中國境內語言暨語言學

第一輯 漢語方言

中華民國　臺北

中華民國八十一年五月

出 版 說 明

　　民國七十九（一九九〇）年的七月間，中央研究院歷史語言研究所在台北市南港中央研究院學術活動中心召開了「第一屆中國境內語言暨語言學國際研討會」。這個會議由中央研究院主辦，行政院國家科學委員會贊助，在三天（七月二十日至二十二日）的會期當中，共發表了兩場專題演講和二十八篇論文，與會學者來自亞歐美澳非各地。現在把專題演講和大部分的論文收集在一起出版，列爲歷史語言研究所學術會議論文集中的一種。

　　中國境內語言和語言學，是歷史語言研究所六十年來一向關心和研究的主要對象。我們希望在這個題目之下，與海內外的朋友經常聚會，一同討論。這一次會議的主題是漢語方言，下一次所訂的主題是「歷史語言學」。我們希望每次在固定主題下的討論，都能結集出版，並且就以「中國境內的語言暨語言學」作爲總名。

　　這一輯內容的安排，是把專題演講放在前面，以下按作者姓氏排列會議論文。美國康乃爾大學的梅祖麟教授在民國七十八年的下半年曾經來華講學，與本所的龔煌城先生舉行了三次上古音的對談。現在把對談的記錄整理出來，作爲附錄，一併發表，相信一定會得到大家的歡迎。

<div style="text-align:right">

中央研究院歷史語言研究所
出版品編輯委員會　　　敬啟

</div>

目　　錄

漢 語 方 言 的 分 類

張　琨

中央研究院

　　李方桂先生在一九三七年英文版的中國年鑑 (Chinese Year Book) 上發表了一篇講中國境內的語言和方言的文章，後來又在 Journal of Chinese Linguistics 的創刊號上重新印出來，略有修改，這篇文章奠定了漢語方言分類的基礎。李先生把漢語方言分爲北方官話、江淮官話、西南官語、吳語、贛客方言、閩語、粵語七類，另外安徽、湖南、廣西西北部有特殊方言。方言分區不可能做到盡善盡美的地步，方言的區劃不是絕對的，方言區與方言區之間的界限不是不能超越的，各個方言區之間的交往從來沒有間斷過，人口經常往來遷動，方言區的邊緣上總有模棱兩可的方言，所以常常有方言歸屬的爭辯。其實同屬一個方言區的方言，彼此常常有不同的地方。方言分類只是爲了方便起見的措施。某些地域相連的方言在音韻上有許多共同的特徵，這就是方言分類的基礎。同時有些相同的音韻特徵並不限於某個特別地區，當然這種現象可能是偶合，可是也可能不是偶合，代表過去人口移動的痕跡。

　　這幾種方言的建立是根據一些限於某個特殊地區的音韻特徵，其中最主要的一個特徵是對於切韻全濁聲母（並、定、澄、從〔邪〕、崇、船〔禪〕、群母），濁塞音濁塞擦音聲母的處理辦法。切韻濁塞音塞擦音聲母有吐氣和不吐氣兩種變體，有些方言讀濁音吐氣，有些方言讀濁音不吐氣，有些方言因爲聲調不同，部分讀吐氣，部分讀不吐氣。有些方言全部或部分保存濁塞音濁塞擦音，有些方言經過濁音清化，把這些濁塞音濁塞擦音讀成吐氣清音，或者讀成不吐氣清音，或者一部分讀成吐氣清音一部分讀成不吐氣清音，就形成了現代漢語方言中對於切韻全濁聲母處理的紛歧現象。

　　切韻全濁聲母不論平仄都讀吐氣清音的分佈現象可能和五胡亂華漢人南遷有密切關係。四世紀的時候北方受異族侵擾，大批北方的居民往南方逃亡。這批移民先到了長江中游的南北岸，然後渡江入贛，到了贛南粵北，最後定居在這些地方。現在只有

聚集在贛南粵北的，也有明清以來散居各地的人自稱客家。早期在河南、安徽、江蘇
、湖北、湖南、江西留居下來的人從不以客家自稱，同時留居在這些地方語音已經受
了很深的官話影響。客家這個名稱恐怕是這批移民在贛南粵北定居下來，為了分辨他
們自己和當地久居的土著而造出來的，早期遷移陸續在各地留居下來的移民並沒有形
成和當地土著對立的局面，當然沒有主客之分，經過長期的時間彼此漸漸同化了。這
些把切韻全濁聲母讀成吐氣清音的方言分佈現象可能是四世紀北方居民南移留下來的
痕跡。

　　在客家人的族譜裡常常提到并州上黨（今山西長治縣境）和司州弘農（今河南靈
寶縣南四十里），是他們的來源地。現在山西南部洪洞（喬全生　1983）、萬榮（吳
健生　1984）運城、垣曲、隰縣、永和、大寧等縣方言中切韻全濁聲母不論平仄都讀
吐氣清音（侯溫田　1986）。河南靈寶（楊荆　1971）、陝縣、三門峽等地也有同樣
的現象。陝北延安、甘泉、延長、延川、清澗（劉勛寧　1983a，1983b，1988）、
子長等地方言中切韻全濁聲母不分平仄全讀吐氣清音（劉育林　1988）。安徽省江北
安慶地區的望江、宿松、太湖、懷寧、潛山、岳西（儲誠志　1987）、江南的東至、
貴池與江西的彭澤相似，切韻全濁聲母不論平仄都讀吐氣清音（鄭張尚芳　1986）。
安徽舊徽州府（休寧〔平田昌司　1982a,b〕、黟縣〔魏建功等　1935〕、績溪嶺北
〔趙楊　1965〕）、浙江舊嚴州府（淳安、遂安、建德、壽昌）以及江西的德興縣舊
浮梁縣居民所使用的所謂徽州話中切韻全濁聲母今主要讀吐氣清音（鄭張尚芳　1986
）。這種情形可能是由於徽州地區居民遷動頻繁的緣故，與閩語中切韻全濁聲母的複
雜的演變相似。蕪湖方村方言中切韻全濁聲母讀成吐氣清擦音（方進　1966）。江蘇
的南通市、如皋、泰州、鹽城四個方言中如皋方言（丁邦新　1966）中切韻全濁聲母
字不論平仄全讀吐氣清音；泰州方言（概況　1960）中仄聲字常有文白異讀、文讀字
聲母讀不吐氣清音，似官話方言；白讀字聲母讀吐氣清音，似贛客方言。鹽城方言（
概況　1960）中切韻全濁聲母仄聲字聲母多半讀不吐氣清音。（請參看表一）

　　安徽休寧方言中有許多切韻全濁聲母上聲字去聲字和切韻次濁聲母去聲字讀的和
陰平調相同，次濁聲母上聲字讀陽上調，這表示全濁上和全濁去合流，在休寧方言中
切韻全濁聲母有的字讀吐氣清音，有的字讀不吐氣清音。江蘇如皋、泰州、鹽城三個

方言也有同樣的現象，如皋方言大多數切韻全濁聲母上聲字去聲字和切韻次濁聲母去聲字都讀的和陰平調字同調，全濁聲母讀吐氣清音；鹽城方言大多數切韻全濁聲母上聲字和去聲字以及次濁聲母去聲字都讀去聲，全濁聲母讀不吐氣清音；泰州方言常有文白兩讀，文讀字把切韻全濁聲母上聲字去聲字和切韻次濁聲母去聲字讀成去聲，全濁聲母讀成不吐氣清音，白讀字把切韻全濁聲母上聲字去聲字和次濁聲母去聲字讀成陰平，全濁聲母讀成吐氣清音。湖北大冶方言中切韻全濁上聲字去聲字和切韻次濁去聲字讀陽去調，陽去調和陰平調同值，現在的去聲調實際上是陰去調，現在陰去調字中根據湖北方言調查報告（趙元任等　1948）只有少數陽去字（叛並附負調兒滯綻篆悴寨乍瑞盛跪杏怒岸）。湖南新化縣城關鎮方言（顏劉　1987）中有些白讀字讀陰平調，包括切韻全濁聲母上聲字（抱phə　在tshe　痔ʂ̩）去聲字（鼻phi　捕phu　薄荷pho　飯pha　病phiɔ　地thi　大the　字tsh̩　謝tɕhia　鑒tshã　賤tɕhiɛ　匠tɕhiɔ　豉tshɭ　轎tɕhiɤ）和切韻次濁去聲字（妹mɤ　帽mə　廟miɤ　面麵miɛ　命miɔ　望om　糯lo　路露lu　爛lã　艾ŋe　硯niɛ　硬ŋɔ̃　汗莧hã　夜ia　話ua）。這幾個方言一致的把切韻全濁上聲字去聲字和切韻次濁去聲字讀的和陰平調相同，並且把切韻全濁聲母讀成吐氣清音，可能有現在還不能瞭解的重要性。（請參看表二）

有些湖北（大冶、嘉魚、咸寧、陽新）、湖南（平江、華容、茶陵、綏寧、瀏陽、醴陵、攸縣、安仁、酃縣、耒陽、常寧、桂東）方言把切韻全濁上聲字去聲字的聲母讀成吐氣清塞音塞擦音。平江方言中切韻全濁上聲字讀陽上調（企綺ᶜtɕhi、巨柱ᶜtɕhy、舵ᶜthœ、坐ᶜtshœ、趙ᶜtṣhau、舅ᶜtɕhiəu、近ᶜtɕhin、蕩ᶜthoŋ、像ᶜtshioŋ、動ᶜthʌŋ、重ᶜtshʌŋ），切韻全濁聲母去聲字讀陽去調（字ts̩ᵓ、自似tsh̩ᵓ、倍敝phiᵓ、地第兒thiᵓ、罪tshiᵓ、步phuᵓ、住tɕhyᵓ、乍tshaᵓ、謝tshiaᵓ、在tshaiᵓ、杜thauᵓ、就tshiəuᵓ、辦phanᵓ、暫棧tshanᵓ、篆倦tɕhyanᵓ、辨辮phienᵓ、漸tshienᵓ、件tɕhienᵓ、鄭tṣhənᵓ、定thinᵓ、盡tshinᵓ、狀tshoŋᵓ、巷khoŋᵓ、洞thʌŋᵓ、共khʌŋᵓ）。次濁聲母上聲字讀陽上調，次濁聲母去聲字讀陽去調。平江、大冶、嘉魚、咸寧、陽新、華容、茶陵、綏寧這幾個方言有陰去陽去的分別，這組之中的其他方言沒有陰去陽去的分別。在這些有陰去陽去之分的方言中有些切韻全濁聲母上聲字去聲字聲母讀不吐氣清音，聲調讀陰去調，例如平江方言有並pinᵓ、滯tṣ̩ᵓ，大冶方言

有並 pin ⼀、兒 tai ⼀、跪 kuai ⼀，嘉魚方言有並 pin ⼀、兒 ti ⼀、乍 tsa ⼀。咸寧方言有並 piən ⼀、兒 tei ⼀、乍 tsa ⼀、棧 tsã ⼀。華容方言有滯 tsɿ ⼀。茶陵方言有動 tʌŋ ⼀。綏寧方言有並 pĩ ⼀、兒 te ⼀、杜 tu ⼀、斷 tɸ ⼀、乍 tsa ⼀、巨聚 tsчʮ。這種現象表示有陰陽去之分的音韻系統中切韻全濁聲母讀吐氣清音，沒有陰陽去之分的音韻系統中切韻全濁聲母讀不吐氣清音。（請參看表三）

在這些湖北湖南方言中切韻全濁聲母入聲字的聲母大致讀吐氣清音，不過每個方言中多多少少都有些切韻全濁聲母讀不吐氣清音，例如大冶方言中有笛嚼及竭局，嘉魚方言中嚼及局讀入聲，笛絕擇傑讀陽平，咸寧方言中有拔嚼局，陽新方言中局字有兩讀 tɕy，和 tɕʰiau，華容方言中有奪，綏寧方言中有達雜極，桂東方言中有雜。平江方言有獨立的入聲，入聲字有舌尖塞音韻尾 t 和喉塞音韻尾 ʔ，桂東方言也有獨立的入聲，入聲字收喉塞音 ʔ 韻尾。大冶、嘉魚、咸寧、陽新、華容、茶陵、瀏陽、醴陵、攸縣、安仁、酃縣、耒陽、常寧也都有獨立的入聲，沒有塞音韻尾。大冶方言中切韻全濁聲母入聲字讀入聲，有少數字姪值殖擲白讀讀陽去，陽去與陰平同值。嘉魚方言中切韻全濁聲母入聲字有兩種讀法，或讀入聲，或讀陽平，例如白字有兩讀 pʰe ⼀，⼁ pe，讀字有兩讀 thou ⼀，⼁ tou。植殖讀 tsʰɿ ⼀，直值讀 ⼁ tsɿ，澤宅讀 tshe ⼀，擇讀 ⼁ tse，竭讀 tɕʰie ⼀，傑讀 ⼁ tɕie，讀入聲的字切韻全濁聲母讀吐氣清音，讀陽平的字切韻全濁聲母讀不吐氣清音，這兩種讀法顯然是兩個不同的音韻系統。咸寧方言中切韻全濁聲母入聲字有讀陽去者，切韻全濁聲母讀吐氣清音，有讀入聲者，切韻全濁聲母多半讀不吐氣清音。醴陵方言中切韻全濁聲母入聲字讀入聲，有少數讀去聲，例如白集族姪直。攸縣方言中切韻全濁入聲字讀去聲，有少數讀入聲（族擇局）。酃縣方言中切韻全濁聲母入聲字有讀去聲者，有讀入聲者。常寧方言中切韻全濁聲母入聲字讀入聲，有少數讀陽平（白雜姪直）。綏寧方言沒有獨立的入聲，切韻全濁聲母入聲字有讀陰平者（勃拔達雜族擇），有讀陽平者（白笛讀集絕姪直及傑極局）。（請參看表四）

湖北湖南和江西鄰近，上邊討論的一些湖北湖南方言可以認爲是和贛方言相似的方言，至於山西洪洞、萬榮方言、河南靈寶方言，以及江蘇南通市、如皋、泰州、鹽城方言要是只根據一個切韻全濁聲母讀吐氣清音的音韻特徵就說是贛客方言，一定很難令人相信的。不過我們也許可以猜想，這個把切韻全濁聲母不分平仄都讀成吐氣清

音的方言的分佈現象跟五胡亂華之後的北方漢人南遷的路線應該有些關連。把切韻全濁聲母讀成吐氣清塞音塞擦音聲母的方言未必一定是贛客方言。同時現在保存切韻濁塞音濁塞擦音的方言也並不一定是吳語方言。因爲在早期保存全濁聲母的方言分佈的一定很廣，後來經過濁母清化的過程許多方言的全濁聲母都全部的或者部分的讀成清音了。現在保存切韻全濁聲母的方言區是江蘇南部和浙江省，江西東北廣豐玉山上饒方言有濁塞音塞擦音聲母，這幾個地方的方言屬於吳語的範圍。江西武寧方言仍然保留著一套濁音，不知道與都昌方言是否相似，材料太少。吳語方言區是一個歷史悠久，人口稠密，保存切韻全濁聲母最完整的方言區。

湖北的蒲圻、通城（湖北方言調查報告 1948）、湖南的臨湘方言（湖南方言調查報告 1974）、江西的都昌方言（陳昌儀 1983）這四個方言中切韻的全濁聲母和切韻的次清（吐氣清塞音塞擦音）聲母合流，都讀成濁聲母，蒲圻通城兩個方言的濁塞音塞擦音帶有吐氣成分，臨湘都昌兩個方言讀濁音，沒有吐氣成分。這種現象是和贛客方言一致的，贛客方言中切韻全濁聲讀吐氣清音，也和切韻次清聲母的字合流。蒲圻通城臨湘都昌四個方言中的現象代表切韻全濁聲母沒有清化以前的階段，贛客方言中的現象代表清化以後的階段。

窗初母江韻平聲，床崇母陽韻平聲，窗切韻聲母是吐氣捲舌清塞擦音，床初韻聲母是捲舌濁塞擦音，窗床兩個字在蒲圻通城兩個方言中都讀成吐氣舌尖濁塞擦音 dzhoŋ，切韻吐氣清聲母字窗讀陰平，切韻濁聲母字床讀陽平。崇陽方言中窗床兩個字都讀 zaŋ，窗讀陰平，床讀陽平。臨湘方言中窗床都讀 dzaŋ，窗讀陰平，床讀陽平。都昌方言材料字少，無窗字，有倉字，切韻清母唐韻平聲，聲母是吐氣的舌尖清塞擦音，都昌方言中倉床都讀 dzoŋ，倉讀陰平，床讀陽平。在那些把切韻全濁聲母都讀吐氣清音的方言中窗床兩個字都讀吐氣清音，tshaŋ（泰州）、tshuã（如皋、鹽城）、tshaŋ（嘉魚）、thaŋ（攸縣）、tshã（綏寧）、tshã（鄞縣）、tshoŋ（平江、瀏陽、醴陵）、tshõ（績溪、安仁）、tʂhoŋ（大冶、咸寧、陽新）、tshõ（茶陵、耒陽、常寧、桂東）、tʂhuaŋ（靈寶）、tʂhɥŋ（岳西）、tʂhuaŋ（洪洞）、tʂhuã（蕪湖）、pfhʌŋ（萬榮）、tʂhyõ（南通市）。窗讀陰平，床讀陽平。

菜清母泰韻去聲，在從母海韻上聲，菜切韻聲母是吐氣舌尖清塞擦音，在切韻聲

母是舌尖濁塞擦音。菜在兩個字在蒲圻通城兩個方言中都讀吐氣舌尖濁塞擦音 dzhai，切韻清聲母字菜讀陰去，切韻濁聲母字在讀陽去。崇陽方言中菜在兩個字都讀 zæ，菜讀陰去，在讀陽去。臨湘方言中菜在兩個字都讀 dzai，菜讀陰去，在讀陽去。都昌方言中菜在兩個字都讀 dzai，都讀陽去。在把切韻全濁聲母不論平仄都讀吐氣清音的方言中菜在兩個字同音，有的方言中這兩個字因爲切韻清濁來源不同而不同調，例如洪洞讀tshɑi，岳西、大冶讀tsha，嘉魚、平江、華容、綏寧讀tshai，南通市讀tsha，績溪、咸寧、陽新、茶陵讀tshæ，如皋、泰州讀tshɛ、休寧讀tsho，黟縣讀ɦuəɯ，有的方言中這兩個字完全同音，萬榮讀tshai，瀏陽讀tshai，安仁、桂東讀tshæ，靈寶、蕪湖讀tshɛ，鄞縣、耒陽、常寧讀tshe，醴陵、攸縣讀tshoi。

促清母燭韻入聲，族從母屋三韻入聲，促切韻聲母是吐氣舌尖清塞擦音，族切韻聲母是舌尖濁塞擦音。促族兩個字在蒲圻方言中讀 dzhouʔ，在通城方言中讀 dzhəuʔ，在崇陽方言中讀 zəu，在臨湘方言中讀 dzou，在這四個方言中入聲沒有陰陽之分。在都昌方言中入聲有三類，切韻全清聲母入聲字讀陰入，切韻次清聲母入聲字讀低入，切韻全濁聲母入聲字讀陽入，切韻次濁聲母入聲字或讀陰入或讀陽入，在都昌方言中促族都讀 dzuk，促讀低入，族讀陽入。在一些把切韻全濁聲母不論平仄都讀成吐氣清音的方言中，有的方言把促族讀成同音同調，例如大冶、陽新、安仁三個方言中促族讀tshau˨，華容方言讀tshou˨，瀏陽方言讀tshəɯ˨，耒陽、常寧方言讀tshu˨，茶陵方言讀tshu˥，綏寧方言讀˨tshu，桂東方言讀tshɯʔ；有的方言把促族讀成同音，不同調，例如如皋方言（丁邦新　1966）促族都讀tshoʔ，促讀陰入，族讀陽入；岳西方言促讀tshəu˨，族讀tshəu˥；咸寧方言促讀tshau˨，族讀tshau˥；醴陵方言促讀tshəu˨，族讀tshəu˥；萬榮方言促讀˨tshəu，族讀˨tshəu；休寧方言促讀tshiu˨，族讀tshau˨。

湖北崇陽方言中切韻並母字不論平仄與滂母字合流，例如派讀phæ˥，敗讀phæ˨，切韻定母字不論平仄與透母字合流，例如泰太讀thæ˥，待代讀thæ˨。崇陽方言中有 ts 和 z 聲母，沒有 tsh 聲母，有 tś 和 ź 聲母，沒有 tśh 聲母，有 k 和 x 聲母，沒有 kh 聲母。切韻的徹、澄、昌、船（禪）、初、崇、清、從（邪）等母字或讀 z 或讀 ź，切韻溪母群母字或讀 ź 或讀 x。切韻全濁聲母和次清聲母合流。

　　湖南境內有三種方言保存切韻全濁聲母，第一種是湖南東北角上的臨湘方言。臨湘與湖北的蒲圻通城搭界，和江西的都昌方言相似，這幾個方言中切韻全濁聲母字與切韻次清聲母字合流，這是贛客方言中的現象。第二種保存切韻全濁聲母的方言多半在湖南西部，永順、保靖、沅陵、古丈、永綏、乾城、瀘溪、漵浦、辰谿、邵陽。這些方言中平聲字仍然保存切韻全濁聲母，這種現象似乎表示是官話發展的前一階段，切韻全濁聲母因爲平仄聲調不同而不同的演變，官話方言中平聲字中切韻全濁聲母讀吐氣清音，仄聲字中切韻全濁聲母讀不吐氣清音。周游 (1985) 根據湖南方言調查報告（楊　1974）中的五十二張方言地圖中所表示的湖南各地方言的異同得出一個結論，說這些方言與常德方言相似的地方特別多，常德方言是官話方言的代表。據他們的計算，這些方言與常德方言相似點的數字如下：永順　29，保靖　30，沅陵　31，古丈　29，乾城　29，瀘溪　24，漵浦　24，辰谿　26，邵陽　26。一九八五年的湖南漢語方言分區圖（方言　1985年　274頁）中官話區不包括瀘溪、漵浦、辰谿、邵陽，大概是因爲這四個方言和常德方言相似點的數字太低。這些方言中平聲字都有 b 和 d 聲母，漵浦方言中沒有葵字，狂讀 ₌khuaŋ 聲母是吐氣清音，其他幾個方言都還有個 g 聲母。這些方言中都有 dz 和 dź 聲母，瀘溪方言還有個 ḍz 聲母（遲 ₌ḍẓʅ 、除 ₌ḍẓu ）。瀘溪方言把潮和喬讀成 dźiɤɯ，把籌和求讀成 ₌dźiɯ。把船讀成 ₌dźyã。瀘溪方言分尖團，齊讀 ₌dzi，奇其期讀 ₌dźi，錢前讀 ₌dziã，鉗讀 ₌dźiã，全讀 ₌dzuã，秦情讀 ₌dzʅ。詳讀 ₌dziã。(請參看表五)這些平聲濁母字清化以後讀成吐氣清音就是官話方言處理切韻全濁聲母字的辦法：切韻全濁聲母字平聲字讀吐氣清音，仄聲字讀不吐氣清音。湖南常德、桃源、慈利、臨澧、澧縣、安鄉、漢壽、龍山、桑植、大庸、芷江、靖縣、晃縣這些方言都屬於這類。

　　第三種保存切韻全濁聲母的湖南方言，在保存切韻全濁聲母上有程度上的不同。這種方言平常稱之爲湘語，有老湘語和新湘語。老湘語是不論平仄切韻全濁聲母都仍然讀濁音，廣西北部的全州、灌陽、資源、興安四地的方言（楊煥典等　1985）和湖南祁陽、零陵、東安、新寧、城步和麻陽等縣的方言都有這個音韻特色。這些方言在保存切韻全濁聲母上和吳語方言相似。（請參看表六）

　　湖南中部有幾個方言非入聲字仍然保存切韻的全濁聲母，入聲字切韻全濁聲母發

生清化，部分讀吐氣，部分讀不吐氣。雙峰（漢語方音字匯第二版　1989）、婁底（李劉顏　1987）、漣源（劉顏　1987）、新化（顏劉　1987）四個方言材料比較多，洞口（唐作藩　1960）、武岡（湖南方言調查報告　1974）兩個方言的材料較少。雙峰方言中切韻全濁聲母入聲字有讀陽平調的，也有讀陰去調的，讀陰去調的字，逢今音讀清塞音塞擦音聲母的，多半讀吐氣，很少讀不吐氣。婁底方言中切韻全濁聲母入聲字部分讀陽平，部分讀陰去，聲母或讀吐氣清音，或讀不吐氣清音。漣源方言中切韻全濁聲母入聲字大部分讀次陰去 (24)，比陰去 (35) 調稍低，比陽平 (13) 調稍高。新化方言中有獨立的入聲，有些切韻全濁聲母入聲字文讀讀入聲，聲母讀不吐氣清音，白讀讀陰去調，聲母讀吐氣清音，例如白文讀 pɤ˩，白讀 pha˥，賊文讀 tsie˩，白讀 tshie˥，讀文讀 tu˩，白讀 thu˥，絕文讀 tse˩，白讀 tshɯi˥。洞口黃橋鎮方言切韻全濁聲母入聲字讀陽平，聲母讀吐氣清音。武岡方言有獨立入聲，切韻全濁聲母入聲字聲母或讀吐氣清音，或讀不吐氣清音，白字讀 bɛ˩。（請參看表七）

　　有些方言沒有濁塞音聲母，切韻並母、定母、群母在這些方言中都讀不吐氣清音，沅江、益陽、桃江三個方言中有濁擦音 z，代表切韻從（邪）母、崇母、澄母和船（禪）母。安化方言中和 z 母相當的聲母是 z，dʑ 和 l。湘鄉方言中有 dz、dʐ 和 dʑ，dʑ 母代表切韻從（邪）母和群母。湘鄉方言中除 dzl 有平仄聲字外，其他濁塞擦音聲母字只限於平聲字。（桃江方言見張汪沈　1988）（請參看表八）

　　有些湖南北部湘江資水下游的方言把切韻全濁聲母字不分平仄都讀成不吐氣清音，普通把這些方言稱之為新湘語，假設這些方言是從湘江資水上游的老湘語，經過濁音清化的程序演變出來的。這些方言中只有少數切韻全濁聲母入聲字聲母讀成吐氣清音。這種方言包括長沙、湘潭、寧鄉、南縣、湘陰、岳陽等地的方言，湖南西南部黔陽、會同、通道三個地方的方言在把切韻全濁聲母字都讀不吐氣清音這個音韻特徵上和長沙等地的方言相似。安仁方言中切韻全濁聲母平聲字聲母讀不吐氣清音，仄聲字聲母讀吐氣清音。有些山西方言有文白兩讀，文讀把切韻全濁聲母平聲字的聲母讀成吐氣清音，把切韻全濁聲母仄聲字的聲母讀成不吐氣清音，這種辦法和官話方言相似；白讀把切韻全濁聲母字不分平仄都讀成不吐氣清音，這種辦法和新湘語方言相似。這種山西方言包括清徐、文水（胡雙寶　1984）、孝義、榆次、太谷（楊述祖　1983）、平遙（侯精　1989）、介休（侯溫田　1986）。（請參看表九）

　　漢語方言的分區是以地域爲基礎的，吳語區在江蘇南部和浙江省，閩語區在福建，粵語區在兩廣，贛方言在江西，湘語區在湖南。用音韻特徵來劃分方言區不能只靠一個音韻特徵。即如用對於切韻全濁聲母處理的辦法來劃分漢語方言也有許多困難。根據漢語方言中對於濁聲母的處理辦法我們可以進一步猜想漢語方言中濁聲母演變的程序。最初塞音塞擦音聲母有三套：不吐氣清音 *p、*t、*ts 等，吐氣清音 *ph、*th、*tsh 等，和濁音 *b、*d、*dz 等。濁音聲母可以有吐氣和不吐氣兩種自由變體，一種是吐氣的變體 *bh、*dh、*dzh 等，像湖北蒲圻通城兩個方言至今還保存這種濁音聲母，在這種方言中本來的吐氣清母 *ph、*th、*tsh 等和濁母 *bh、*dh、*dzh 等合流，所以窗床同音異調，菜在同音，聲調或有不同。第二種是不吐氣濁音 *b、*d、*dz 等，大概湘江資水上游的老湘語中的濁母就是這種濁音聲母，後來在湘江資水下游的新湘語中濁音清化之後就形成了切韻全濁聲母字不論平仄聲母都讀不吐氣清音。濁音清化可能因爲聲調不同而有不同的演變，例如湖南永順等地的方言平聲字保存濁聲母，仄聲字的濁聲母完全清化了，讀成不吐氣清音。這種方言代表官話方言的過渡階段。平聲字和仄聲字濁音清化前後演變不同，平聲字的聲母清化較晚，清化後讀成吐氣清音。此外雙峰等方言中濁音清化最先發生在入聲字裡，沅江等方言中最後清化的是濁擦音或濁塞擦音聲母。將來幾百年後討論吳語方言中的濁母清化，這些湖北湖南方言現象都可以備作參考。

【附　表】

一·山西、陝西、河南、江蘇方言切韻全濁聲母不論平仄讀吐氣清音例字（只列仄聲字）

二·切韻全濁聲母上聲字去聲字次濁聲母去聲字讀陰平例字

三、四·湖北、湖南方言切韻全濁聲母不論平仄讀吐氣清音例字

五·湖南方言切韻全濁聲母平聲字保存濁聲母例字（讀陽平）

六·湖南方言切韻全濁聲字不論平仄讀濁音例字

七·雙峰、婁底、漣源、新化、洞口、武岡方言入聲字（不讀濁音）

八·沅江、益陽、桃江、安化、湘鄉方言中的濁擦音、濁塞擦音聲母

九·湖南方言切韻全濁聲母不論平仄讀不吐氣清音例字（只列陽平字）

表　一

	動	重	在	盡	跪	自
洪洞	thuen꜄白	tʂhuen꜄白	tshai꜄	tᶝhien꜄白	(kuei꜄)	tshɿ꜄
萬榮	thuʌŋ꜄白	pfhʌŋ꜄	tshɑi꜄	tᶝhiei꜄	khuei꜄	tshɿ꜄
清澗	thuəɤ̃꜄白	tʂhuəɤ̃꜄	tshæi꜄白	tᶝhiəɤ̃꜄白		tshɿ꜄白
靈寶	thuoŋ꜄	tʂhuoŋ꜄	tshɛ꜄	tᶝhi꜄	khui꜄	꜀tshɿ
休寧	(꜀tæn)	꜀tshæn	꜀tsho	꜀tshin	tᶝhy꜄	꜀tshɿ
黟縣	꜀taŋ	꜀thaŋ	꜀tɕhuɯ	꜀tᶝhiɛi	tᶝhyɛi꜄	tshɿ꜄
績溪	꜀thuæ	꜀tshuæ	꜀tshæ	꜀tshæ	꜀khue	tshɿ꜄
蕪湖	ɕhoŋ꜄	ʂhoŋ꜄	shɛ꜄	shin꜄	huei꜄櫃	shɿ꜄字
岳西	thoŋ꜄	tʂhoŋ꜄	tshai꜄	tᶝhin꜄	(kuei꜄)	tshɿ꜄
南通市	thʌŋ꜄	tshʌŋ꜄	tsha꜄	tsheŋ꜄	khue꜄	tshɿ꜄
如皋	꜀thoŋ	꜀tshoŋ	꜀tshɛ	꜀tᶝhiŋ	꜀khuei	꜀tshɿ
泰州	꜀thoŋ白	꜀tshoŋ白	꜀tshɛ白	(tᶝiŋ꜄)	꜀khuəi	(tsɿ꜄)
鹽城	toŋ꜄	꜀tshoŋ白	(tsɛ꜄)	(tᶝin꜄)	꜀khuei白	(tsɿ꜄)

	拔	白	雜	絕	鑿	族
洪洞	꜀pha	꜀phɛ	꜀tshɑ	(꜀tsye)	꜀tsho	꜀tshou
萬榮	꜀pha	꜀phiɑ白	꜀tshɑ	(꜀tᶝyE)		꜀tshəu
靈寶	꜀pha	(꜀pɛ)	꜀tshɑ	(꜀tᶝyo)	꜀tshuo	꜀tshou
休寧	phuɐ̆꜆	pha꜆	tshɔ꜆	tshiɐ̆꜆	tsho꜆	tshau꜆
黟縣	꜀pho	꜀phɑ	꜀tɕho	꜀tᶝhiɛ	꜀tɕhɔu	꜀tshɣ
績溪	pha꜆	pha꜆	tsha꜆	tᶝhyæ꜆		tsho꜆
蕪湖	fhaʔ꜆	fhəʔ꜆	shaʔ꜆	shiəʔ꜆	shoʔ꜆	
岳西	pha꜄	phe꜄	(tsa꜆)	tᶝhie꜄	tsho꜄	tshəu꜄
南通市	phaʔ꜆	phoʔ꜆	(tsaʔ꜆)	tᶝhyʔ꜆	tshoʔ꜆	tshoʔ꜆
如皋	phe꜆	phɔʔ꜆	(tseʔ꜆)	tᶝhyʋ꜆	tshaʔ꜆	(tsɔʔ꜆)
泰州	phæʔ꜆	phɔʔ꜆白	(tsæʔ꜆)	(tᶝyʔ꜆)	tshaʔ꜆	tshɔʔ꜆
鹽城	phæʔ꜆白	(pɔʔ꜆)	(tsæʔ꜆)	(tᶝyoʔ꜆)	tshaʔ꜆	tshɔʔ꜆

表 二

	休寧	如皋	泰州	鹽城	大冶	新化
步	꜀phu	꜀phu	꜀phu白	꜀phu白	꜀phu	
妹	꜀mɤ	꜀mei	꜀miĬ	(mĭᶜ)	꜀mai	꜀mɤ
慢	꜀muɔ̌	꜀mẽ	꜀mɛ̃白	꜀mæ	꜀mã	
命	꜀ma	꜀miŋ	꜀miŋ白	꜀min白	ꞏmin	꜀miɔ
飯	꜀fuɔ̌	꜀fẽ	꜀fɛ̃白	꜀fæ白	꜀fã	꜀phã
地	꜀thi	꜀thi	꜀thi	(tiᶜ)	꜀thai	꜀thi
大	꜀tha大學 ꜀tho大小	꜀tɑ	꜀tɑ	(tɑᶜ)	꜀tɔ	꜀the
代	꜀to	꜀thɛ	꜀thɛ白	(tɛᶜ)	꜀tha	
路	꜀lau	꜀lu	꜀nu白	꜀lu白		꜀lu
爛	꜀lɔ	꜀lẽ	꜀nɛ̃白	꜀læ白		꜀lã
撞	꜀tsau	꜀tshuã白	꜀tshuaŋ	(tsuãᶜ)	꜀tshɔŋ	
助	꜀tshau	꜀tshu	꜀tshu白	(tsuᶜ)	꜀tshau	
字	꜀tshɿ	꜀tshɿ	꜀tshɿ白	(tsɿᶜ)	꜀tshɿ	꜀tshɿ
就	꜀tšhiu	꜀tšhiou	꜀tšhiɯ白	(tšiɤᶜ)	꜀tšhiu	
匠	꜀tshiau	꜀tšhiã	꜀tšhiaŋ	(tšiãᶜ)		꜀tšhiɔ
轎	꜀tšio	꜀tšhiɔu	꜀tšhiɔ	(tšiɔᶜ)		꜀tšhiɤ
外	꜀ŋaᶜna	꜀uɛ	꜀vɛ	(uɛᶜ)	꜀ua	
恨	xaᶜ	xəŋᶜ	ɣəxᶜ	(xnexᶜ)	xẽiᶜ	
夜	꜀ia	꜀iɑ白	꜀iɑ白	꜀iɑ白		꜀ia

表 三

	步	敗	敝	辦	辨	待代	舵	地	杜	洞	自	在	坐	罪
平江	phu⊃		phi⊃	phan⊃	phien⊃	thai⊃	ᶜthæ	thi⊃	theu⊃	thʌŋ⊃	tshʅ⊃	tshai⊃	ᶜtsho	tshi⊃
大冶	ᶜphu	ᶜpha	ᶜphai	ᶜphã	ᶜphĩ	ᶜtha	ᶜtho	ᶜthai	ᶜthau	ᶜthaŋ	ᶜtshʅ	ᶜtsha	ᶜtsho	ᶜtshai
嘉魚	phu⊃	phai⊃	phi⊃	phan⊃	phien⊃	thai⊃	tho⊃	thi⊃	thou⊃	thoŋ⊃	tshʅ⊃	tshai⊃	tsho⊃	tshi⊃
咸寧	phu⊃	phæ⊃	phei⊃	phã⊃	phiẽ⊃	thæ⊃	tho⊃	thei⊃	thau⊃	thʌŋ⊃	tshʅ⊃	tshæ⊃	tsho⊃	tshei⊃
陽新	phu⊃	phæ⊃	phei⊃	phæ̃⊃	phiẽ⊃	thæ⊃		thei⊃	thau⊃	thʌŋ⊃	tshʅ⊃	tshæ⊃	tsho⊃	tshei⊃
華容	phu⊃	phai⊃					tho⊃	thi⊃	thou⊃		tshʅ⊃	tshai⊃	tsho⊃	tshi⊃
茶陵	phu⊃	phæ⊃	phi⊃	phɛ̃⊃	phiɛ̃⊃	thai⊃		thi⊃	thu⊃	thʌŋ⊃	tshʅ⊃	tshæ⊃	tsho⊃	tshei⊃
綏寧	phu⊃	phai⊃	phei⊃	phã⊃	phiẽ⊃	thæ⊃		thi⊃	(tu⊃)	thʌn⊃	tshʅ⊃	tshai⊃	tsho⊃	tshe⊃
瀏陽	phu⊃	phai⊃	phi⊃	phaŋ⊃	phieŋ⊃	thai⊃	tho⊃	thi⊃	theu⊃	thʌn⊃	tshʅ⊃	tshai⊃	tsho⊃	
醴陵	phu⊃	phai⊃	phi⊃			thai⊃		thi⊃	theu⊃	thʌŋ⊃	tshʅ⊃	tshoi⊃	tsho⊃	tshei⊃
攸縣	phu⊃	phai⊃	phi⊃		(pi⊃)	thoi⊃		thi⊃	thu⊃	hʌŋ⊃	tshʅ⊃	tshoi⊃	tsho⊃	thui⊃
安仁*	phu⊃	phæ⊃	(pi⊃)	(pã⊃)		hoi⊃		thi⊃	thau⊃	teŋ⊃	tshʅ⊃	tshæ⊃	tsho⊃	tshuei⊃
寧鄉	phu⊃	phe⊃	phi⊃	phã⊃		thæ⊃	tho⊃	thi⊃	thu⊃	thʌŋ⊃	tshʅ⊃	tshe⊃	tsho⊃	tshuei⊃
耒陽	phu⊃	phe⊃	phi⊃			the⊃	tho⊃	thi⊃	thu⊃	thʌŋ⊃	tshʅ⊃	tshe⊃	tsho⊃	tshui⊃
常寧	phu⊃	phe⊃				the⊃	tho⊃	thi⊃	thu⊃	thʌŋ⊃	tshʅ⊃	tshe⊃	tsho⊃	tshui⊃
桂東	phu⊃	phæ⊃	phi⊃	phæ̃⊃	phẽ⊃	thæ⊃		thi⊃	thɯ⊃	thoŋ⊃	tshʅ⊃	tshæ⊃	tshuɯ⊃	tshuei⊃
崇陽	phu⊃	phæ⊃	phi⊃	phẽ⊃	phẽ⊃	thæ⊃	tho⊃	thi⊃	neu⊃	nen⊃	zʅ⊃	zai⊃	zo⊃	zi⊃

*安仁方言中切韻全濁聲母平聲字讀不吐氣清音

表 三續

	助	棧	狀	柱	趙	鄭	巨	舅	伴	倦	近	共
平江	₌tshau	tshan⁼	tshoŋ⁼	₌tšhy	₌tʂhau	tshen̩⁼	₌tšhy	₌tšhieu	tšhien⁼	tšhyan⁼	₌tšhin	khʌŋ⁼
大冶	₌tshou	(tsã̃⁼)		₌tshɥ	₌tshe	₌tshan	₌tshɥ	₌tšhiau	₌tšhiĕi	₌tshɥĕi	₌tšhian	₌khaŋ
嘉魚	tshau⁼	tshan⁼	tshoŋ⁼	tšhɥ⁼	tsheu⁼	tshen⁼	tshɥ⁻	tšhiou⁼	tšhien⁼	tshɥen⁼	tshin⁼	koŋ⁼
咸寧	tshau⁼	(tsã̃⁼)	tshoŋ⁼	tšhɥ⁼	tshe∅⁼	tshen⁼	tšhy⁼	tšhiau⁼	tšhiĕ⁼	tšhyĕ⁼	tšhien⁻	khuʌŋ⁼
陽新	tshau⁼	(tsɛ̃⁻)	tshɥoŋ⁼	tšhɥ⁼	tsh∅⁼	tshen⁼	tšhy⁼	tšhiau⁼	tšhiĕ⁼	tšhyĕ̃⁻	tšhien⁻	khʌŋ⁻
華容		tshan⁼	tshɥaŋ⁻	tšhɥ⁼	tshau⁼	tshen⁼			tšhien⁼	tshɥĕ̃⁻	tšhien⁻	khoŋ⁻
荼陵	tshu⁼	tshã̃⁼	tshɔ̃⁼		₌tʂ̬ʂ	tshĕ̃⁼	(tsɥ⁻)			tšhiĕ̃⁻	tšhin⁻	khʌŋ⁻
綏寧	₌tsheu	tshɛ̃⁼	tshɔ̃⁼	tšhɥ⁼	₌tʂ̣ʂ	tšhʌ̃⁼	tšhɥ⁼	khieu⁻	tšhiɛ̃⁻	tšhiĕ̃⁻	tšhĩ⁻	khʌŋ⁻
瀏陽	tsheu⁼	tshã̃⁻	tshoŋ⁻	tʂhɥ⁼	tshaɣ⁼	tshʌ̃⁼	tšhʂ̩⁼	khieu⁻	khiĕ⁻	tshɥeŋ⁻	khin⁻	khuʌŋ⁻
醴陵		thã̃i⁻	tshoŋ⁻	tʂhɥ⁻	tsheu⁼	tshʌ̃⁻	khɥ⁻	khieu⁻	khieŋ⁻	khyeŋ⁻	khiʌŋ⁻	khʌ̃⁻
攸縣		thã̃i⁻	thaŋ⁻		tšhiau⁻	tšhiŋ⁻			tšhiĕi⁻	tšhiĕi⁻	tšhiŋ⁻	khuʌŋ⁻
安仁	tshau⁻	(tsã̃⁻)	tshɔ̃⁻		tšhiɔ⁻	tšhien⁻	tšhy⁻	tšhiɯ⁻	tšhĩ⁻	tšhyĩ⁻	(tiĕi⁻)	khen⁻
鄘縣	tshu⁻	tshã̃⁻	tshã̃⁻	tšhɥ⁻	₌tʂ̣ʂ	tshen⁻	tšhy⁻	tšhiʌɯ⁻	tšhiã̃⁻	tšhyã̃⁻	khin⁻	khʌŋ⁻
耒陽		tshã̃⁻	tshɔ̃⁻		thiɔ⁻	tšhiĕ̃⁻	(tšy⁻)	tšhiɯ⁻	(tšĩ⁻)	(tšyĩ⁻)	tšhĩ⁻	khuʌŋ⁻
常寧		tshã̃⁻	tshɔ̃⁻		thiɔ⁻	₌thiĕi	₌yi	₌thieɯ		₌thyã̃⁻	(tiĕi⁻)	kheŋ⁻
桂東	tshɯ⁻	tshã̃⁻	tshɔ̃⁻	tšhy⁻	tshaʌ⁻	₌tʂheŋ	₌yi	tšhieɣ⁻	tšhiĕ⁻	tšhyĕ⁻	tšhiŋ⁻	khoŋ⁻
崇陽	₌nɯz	zã̃z⁼	zaz⁼	₌nueʔ	₌ʨɥʔ	thaŋ⁼ 文 / then⁼ 白	₌yi	žieɯ⁼	žieⁿ⁼	kyĕ⁻	žin⁼	₌uez

— 13 —

表　四

例字	勃	拔	白	達	讀	擇	雜	集	絕	族	及	傑
平江	phət꜔	pha?꜔	phe?꜔	tha?꜔		tshe?꜔	tsho?꜔	tshi?꜔	tshie?꜔	tshu?꜔	tšhi?꜔	tšhie?꜔
大冶	phu꜔	phɔ꜔	₋phe	(tɔ꜔)	₋thau	tsha꜔		tshai꜔	(₋tšie)	tshau꜔	(tši꜔)	tšhie꜔
嘉魚	phu꜔	pha꜔	phe꜔₋pe	tha꜔₋ta	thou꜔₋tou	₋tse		tšhi꜕	thie꜕	tshu꜔	tšhi꜔tši꜔	tšhie꜔竭
咸寧	phu꜔pu꜔	(pa꜔)	phe꜕	(ta꜔)	thau꜕	tshe꜕	tsha꜕	tshei꜕	tshie꜔	tshau꜕	tšhi꜕tšhi꜔	tšhie꜕
陽新	phu꜔	pha꜔	pha꜔phe꜔	tha꜔	thau꜔	tshe꜔	tsha꜔	tshei꜕	tshɥe꜔	tshau꜔	tšhi꜔	tšhie꜔
華容		pha꜔	phe꜔	tha꜔		tshe꜔	tsha꜔	tšhi꜔	tshie꜔	tshou꜔	tšhi꜔	tšhie꜔
茶陵		pha꜔		tha꜔				(₋tši)	tshie꜔	tshu꜕	tšhi꜔	tšhie꜔
綏寧	₋phu	₋pha	₋phe	(₋ta)	₋thu	₋tshe	₋tsa	tshi꜔	₋tshie	₋tshu	₋tšhi	₋tšhie
瀏陽	pho꜔	pha꜔	phɤ꜔	tha꜔	theɯ꜔	tshe꜔	tsha꜔	tshi꜔	tshie꜔	tsheɯ꜔	khi꜔	khie꜔
醴陵	pho꜔	pha꜔	phe꜔	tha꜔		tshe꜔	tsha꜔	tšhie꜔	tshie꜔	tsheu꜔	khi꜔	khie꜔
攸縣		pha꜔	phæ꜔	ha꜔	thau꜔	thæ꜔	tha꜔	tshi꜔	tshie꜔	tho꜔	tšhie꜔	tšhie꜔
安仁	phe꜔	pha꜔	phe꜔	tha꜔		tshe꜔	tsha꜔tsa꜔	tshie꜔	tshie꜔	tshau꜔	(tši꜔)	tšhie꜔
郴縣	phe꜔	pha꜔	phe꜔	tha꜔		tshe꜔澤	tsha꜔	tšhi꜔		tshu꜕	tshie꜔	tšhie꜔
耒陽		pha꜔	(pe꜔)	(ta꜔)			(tsa꜔)	tshie꜔		tshu꜔	tšhi꜔	tšhie꜔
常寧		pha꜔	₋phe	tha꜔		tshe꜔澤	₋tsha	tshie꜔		tshu꜔	fhi꜔	tšhie꜔
桂東	phe?꜔	pha?꜔	phe?꜔	tha?꜔	thɯ?꜔		(tsa?꜔)	tshi?꜔		tshɯ꜔	tšhi?꜔	tšhie?꜔

表 五

		旁	桃	葵	遲	求	船	全
永	順	bɑ̃	dʌ	guei	dzʅ	džiɤ	dzuã	džyẽ
保	靖	baŋ	daɤ	guei	dzʅ	džiu	dzuã	džyɛ
沅	陵	baŋ	dao	guei	dzʅ	džiɤ	dzuã	džyɛ
古	丈	baŋ	daɤ	gui	dzʅ	džiɯ	dzuan	džyen
永	綏	bɑ̃	dau	guəi	dzʅ	džiɤu	dzuã	džyã
乾	城	baŋ	daʌ	guei	dzʅ	džiəɤ	dzuã	džyẽ
瀘	溪	bɑ̃	dɤɯ	gui	dz̥ʅ	džiɯ	džyã	dzuã
溆	浦	baŋ	daʌ		dzʅ	džiɤɯ		džye
辰	谿	baɯ	dau	guei	dzʅ	džiəu	dzuẽ	džyẽ
邵	陽	baŋ	daɤ	guəi	dzʅ	džiəɯ	džyen	džyen

表 六

		婆	步	拔	題	杜	達	才
全	州	꜇buo	bu꜕	꜇ba		du꜕	꜇da	꜇dzai
祁	陽	꜇bo	bu꜕	꜇ba	꜇di	du꜕	꜇da	꜇dzai
零	陵	꜇bo	bu꜕	꜇ba	꜇di	du꜕	꜇da	꜇zai
東	安	꜇bo	bu꜕	꜇ba		du꜕	da꜕	꜇dzai
新	寧	꜇bo	bu꜕	ba꜕	꜇di	dəɯ꜕	da꜕	꜇dzai
城	步	꜇bo	bu꜕	꜇ba	꜇di	du꜕	da꜕	꜇dzai
麻	陽	꜇bo	bu꜕	꜇ba	꜇di	dəɯ꜕	꜇da	꜇dze

張琨

表 六續

	字	蟲	床	助	葵	裙群	極及
全州	zɿ꜔	꜀dzoŋ	꜀dzuaŋ	dzu꜔	꜀guei	꜀dʒyŋ	꜀dʒʅ極
祁陽	dzɿ꜔	꜀dzoŋ	꜀dzuaŋ		꜀guəi	꜀džin	꜀dži及
零陵	zɿ꜔	꜀zoŋ	꜀zuã	zu꜔	꜀guei	꜀žin	꜀ži及
東安	dzɿ꜔	꜀dzoŋ	꜀dzuaŋ	dzu꜔	꜀guei	꜀džiŋ	꜀dži及
新寧	dzɿ꜔	꜀dzoŋ	꜀dzuaŋ	dzəɯ꜔	꜀guei	꜀džin	dži꜔及
城步	dzɿ꜔	꜀dzoŋ	꜀dzaŋ	dzu꜔	꜀guei	꜀džin	dži꜔及
麻陽	dzɿ꜔	꜀dzoŋ	꜀dzã	dzəɯ꜔	꜀gui	꜀džyĭ	꜀dži極及

表 七

	雙峯	婁底	漣源	新化	洞口	武岡
拔	pha꜔	pha꜔	pha24	pha꜔		phɑ꜔
厚薄	phʊ꜔	pho꜔	pho24	pho꜔	pɔ꜔	
勃僕	꜀phʊ	꜀pho	phu35	phu꜔		phu꜔
白	꜀pe文 ꜀pia白	꜀pe文 ꜀phɔ白	phɔ24白	pɤ꜔文 pha꜔白		bɛ꜔
達	꜀ta	꜀ta	ta24	ta꜔	ta꜔	tɑ꜔
奪	꜀tue文 ꜀tua白	꜀tue	to24	to꜔	tɔ꜔	
蝶	꜀the文 thia꜔白	the꜔	thie24	thie꜔	thie꜔	
跌	꜀the文 ꜀thia白	꜀the	tie24	tie꜔		tiɛ꜔
笛	꜀thi	꜀thi	thi24	thi꜔	thi꜔	ti꜔
讀	thəu꜔	thɤu꜔白	tu24文 thu24白	tu꜔文 thu꜔白	tu꜔毒	tu꜔
族	tshəu꜔	tshɤu꜔	tshu24	tshu꜔	tshu꜔	tshu꜔
賊	tshe꜔文 tshia꜔白 tshue꜔白 tšhya꜔白	tshe꜔白 ꜀tsue文 tshue꜔白	tshie24白 tsie24文	tšie꜔文 tšhie꜔白 tse꜔文 tshɯi꜔白	dzye꜔	tšyɛ꜔
絕集	tšhi	tšhi	tshi24	tshi꜔		tši꜔
及	tšhi꜔	tšhi꜔	tšhi24	tšhi꜔	tʂʅ꜔	tšhi꜔
傑	khe꜔文 khia꜔白	꜀khe	khie24	tšhie꜔	tšhie꜔	tšhiɛ꜔

表 八

	沅 江	益 陽	桃 江	安 化	湘 鄉
自 是	z₁⊒	z₁⊒	z₁⊒	z₁⊒	dz₁⊒自
徐	⊆zi	⊆zi	⊆zi白	⊆dzi	⊆džyi
隨	⊆zi ⊆zei	⊆zei	⊆zi	⊆dzi	⊆džyi
秦	⊆zin	⊆zin	⊆zin	⊆dzin	⊆džin
全	⊆ziẽ	⊆zie	⊆zie	⊆dzie	⊆tšyĭ
遲 時	⊆z₁	⊆z₁時	⊆z₁	⊆dz₁	⊆dz₁遲
臣	⊆zən	⊆zən	⊆zən	⊆lən	⊆lʌn
牀	⊆zɔŋ	⊆zoŋ	⊆zɔŋ	⊆dzã	(⊆tsaū)
在	zai⊐	zæ⊒	zɛ⊒	dzæ⊒	tsai⊐
坐	zo⊒	zo⊒	zo⊒	dzo⊒	tsu⊒
靜	zin⊒	zin⊒	zin⊐	(tsiŋ⊒)	
助	zəu⊒	zəɣ⊐	zəu⊐	dzou⊒	
雜	⊆za		(tsa⊐)	(tshɑ⊐)	tsa⊐

表 九

方言點	旁	盤	平瓶	頭	談	同	全	秦	從	遲	柴	除	垂	臣	其	求	群
長沙	pã	pɔ̃	pin	nɤ	tã	toŋ	tɕʮiẽ		tsoŋ	tsʮ	tsai	tsʮy	tsʮyei	tsen	tɕʮi	tɕieu	tɕʮen
湘潭	pɔn	pon	pin	ɣɤ	tan	tɤn	tsʮ	tsin	tsɤn	tsʮ	tsai	tsʮy	tsʮyei	tsɤn	tɕʮi	tɕʮeiɣ	tɕʮɤn
寧鄉	paŋ	pɔ̃	pin		tã	tɤn	tsʮ	tsin	tsɤn	tsʮ	tsa	tsʮy	tsʮyei	tsʮɤn	tɕʮi	tɕiu	tɕʮɤn
南縣	pɔ̃	pon⁻²半	pin	ɣɤ	tã	tɤn	tɕʮiẽ	tɕʮin			tsai	tsʮy	tsʮyɛ	tsʮɤn	tɕʮi	tɕʮeiɣ	tɕʮin
湘陰	paŋ	pan⁻²半	pin	ɛ	tan	toŋ	tɕʮiẽ	tsin		tsʮ	tsai	tsʮy	tsʮyei	tsɤn	tɕʮi	tɕieu	tɕʮɤn
岳陽	paŋ	pon	pin	tœy	tan	toŋ	tɕien	tɕʮin	tsoŋ	tsʮ	tsai	tsʮy	tsʮyei	tsɤn	tɕʮi	tɕieu	tɕʮin
黔陽	paŋ	pon	pin	tou	tan	toŋ	tɕien	tɕʮin	tsoŋ	tsʮ	tsai	tsʮy	kuei	tsɤn	tɕʮi	tɕiou	tɕʮɤn
會同	paŋ	pon	pin	tiau	tan	toŋ	tɕien	tɕʮin	tsoŋ	tsʮ	tsai	tsʮy	tsei	tsɤn	tɕʮi	tɕʮiou	tɕʮɤn
通道	paŋ	pon	pin	tou		toŋ	tɕʮiɣ	tɕʮin	tsoŋ	tsʮ	tsai	tsʮy	tsʮuei	tsʮɤn	tɕʮi	tɕʮiou	tɕʮɤn
安仁	pɔ̃	pɑ̃	pien	te	tã	tɤŋ	tsʮ	tsien		tsʮ	tsæ	tsʮy		tɕʮien	tɕʮi	tɕʮɯ	tɕʮen

書　目

湖北方言調查報告　趙元任、丁聲樹、楊時逢、吳宗濟、董同龢　1948

湖南方言調查報告　楊時逢　1974

江蘇省上海市方言概況　1960

漢語方音字匯第二版　1989

丁邦新

　　1966　　如皋方言的音韻　中央研究院歷史語言研究所集刊36.573-631.

方　進

　　1966　蕪湖縣方村話記音　中國語文141.137-146.

平田昌司

　　1982a　休寧音系簡介　方言1982.276-284

　　1982b　徽州方言古全濁聲母的演變　均社論叢12.33-45.

李劉顏

　　1987　李濟源　劉麗華　顏清徵　湖南婁底方言的同音字匯　方言1987.294-305.

吳健生

　　1984　萬榮方言志

周游

　　1985　周振鶴　游汝傑　湖南省方言區劃及其歷史背景　方言1985.257-272.

胡雙寶

　　1984　文水方言志

侯溫田

　　1986　侯精一　溫端政　田希誠　山西方言的分區（稿）　方言1986.81-92.

侯精一

　　1989　晉語研究

張　琨

唐作藩

　　1960　　湖南洞口黃橋鎮方言　語言學論叢4.83-133.

陳昌儀

　　1983　　都昌（土塘）方言的兩個特點　方言1983.248-259

張汪沈

　　1988　　張盛裕　汪平沈同　湖南桃江(高橋)方言同音字匯　方言1988.270-286

喬全生

　　1983　　洪洞方言志

楊荊

　　1971　　楊時逢　荊允敬　靈寶方言　清華學報新九卷第一二期合刊106-147

楊述祖

　　1983　　太谷方言志

楊煥典等

　　1985　　楊煥典　梁振仕　李譜莫　劉村漢　廣西的漢語方言（稿）　方言1985.181-190

劉育林

　　1988　　陝北方言略說　方言1988.257-269

劉勛寧

　　1983a　　陝北清澗方言的文白異讀　中國語文172.40-43

　　1983b　　古入聲在清澗話中的分化與廣州話的長短入　語言學論叢10.61-76

　　1988　　陝北清澗話的歸屬　方言1988.100-102

劉顏

　　1987　　漣源縣藍田鎮方言的語音系統　（漢語方言學會第四屆年會論文）

趙楊

　　1965　　趙元任　楊時逢　績溪嶺北方言　中央研究院歷史語言研究所集刊36.11-113

鄭張尚芳

　　1986　　皖南方言的分區（稿）　方言1986.8-18

儲誠志

    1987   安徽岳西方言的同音字匯   方言1987.284-293

魏建功

    1935   黟縣方音調查錄   國學季刊4.4.35-85

顏劉

    1987   顏清徽   劉麗華   新化縣域關鎮方言的語音系統   （漢語方言學會第四屆年會論文）

漢語方言史和方言區域史的研究

丁邦新

加州大學柏克萊校區 (U. C. Berkeley)

漢語是一個人口衆多、歷史悠久、方言複雜的語言，又有至少兩千多年的文獻提供早期的資料，對於研究語言現象的各方面，漢語都是可以墾拓的園地。漢語方言史是研究一個漢語方言形成的歷史；而方言區域史則是以現在或古代某一個方言區爲對象，研究那一個區域從古到今方言之間演變接觸的情形。兩者都是歷史語言學的課題，著重點雖有不同，最終的目的都是給整個的漢語史描繪一幅比較完整的圖畫。

現在先舉例說明方言史的研究以及方言區域史的研究，然後再就這個範圍提出幾點粗淺的想法來討論。

一、方言史研究舉例

這些年來對於閩南語的研究有不少新的資料使我們可以進一步了解一些小方言形成的歷史，例如何大安 (1981a) 討論海南島澄邁方言的來源；李如龍和陳章太 (1982) 研究碗窰閩南方言島二百多年間的變化；陸嘉美 (1983) 探討一種浙南閩語 —— 溫州平陽閩南語的來源。可以大體推知這些小方言是從什麼地方的方言移植遷徙而來，也可以看出其間演變的軌迹。

董同龢先生 (1960) 曾經調查過廈門、漳州龍溪、泉州晉江、和潮汕揭陽等四個地方的閩南語，資料相當詳細，可以用作比較閩南方言的起點。以下引用何大安、陸嘉美的研究及資料，綜合地來推究澄邁及平陽兩種閩南方言跟其他方言的親疏關係。

首先按照各地的音韻特點列成下表：

	廈門	漳州龍溪	泉州晉江	潮汕揭陽	澄邁	平陽	例字
(1)	dz	dz	l	dz	z	dz（另有 l-）	日、熱
(2)	i	i	ə	ə	u	ï	豬、去
(3)	u	i	ï	ə	u	ï	煮
(4)	ue	e	ue	oi	uai	ue	雞
	ueʔ	eʔ	ueʔ	oiʔ	uai	ue	八
	eʔ	eʔ	əʔ	oʔ	uai	ɤ	雪
(5)	e	ue	ə	ue	ue	ɤ	歲、尾
	eʔ	ueʔ	əʔ	ueʔ	ue	ɤ	月
	uiʔ	ueʔ	uiʔ	ueʔ	ue	ui	血
(6)	ŋ̩	uĩ	ŋ̩	ŋ̩	ui	ŋ̩	飯、園
(7)	ĩ	ẽ	ĩ	ẽ	æ	ĩ	生
(8)	in	iŋ	in	iŋ	in	in	緊、稱
	it	ik	it	ik	it	ieʔ	筆、直
(9)	un	un	un	uŋ	un	uən	船、唇
	ut	ut	ut	uk	ut	uəʔ	忽、出
(10)	陽平：陰平	陽平：陰平	陽平：陽去	陽平：陽去	—	陽平：陽去	門、茶

在這十個音韻特點之內，澄邁跟四個具有代表性的方言點的接近情形如下：

澄邁＝廈門	澄邁＝龍溪	澄邁＝晉江	澄邁＝揭陽	不清楚
1,3,4,8,9	1,5,6,7,9	4,8,9	1,5,7	2,10

先看不清楚的兩點，第(2)點是「豬、去」等字的韻母問題，澄邁讀 d'u22、k'u14，元音 u 可能受別的閩南方言影響而來，跟表上的四個方言點無關，因此關係不明。第(10)點是說明連讀調值的變化方向，有的地方陽平相當於陰平的變化，有的地方則相當於陽去。而澄邁根本沒有變調，只有一種調值，因此無法比較。

其餘八個特點之中，澄邁跟廈門、龍溪接近的各有五點，跟晉江、揭陽接近的各有三點。如果認為澄邁方言是從漳州音加廈門話的母語移入海南島的，或者由漳州移入，後來收到閩南通語廈門話的影響形成目前的情形，都是言之成理的，因為八個特

點完全符合。[1]自然，澄邁跟晉江、揭陽的關係就相對地疏遠了。

至於平陽跟幾個方言點的關係則與澄邁的情形大不相同：

平陽＝廈門	平陽＝龍溪	平陽＝晉江	平陽＝揭陽	不清楚
1,4,7,8	1	2,3,4,5,6,7,8,10	1,2,6,10	9

第(9)點的接近情形看不出來，平陽的兩種韻母似乎有進一步的變化，難以說定跟哪一種讀法接近。其餘九個特點之中有八個是平陽跟晉江類似的。我們可以相當肯定地說，平陽的閩南語大概是從晉江一帶遷移過去的，這跟陸嘉美的發音人蘇尚耀先生的說法是一致的。[2]

第(1)點平陽的 dz- 表面上跟晉江的 l- 不同，其實平陽另有 l- 聲母，而 dz- 與 l- 並立的階段正代表晉江早期母語的情形，後來兩者合流，就成爲晉江現在的讀音了。[3]

從接近的情形看來，澄邁、平陽各有來源，那麼差異的情形又如何呢？以最接近的兩點來觀察，可以歸納如下：

1. 澄邁與廈門、龍溪之差異

廈門、龍溪		澄邁
ṽ	—→	v
-ʔ	—→	∅

2. 平陽與晉江之差異

晉江		平陽
-m	—→	-n
-ʔ	—→	-∅
-p,-t,-k	—→	-ʔ

把相同及差異的情形綜合起來，就是澄邁、平陽兩個小方言音韻演變的歷史。如果跟碗窯的情形比較，也可看出各地音變的方向：

---

1 何大安 (1981a：110) 認爲「澄邁方言在系統上，是比較接近漳州的。」跟本文的看法大同小異。
2 陸文 (1983：5) 說：「蘇先生自述他的祖先來自福建泉州，明末崇禎年間 (1628－1644) 因避饑荒而遷移到浙江。」
3 陸嘉美 (1983：259-260) 曾以〈彙音妙悟〉中 dz- 跟 l- 分立的情形證明早期泉州方言還具有這兩個聲母。

3. 福建碗窯閩南方言島與晉江之差異：

晉江		碗窯
-m,-n	⟶	-ŋ
-p,-t,-k	⟶	-k ～-ʔ

正如陳淵泉 (Matthew Chen 1973) 指出的情形一樣，鼻音尾有的變爲舌根鼻音-ŋ，有的則經過鼻化元音的階段之後終於失落。塞音尾變成 -k 或 -ʔ，最後在某些方言也完全失落。

這樣的方言史研究可以追溯大約兩三百年的光景，如果有可靠的資料，我們就可以把小方言演變的歷史匯合成大方言的演變史。以閩語而言，可以把歷史上人民遷徙的資料配合音韻的變化來推測閩語形成的歷史。張琨先生 (1984) 的「論比較閩方言」已經把許多資料做了綜合分析的工夫。何大安 (1988) 對於「贛語史」的研究也是方言史研究的一個很好的例證。

二、方言區域史研究舉例

最近我 (1988) 曾經提出一些想法，認爲浙江西南角吳語底層的白話音具有閩語的成分，可能南北朝時的吳語就是現在閩語的前身，而當時的北語則是現在吳語的祖先。這個想法讓我想到以江東或者江南這一個方言區作爲研究對象的可能，也許可以從各種語言現象推究在這一個區域之中方言之間影響接觸的情況。

吳語底層的問題是從一個有爭論的方言引起來的，傅佐之 (1984) 認爲平陽蠻話是吳語，鄭張尚芳 (1984) 則認爲從語音和詞彙看來都有閩語的特徵。平陽蠻話的聲母系統引錄如下：

p	pʻ	b	m	f	v
t	tʻ	d	n		l
ts	tsʻ	dz		s	z
tɕ	tɕʻ	dʑ	ɲ	ɕ	ʑ
k	kʻ	g	ŋ	h	ɦ
ø		j			

從這個系統看來自然是吳語的一種，但是讀音上卻有「端知不分」的問題。傅氏把知系字分成以下四組：

<div>

1. 蟲、長、桌、啄等十個字。 2. 豬、錘、張、竹等二十九個字。

3. 茶、蛛、賬、中等八十個字。 4. 柱、知、轉、澄等二十四個字。

</div>

認爲蠻話的三種方言把這些知母字讀如端母的範圍大小不同，白沙蠻話只把第1組讀爲舌尖音，錢庫蠻話則把1、2兩組讀爲舌尖音，平陽蠻話又擴充至第3組，而第4組則沒有讀爲舌尖音。既然範圍寬窄不同，自然不該根據這一個不一致的現象把蠻話歸爲閩語。

我覺得討論這個問題應該注意文白的異同，但原資料裡文言白話的層次卻沒有清楚的描述。根據謝雲飛(1988)的資料，在麗水方言中有下面的文白對比：

例 字	白 話	文 言
豬	ti 35	tɕy 35
蛛	ty 35	tɕy 35
轉	tyɛ̃ 22	tɕyɛ̃ 22
啄	ti? 44	
長（動詞）	dai 213	dz'iaŋ 213
張	tiaŋ 35	tsaŋ 35
賬	tiaŋ 51	tsaŋ 51
帳	tiaŋ 51	
漲	tiaŋ 51	tsaŋ 22（漲潮）

值得注意的是這幾個白話讀音卻涵蓋上面所說的四個組，因此我才提出白話底層的看法。[4] 推究這個底層的來源，我曾引用南史王亮傳的資料，指出閩語的方言字「跤（骹）」出現在當時南朝的口語裡。後來又在南朝的吳歌裡找到一個「儂」字，具有跟閩語很接近的用法。例如：

(1)吳歌子夜四時歌夏歌：赫赫盛陽月，無儂不握扇。

(2)吳歌子夜歌：歡愁儂亦慘，郎笑我便喜。

4 請參看 1988 拙文，此地不再詳論。

前一例中「無儂」是「無人」的意思，夏月炎熱，無人不握扇。後一例中，從上下對句看來，「儂」指「我」。而閩語中的「人」其實就是「儂」字。例如廈門讀 ˬlaŋ，福州讀 ˬnøyŋ、龍岩讀 ˬdaŋ、莆田讀 ˬnaŋ。[5] 這個「儂」字可以指稱自己，作爲一種委婉的說法。例如台北的閩南語：

    ˬlaŋ ˬbo ai꜒ 「人家不要！」

    koꜗ leꜗ ts′io꜒ ˬlaŋ 「還在笑人家！」

正如國語一樣，這兩句裡的「儂」（人家）指的其實就是「自己」。

  在詞彙之外，韻母的演變上有沒有證據支持南北朝的讀法跟閩語的白話相近呢？仔細檢索的結果，得到下面一點資料：

之脂支三部演變情形

  上古： 支部 -ig 之部 -əg   脂部 -id

  兩漢： 支部 -eï→ ei 之部 -əg   脂部 -əd → -əi

  魏晉： 支部 -ei 之、（哈）部 -əï 脂部 -əi

  南北朝：

   宋北魏前期   支佳 -ei 之 -əï 脂微 -əi

   北魏後期、北齊 支 -e 之 -əï 脂 -ei

   齊梁陳北周隋   支 -e   脂之 ei（微 -əi）

  閩南：   支 i,e,ə,ue,ia,ua 脂之 i,ai（脂：眉、梨、師 之：治、使）

中古切韻中有之、脂、支三韻，分別來自上古的之、脂、支三部，這些韻裡的字在現代方言裡大體都無法分別。正如國語中「之脂支」三個字根本完全同音，無法從韻母上看出以往歷史上的區別。只有閩語中可以找到「支」跟「之脂」有分讀的線索。例如支韻字在閩南語中的韻母有 -i、-e、-ə、-ue、-ia、-ua 等，但之脂韻字卻有讀 -ai 的，例字見上。韻母上這種分野有沒有歷史的證據呢？檢看上古到南北朝之間韻部演變的情形，恰好在南北朝的後期「齊梁陳北周隋」的時代也有「支」跟「之脂」分立，「之脂」合流的現象，而且根據何大安 (1981b：205-210) 的擬音，「支」是 -e，「脂之」是 -ei，後者正是一個複元音。我相信這不是偶合，跟現代吳語的白話底層一

---

5 參見拙文 (1990：11)。

樣，閩語的祖語可能就是南北朝時代所謂的「吳語」。

　　這樣的推論引發的問題是關於方言區域史研究的縱深現象。在江東或江南這一個區域，方言之間有過什麼樣的接觸？彼此之間的影響在現代方言之中產生什麼樣的結果？如果把歷史上的現象跟現代方言綜合探討，也許可以給這個區域的方言做相當清楚的描寫。Serruys (1959：98-99) 研究揚雄方言時把漢代的方言分做六區；嚴耕望先生 (1975) 根據同樣的材料從歷史地理的角度也分爲六區；我 (1975：261-262) 利用郭璞 (276-324 A. D.) 的爾雅注找出他對比的五個區域，列表比較如下：

漢代（Serruys 說）	漢代（嚴耕望說）	晉代
Western	關西區	關西
Central	關東區（中原區）	
North-Northeastern	燕朝鮮區	北燕
Eastern	海岱間之齊國區	東齊
Southeastern	江淮區	江東
Southern	長江中下游區	荊巴

其中江東都是一個方言區，顯示當時似乎沒有今天所謂閩語和吳語的差別。等到明代張位在問奇集（寫成於1540-1600左右）中敘述各地方音時，就成爲八個區：燕趙、秦晉、梁宋、齊魯、西蜀、吳越、二楚、閩粵。已經把吳越跟閩粵分列。他舉的例字如：

　　吳越：打爲黨，黃爲王、豬爲知。

　　閩粵：方爲荒，知爲茲。

吳越部分的讀音也是今天吳語的特色，尤其「打」字讀如「黨」一條最爲清楚。閩粵部分所顯示的也是現在閩語或粵語的現象。[6]

　　如果我們能找到更多的資料，對於江東這一個方言區的歷史就能掌握更有條理的細節，自然對現代方言的來龍去脈就更能了解全貌了。

　　以上只是拿江東方言區作爲一個例子來研究，其他的方言區自然也可以作如此深入的探討。前幾年我曾經主持過海南島方言的調查計畫，[7]注意到當地的漢語方言都有

6　詳見拙文 (1978)。
7　我自己調查儋州村話、臨高話，何大安調查樂會、澄邁；楊秀芳調查萬寧；張賢豹（光字）調查海口，都已發表部分結果。

把一般的 s- 讀成 t- 的現象，認爲可能受到黎語的影響。而歐陽覺亞和鄭貽青 (1963) 的黎語概況之中正有以下的對當情形：[8]

海南黎語

保定	通什	白沙	西方	語義
tui	tui	tshoi	sui	水牛
te:ŋ	te:ŋ	tshiaŋ	se:ŋ	梳子
to:k	to:ʔ	tshɔʔ	so:k	洗（衣）

如果以海南方言區作爲一個研究的對象，對於了解這個方言區域的歷史，其中語言及方言接觸的情形，都是很有意義的課題。

三、方言影響與方言層

　　無論研究方言史或方言區域史都要處理方言間影響的問題，我以爲彼此影響如果很深，就產生所謂的方言層，例如閩語的文白兩讀就形成文讀層和白話層；如果影響很淺，就只有小部分詞彙的移借或一字兩讀。我想方言層有數量較多的例字，最主要的特性是具有成系統的音韻特徵，而一般的方言或語言影響則僅有少數零碎的例證，或者即使數量不少，但系統性卻不明朗，常有錯綜複雜的現象。方言層是大家熟知的，不必舉例。方言影響則有多樣性的面貌，現在來討論幾種類型：

㈠以另一方言白話作文讀

　　上面我們說過幾種閩南方言的音韻特點，其中的一種就是「雞」這一類的字在漳州讀 ͨke，在泉州讀 ͨkue，顯示介音 u 的有無是兩種白話音的不同。在董同龢先生 (1967) 所記的一種台北的閩南話裡，具有以下的資料：

　　1. 雞 ke 44：ke 33　nŋ̍ 33　bat 11　bat 44　ia 11　u 11　pʼaŋ 33
　　　　　　　　　　　　　　　　　雞卵密密也有縫。

　　2. a. kue 44：sui 55　kue 44　ki 11　　水雞記

　　　　b. 　　　　kue 44　siã 44　　　雞聲

8　詳見拙著 (1986：183)。

第1條是一句諺語，「雞」字的讀法 ke (44 --> 33) 自然是白話音；2a是一篇故事的題目，其中「水」字讀 sui55 顯然是文讀，[9] 可見「雞」讀 kue44 也是文讀。這是把另一個方言中的白話音拿來作爲文言音用。但2b 的「雞聲」又是以 kue44 與白話音 siã44 相配，顯示方言混雜時用法不一致的現象。

(二)以另一方言文讀作白話

何大安 (1981b) 討論澄邁方言的文白異讀時，引用以下的例證：

	台南文讀	台南白話	澄邁文讀	澄邁白話
熊	hiɔŋ 33	him 13	sioŋ 51	hioŋ 51
盒	ap 44	aʔ 44	hap 33	ap 33
竹	tiɔk 22	tik 22	tsok 55	diok 55

台南的這一種方言屬於漳州方言，[10] 從以上的比較看來，澄邁是把別的方言的文讀音作爲自己的白話音。自然這個說法並不意味著澄邁方言是從台灣遷移而去的，只是指出澄邁的白話音確實跟一種漳州方言的文讀音相合，而上文已經說明澄邁的音系跟漳州方言及廈門話是很接近的。

(三)以本方言文讀作白話

我 (丁：1986) 調查的儋州話有相當完整的文白兩讀，因爲聲調系統不同，幾乎所有的字都有文白的差異。效攝蕭韻的開口部分有三種白話韻母：e、i、ieu，全部例字如下：

(1) e：條調 he 55：鳥 ne 11、了 le 11：釣 he 22、尿 ne 11、料 le 11。

(2) i：蕭簫 ti 35。

(3) ieu：刁 dieu 35、雕 dieu 35～hieu 35、挑 hieu 35、撩 lieu 22；弔 dieu 22。

韻母讀 -e 的都是端系字；讀 -i 的蕭簫兩字是心母字，跟三等宵韻的「消宵」等字混合，都讀 ti35。第(3)類讀 -ieu 的字顯得很奇怪，它們也都是端系字，但韻母差別甚大。如果 -ieu 韻代表早期的韻母，何以一部分端系字後來變 -e，另一部分卻不變？如果假設所有的蕭韻字在白話音都該變讀爲 -e 或 -i，那麼這些 -ieu 韻的讀法從何而來？

9　「水」字的白話音通常是 ᶜtsui，聲母不同。

10　參見何大安 (1981b：117)。

現在來檢看儋州的文言音：

(4)文言音：刁 dieu 22、雕 dieu 22、挑 hieu 22、撩 lieu 11、弔 dieu 35。

我們發現除去聲調以外，聲韻母全同，可見白話的讀法是受了文言的影響。最大的可能就是這些字以文讀當作白話，加上聲調的調整成爲現在的情形。

㈣文白混雜產生新讀

在儋州村話裡文白混雜的情形有好幾種，其中一種是元音改變型：

白　話	文　言	新　白　話
昌　suɔŋ 35	saŋ 22	sɔŋ 35
昌盛　suɔŋ 35 tieŋ 11	文昌帝君 vɔn 11 saŋ 22 di 35 kin 22	昌化 sɔŋ 35 ha 22（縣名）
穿　suan 35	suan 22	sun 35
穿衫　suan 35 tam 35	穿衣 suan 22　zi 22	穿穴 sun 35　hot 22
陵　laŋ 55	liŋ 11	leŋ 55
螞蝗陵　ŋai 11 vaŋ 55 laŋ 55	丘陵 qʻieu 22　liŋ 11	陵水 leŋ 55 tui 22（縣名）

在白話、文言兩種讀音之外又產生一種新白話，音讀似乎是以文言音或白話音爲基礎，改變元音而成。值得注意的是其中有兩處是地名，地名有時存古，有時翻新，難以認定。我們也不知道這些地名會不會帶著其他方言的色彩。總之，這種新白話顯示文白之外的音讀，可以視爲方言影響的一種現象。

綜合以上的類型，可見方言之間的影響有多樣性，許多零碎的例子只有片面的意義，代表方言影響的一個點，並不能反映整個的方言層。方言層的時間可以推索，顯示系統性的現象；方言影響則不易推斷，有時會產生新的變讀。

四、方言語法與歷史語法

一般說來，方言語音方面的研究跟歷史音韻學頗能配合，但是方言語法的研究跟歷史語法還没有良好的結合。趙元任先生 (1968：13) 以前曾經說過：

「中國各地方言在文法上最有統一性。除去一些小的分歧：像吳語粵語的間接賓語放在直接賓語之前，……再除去一些詞尾跟語助詞的不同，……咱們可以說，

中國話其實只有一個文法。即使把文言也算在內，它的最大特點只在單音節詞多，複詞少；還有表示地方、來源的介詞組可以放在主要動詞之後，而不放在前面。除此以外，實質上，其文法結構不僅跟北平話一致，跟任何方言都一致。」[11]

近來頗有人提出不同的看法，認爲方言語法之間也頗有差異。例如朱德熙 (1985、1990) 對反覆問句的看法就指出各方言之間的不同。現在我把他的研究綜合如下：

		可+動詞組	動詞組+不+動詞組	動賓+不+動賓	動賓+不+動	動+不+動賓	動賓+不
北方官話	北平				×		
	河南		×	×	×		
	陝西				×		×
	山東、東北					×	
西南官話		×	×			×	
下江官話		×	×				
吳　語		×	×				
湘　語			○			○	
贛　語			○				
客家話			×			×	
粵　語			×			×	
閩　語		○	×	?		×	×
	西游記	×					
	儒林外史	×	○				
	金瓶梅		×				
	紅樓夢	×	×				
	兒女英雄傳	×	×				

表上圓圈的部分是我增補的，只是根據一般的觀察，並沒有做詳盡的調查。這裡只是舉例來說明各大方言及若干近代文學作品中反覆問句的情形。

11　本段引文見拙譯本 (1980：8)

反覆問句如此，別的結構又如何呢？舉一個我所熟悉的例子來說：[12]

我 (1986) 出版《儋州村話》之後，梅祖麟曾來信跟我討論村話中的語法現象，其中一點是「得」字的用法。儋州村話的語料裡「動詞＋得」的情形相當多，例如：知得、過得、偷得、拿得、看得、住得、提得、擔得。《朱子語類》裡這一類的結構非常多，在那以後就漸漸消失，國語裡只保存了「覺得、記得、曉得」。從斷代的條件說來，這種結構大約是十二、三世紀漢語的特徵。

另外，儋州村話有以下的用例：

雞…總抽不得那隻腳出來。（197頁4行）

細粉…總不從得鼻出來。（198頁1-2行）

人…醉幾日睡不起得身來。（203頁9行）

又有：

我也不喫得。（193頁11-12行）

人家…沒出得海。（229頁10行）

先生爸…未喫得幾塊肉。（237頁11行）

你們…也無擔得，無提得。（240頁9-10行）

他…未走得過。（247頁8行）

這一類結構大體是「動詞＋不得＋賓語＋補語」，「不＋動詞＋得＋補語」，或「不＋動詞＋得＋（賓語）」，跟宋代資料的情形相當接近。[13]梅先生認為前兩種結構都有「拆開的能性補語」，[14]例如「總抽不得那隻腳出來」、「未走得過」，在元代以後大致絕跡，因此很容易用來斷代。

這一種討論是把方言語法跟歷史語法結合在一起，有時候可以互相發明。問題是我們對歷史語法的斷代條件到現在只有粗略的看法，遠不及歷史音韻學中斷代條件的細緻，這一個方向還需要進一步的探究。當然，研究方言語法的路向跟歷史語法的連繫更有待加強。近年來研究閩南語語法的著作不少，跟歷史語法的關係還沒有能闡明。

12　這個例子在講演時沒有時間說明，現在加以補充。主要的論點根據梅祖麟給我的來信。
13　詳見呂叔湘 (1955：59-68) 在「與動詞後得與不有關之詞序問題」中的討論。
14　梅先生信中用「split potential complement」，這是我的翻譯。

五、方言詞彙之時代性與方言分類

當兩個語言接觸或兩個方言彼此影響時，通常最容易移借的是詞彙，也可以說詞彙最容易改變；語音變化至少也要幾十年的光景；語法最不容易改變，但從中國語言的歷史看來，漸進的語法改變有相當清楚的軌跡可循；那麼，語言中最保守的也許就是構詞法了。

詞彙既然容易改變，是否能用來作方言分類的根據呢？我想如果我們能釐清詞彙的時代性，還是可以作分類的條件。例如某一個詞彙在歷史上可以肯定它應用的時段，到某一個時期之後已經被其他同義詞代替了，不再見用了；而這一個詞彙卻保存在某一方言之中，那麼就可以用它來作為方言區分的一個條件。問題在於我們如何能肯定一個詞彙的歷史？古文獻數量龐大，翻檢不易。幸好中央研究院歷史語言研究所近年來把二十五史輸入了電腦，我們至少可以用這一份資料作詳盡的觀察。舉一個例子來說：

國語中稱為「鍋子」的東西，在文獻上或方言中有不同的名稱：鼎、釜、鑊、鍋。其中「鼎」字在閩方言中仍然存在，大家都認為這一個字是方言詞彙，我們是不是可以看一看這些跟「鍋子」有關的詞彙在史記一書裡的用法，有沒有什麼語義上的分歧？能不能顯示時代上的區別？

檢索的結果，在全部史記中這些字出現的次數如下：

鼎 299次　　釜 21次　鑊 3次　鍋 1次

先從出現次數較少的說起：「鍋」字一見，並非史記本文，而是史記索隱的說明：「過與鍋字相近，蓋即脂器也。」可見「鍋」大概是後起字，至少在史記正文中沒有出現。

「鑊」字三見，一次也是見於索隱，可以不必注意。另外的兩次原文如下：

范睢傳：「賈有湯鑊之罪。」

廉頗藺相如傳：「臣請就湯鑊。」

兩處都與「湯」字連用，可以推想「鑊」在當時可能專門指稱燒水的大鍋，可以作為刑具，大概不會是飯鍋。

「釜」字二十一見，見於三家注的十四次可以不論，其餘七次原文如下：

五帝本紀：合符釜山。

項羽本紀：破釜甑。

趙世家：城中懸釜而炊。

田完世家：宜若奉漏甕沃焦釜也。

楚元王世家：嫂詳爲羹盡，櫟釜，賓客以故去。已而視釜中尚有羹，……。

蔡澤列傳：遇奪釜鬲於塗。

其中六次指烹煮食物的鍋，意義相當明顯。即使「釜山」一條大概指山形如釜，也沒有問題。可見太史公用「釜」字的時候，心目中是指稱一種「鍋子」。

現在來看「鼎」字的用法。見於史記正文的只有一百二十九次，見於三家注的一百次也可以不論。見於正文的部分可分四種意義：

一、指寶器，如「寶鼎」、「九鼎」，共一〇五次。

二、指食器，共六次。

三、見於年號「元鼎」，共十二次。

四、意義不明顯，如「鼎足」，共六次。

我們來檢看指食器的用法：

殷本紀：（伊尹）負鼎俎，以滋味說湯。

孟子荀卿列傳：伊尹負鼎而勉湯以王。

平津侯主父列傳：且丈夫生不五鼎食，死即五鼎烹耳。

游俠列傳：伊尹負於鼎俎。

貨殖列傳：酒削、薄技也，而郅氏鼎食。

其中三條都跟伊尹有關，指傳說中伊尹善於烹調，帶著鍋子（鼎）切板（俎）遊說成湯的故事，並不是指當時實際的情形。[15] 主父偃列傳中的「五鼎食、五鼎烹」說明大丈夫的抱負，似乎也不是實際的情形，只是一種譬喻。最後一條的「鼎食」指以薄技致富，跟「五鼎食」的用法類似。因此我們可以得到一點證明來論斷「鼎」字在太史公時代的用法：西漢的「鼎」主要指「九鼎」一類的寶器，也還了解「鼎」早先用爲食器，但當時只

---

15 史記中有幾處記載「舉鼎、扛鼎」的故事，讓我們了解後來的「鼎」至少在重量上已經不可能指伊尹可以負載的「鼎俎」之「鼎」了。

用在譬喻性的典故裡，並不眞正當作現代的「鍋子」用。

根據以上的分析，我們知道西漢時代的「釜」大約相當於現在的「鍋子」；「鑊」是大的水鍋；「鼎」則已用爲寶器，只在引述傳說或典故時才用爲食器。[16]那麼閩語中還把「鼎」當作眞正的「鍋子」使用，至少保存了西漢時代尚可了解的一種用法。我們如果用這個詞彙作爲方言分類的一個條件自然有充分的理由。

有的時候詞彙完全相同，但是它的一種特殊用法可以用來作分類之用，而且具有相當清楚的時代性。例如閩南語中的「有」字，可以加在形容詞之前加強語氣：

這 (tsit˰) 粒西瓜有大：（國語）這個西瓜眞大。

這 (tsit˰) 個(˰e) 嬰仔(ᶜa) 有勇：（國語）這個孩子眞勇敢。

我覺得這種用法跟詩經裡「有」字的一種用法非常接近：

周南桃夭：桃之夭夭，有蕡其實。

小雅白華：有扁斯石，履之卑兮。

「有蕡、有扁」就是「眞大、眞扁」的意思。如果這種看法正確的話，那麼有些詞彙的特殊用法就可以作爲以方言詞彙分類的一種條件，當然也是方言史研究的一個課題了。

今天我們對許多詞彙發展的歷史還不清楚，這個方向還有很廣闊的園地有待我們去開拓。

六、綜合研究

以上我從音韻、文法、詞彙等幾個方面討論漢語方言史和方言區域史研究的一些想法，總起來說，我是想提議一種綜合的研究。一方面希望對於中國方言的研究要從音韻擴展到文法和詞彙，不僅要了解漢語音韻史，也要了解漢語文法史、漢語詞彙史，再把這些縱深的研究跟方言平面的研究交接起來，建立座標圖上的兩根主軸，使我們對漢語整個發展的歷史得到明確的認識。另一方面，基於這樣的要求，我也希望從事研究的人能把注意的範圍擴大，研究音韻的也注意文法，研究文法的也注意音韻，彼此也都注意詞彙。那麼漢語方言史和方言區域史的研究也就等於整個漢語史的研究，也就能在語言學的領域裡大放異彩了。

---

16 這裡我特別著重實際的用例，因此沒有引述《說文》及《方言》中的定義和名稱。

參考書目

丁邦新

1978　〈問奇集所記之明代方音〉，《中央研究院成立五十週年紀念論文集》，577-592。

1980　《中國話的文法》，譯自趙元任1968，香港中文大學出版社。

1986　《儋州村話》，中央研究院歷史語言研究所專刊（以下簡稱「史語所專刊」）之八十四。

1988　〈吳語中的閩語成分〉，《中央研究院歷史語言研究所集刊》（以下簡稱《史語所集刊》）59.1:13-22。

1990　〈華語研究的展望〉，《華文世界》51:1-13。

朱德熙

1985　〈漢語方言裡的兩種反覆問句〉，《中國語文》1985.1:10-20。

何大安

1981a　《南北朝韻部演變研究》，國立台灣大學中國文學研究所博士論文。

1981b　〈澄邁方言的文白異讀〉，《史語所集刊》52.1:101-152。

1988　《規律與方向——變遷中的音韻結構》，史語所專刊之九十。

李如龍，陳章太

1982　〈碗窰閩南方言島二百多年間的變化〉，《中國語文》1982.5:354-364。

呂叔湘

1955　《漢語語法論文集》，北京科學出版社。

張　琨

1984　〈論比較閩方言〉，《史語所集刊》55.3:415-458。

陸嘉美

1983　《溫州平陽閩南語研究》，國立台灣大學中國文學研究所碩士論文。

傅佐之

　　1984　〈平陽蠻話的性質〉，《方言》1984.2:95-100。

董同龢

　　1960　〈四個閩南方言〉，《史語所集刊》30:729-1042。

　　1967　《記台灣的一種閩南話》，史語所單刊甲種二十四。

鄭張尚芳

　　1984　〈平陽蠻話的性質〉，《方言》1984.2:100-101。

謝雲飛

　　1988　〈麗水西鄉方言的音位〉，《中華學苑》38:1-68。

嚴耕望

　　1975　〈揚雄所記先秦方言地理區〉，《新亞書院學術年刊》17:37-47。

Chao, Yuen Ren（趙元任）

　　1968　*A Grammar of Spoken Chinese*, University of Califormia press, Berkeley and Los Angeles.

Chen, Matthew（陳淵泉）

　　1973　Cross Dialectal Comparison: A Case study and some Theoretical Considerations, *Journal of Chinese Linguistics* 1.1:38-63.

Serruys, Paul L-M

　　1959　*The Chinese Dialects of Han Time According to Fang Yen*, University of California Press, Berkeley and Los Angeles.

Ting, Pang-Hsin（丁邦新）

　　1975　*Chinese Phonology of the Wei-Chin Period: Reconstruction of the Finals as Reflected in Poetry*, Institute of History and Philology, Academia Sinica, Special Publications No.65.

Zhu, Dexi（朱德熙）

　　1990　A Preliminary Survey of the Dialectal Distribution of the Interrogative Sentences Patterns V-NEG-VO and VO-NEG-V in Chinese, *Journal of Chinese Linguistics* 18.2:209-230。

Oujiang Wu Tone Sandhi: Visi-Pitch Results

W. L. Ballard

Ehime University Matsuyama, Japan June 1990

Fieldwork in Zhejiang *

During February, March and April, 1988, I spent two periods each in three places, Hangzhou, Jinhua and Wenzhou, interviewing teachers and students at three institutions, Hangzhou University, Zhejiang Normal College, and Wenzhou Normal Institute. These consultants came from 25 different sites, mostly different county seats, or towns near them, in central and southern Zhejiang; see Map I. (Upon my return to Matsuyama I was able to interview in the same way two overseas students at Ehime University that came from the same area.) All but two of the informants were male, all but four or so were between the ages of 19 and 25. Generally speaking, the consultants had all lived exclusively in their places of birth until attending college.

During each interview the consultant and I first selected and then recorded on magnetic tape five examples each of the eight isolation tones, and three examples each of every possible two-syllable lexical tone sandhi combination of the eight tones, as culled from a protocol that is used by the Wu dialectologists at Fudan University. Each example was spoken three times by the informant. I am well aware of a number of limitations in the

elicitation procedure: since the sample was not randomized, sing–song may very well have set in in any cell; the protocol and/or example selection procedure may have contained hidden biases; recording conditions were often far from ideal. However, I could not choose the setting or informants, and given a desire to cover as many different dialects as possible, all with freely donated time, the sample I extracted was probably about as good as could be had.

I have now run all of the data for the 6 Oujiang dialects in my sample: Yong Jia, Xiang Yang (2 speakers), Wen Zhou, Ping Yang and Wen Cheng, through a digital transistorized Visi–pitch machine produced by Kay Electronics, number 6095/6097, that runs in conjunction with an IBM (clone) computer and dot–matrix printer. I set the time display at 1 second, and chose the double (amplitude and pitch) display mode. I use the standard 0 to 400 HZ frequency range. After getting the record for the middle pronunciation onto the screen in an appropriate location, I place the cursors: one at the beginning of the pitch curve and the other at the end for the whole group . (If there is a bit of fuzziness at either end, I try to judge the proper placement based on the general appearance of the curve and on the amplitude curve.) I also use the built–in machine statistics option and extract figures for highest F_0 and lowest F_0. After making a print, I place the cursors at the two internal syllable boundaries, if possible, and again extract all the relevant data.

Next, I average all of the values for F_0 and for overall elapsed time and determine standard deviations; these figures are entered on a data sheet. I then trace overlays of the two curves for the three examples in each cell. By comparing the numbers with the tracings I derive a best overall estimate of the F_0 configuration for each cell. Sometimes in examining a set, it will become obvious from the tracings that one of the three examples is wildly divergent from the other two in one or more features; that one example will then be eliminated. From the tracings, and from the numbers indicating onset F_0, offset F_0, highest F_0 and lowest F_0, turned contours show up. Generally, if the highest and lowest F_0 values do not diverge more than 2 or 3 HZ or so from onset and offset, and if thetraing is fairly straight, I ignore the difference. If the deviance gets greater than about 5 or 6 HZ,

Ballard / ISCLL

MAP I : Dialects in the Survey

杭州
Hangzhou

ZHEJIANG

浦江
PJ
義烏
金華 YW
龍游 湯溪 JH
衢州 LY ·TX 武義
QZ WY 永康
YK

東陽
·DY
毛店
·MD 磐安
·PA
方岩 仙居
FY ·XJ

鹽海
·LH

松陽
SY
麗水
LS

黃岩
·HY

青田
QT
永嘉
YJ
象陽
XY

溫岭
·WL

龍泉
LQ
景寧
JN·
溫州
WZ

文成
WC
平陽
PY·

泰順
TS
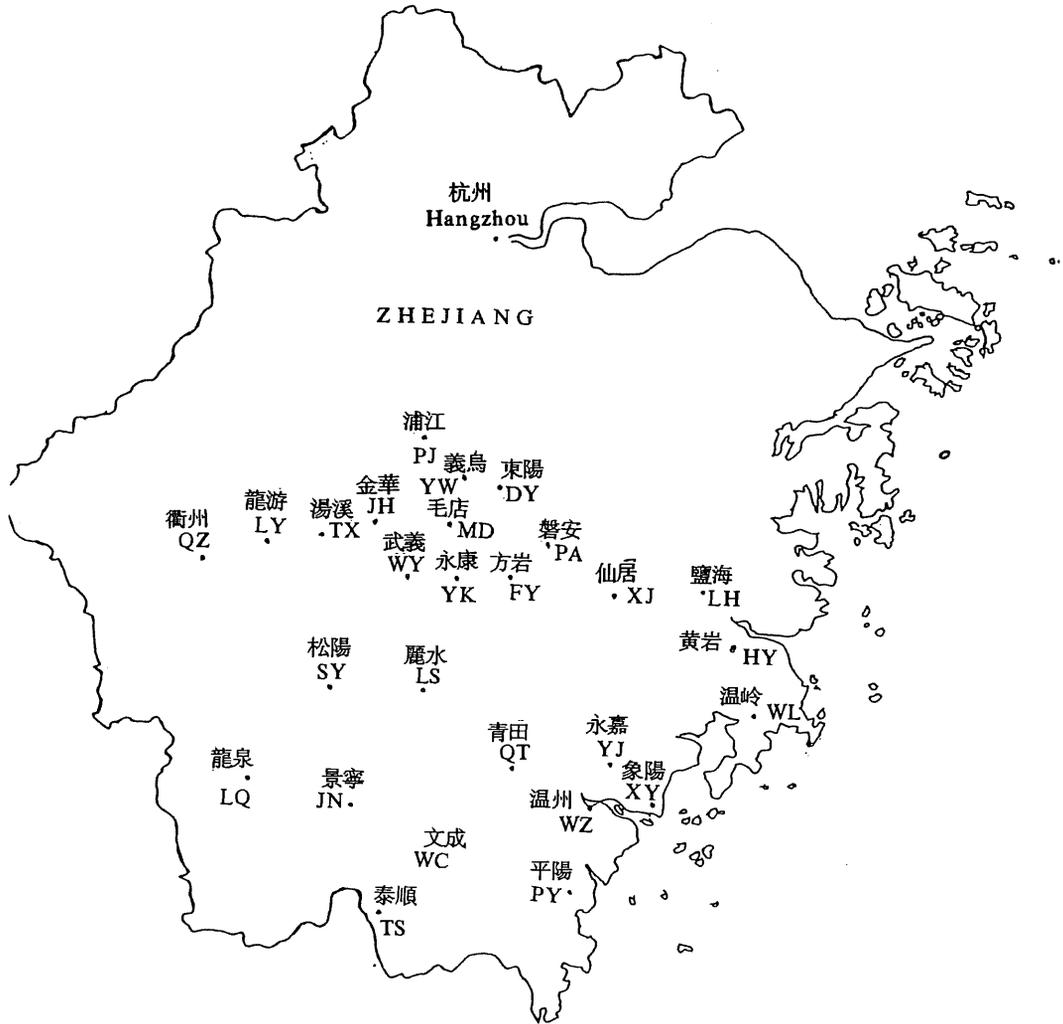
and the tracing indicates a hump or dip, then a turned contour is opted for. In some cases, that means two internal turns; in others, long stretches with shoulders, tails, etc. This procedure does not allow for machine determination of the place of turn. Instead I have had to try to estimate that by percentages. I understand from the literature the advantages of frequent periodic sampling, and something like that may be possible in the future, but there are limitations involved. For one thing, it is not always possible to tell from just one display that positing a turn will be in order. For another, the more times I sample, the more time it takes to process the data. For a third, the lengths vary so much that setting up an automatic periodic sampling rate would be nearly impossible.

In Table 1 I give the values for the isolation tones for the 6 dialects. The data on each line is arranged as follows : onset F_0 , number in the sample (n)/standard deviation (sd), intermediate F_0 , n and sd, if any, offset F_0 , n and sd, elapsed time, n, sd, and the turning point, if any, and its n and sd. (If there are two turns, the final F_0 is set down one line.) In some cases there appears to be more than one set of values for a given dialect.

In Table 2 I show all of the numbers for all two-syllable combinations in Wen Zhou. The first line for each initial syllable type shows onset F_0 value for the first syllable, turning F_0 and percentage, if any, offset F_0 for the first syllable, elapsed time for the first syllable, time between syllables, elapsed time for the second syllable (all times in milliseconds), second syllable onset, turn and final F_0 values. The second line shows the standard deviations. A whole line may be preceded by the number of examples (2 or 4); otherwise n=3. If a given value is preceded by one asterisk, that value is for two examples only; two asterisks mean n=1.

In Table 3, I show the values for all initial syllable types plus IVb in all the dialects. (The format is the same as in Table 2.)

The last procedural step is to reconstitute sort of an ideal curve for each cell using the extracted data on F_0 and length. Tables 4, 5 and 6 contain the graphs of reconstituted curves for isolation tones (4), all WZ tones (5), and for all tone types plus IVb (6). The vertical axis shows F_0 in Herz, the horizontal, time in milliseconds. In the graphs inTables

Table 1: Isolation Tone Data For The Oujiang Wu Dialects

Ia

YJ	132	5/3.9			132	5/3.9	.367	5/.035		
XY	126	5/7.8			120	5/9.7	.319	5/.043		
XYF	267	8/11.4			233	8/5.1	.223	8/.025		
WZ	133	5/1.6	133	5/1.6	117	5/4.1	.351	5/.029	56%	5/23%
PY	140	5/6.0			134	5/9.5	.274	5/.034		
WC	124	5/3.2			111	4/1.1	.397	5/.018		

Ib

YJ	129	5/5.7	138	5/5.2	113	5/2.6	.244	5/.052	44%	5/11%
XY	111	5/7.0	121	5/5.3	94	5/12.0	.332	5/.027	43%	5/10%
XYF	239	6/14.3	275	6/7.8	223	6/10.2	.229	6/.052	43%	6/12%
WZ	117	5/6.8	129	5/2.6	69	5/3.9	.409	5/.009	25%	5/9%
					81	5/3.3			88%	5/3%
PY	127	5/3.0	138	5/2.5	94	5/3.7	.366	5/.057	34%	5/6%
					107	4/6.4			79%	5/2%
WC	107	5/3.3			99	5/1.5	.434	5/.041		

IIa

YJ	136	5/8.5	154	5/11.9	138	5/15.2	.150	5/.028	71%	5/7%
XY	127	5./7.0	144	5/5.5	122	4/5.6	.161	5/.015	73%	5/5%
XYF	238	5/12.7			265	5/14.0	.154	5/.016		
WZ	132	4/6.0			161	4/6.3	.168	4/.013		
PY	147	2/8.5			162	2/4.5	.100	2/.024		
	158	3/5.4	170	3/4.9	120	3/10.2	.193	3/.026	43%	3/2%
WC	130	5/5.8	144	5/7.1	130	5/4.5	.195	5/.039	69%	5/6%

IIb

YJ	114	5/3.2	107	5/3.6	124	5/3.5	.218	5/.015	22%	5/4%
					111	5/9.1			81%	5/9%
XY	118	4/4.7	103	5/2.7	141	5/11.8	.242	5/.034	20%	4/4%
					115	5/17.9			67%	5/17%
XYF	221	3/4.2	276	3/3.1	227	3/13.8	.231	3/.029	70%	3/18%
	221	3/7.9	203	3/4.7	255	3/6.9	.191	3/.014	18%	3/6%
	243	2/2.5			209	2/1.0	.304	2/.028		
WZ	96	5/10.8	96	5/10.8	158	5/10.6	.293	5/.015	38%	5/13%
PY	122	5/1.6	116	5/1.3	149	5/8.1	.182	5/.027	24%	5/4%
EC	114	5/4.4	123	5/2.8	113	5/4.7	.362	5/.016	45%	5/4%

Table 1 Continued

IIIa

YJ	135	5/9.2	143	5/5.1	105	5/6.6	.170	5/.009	17%	5/9%
XY	162	5/7.7			104	5/3.7	.183	5/.015		
XYF	308	7/14.8		.	205	7/9.5	.156	7/.032		
WZ	196	4/4.4			89	4/7.7	.231	4/.031		
PY	180	5/24.3	103	5/7.8	115	5/3.2	.225	5/.068	85%	5/7%
WC	115	5/2.1			99	5/6.2	.301	4/.014		

IIIb

YJ	121	5/3.8			106	5/4.6	.365	5/.061		
XY	113	5/6.3			110	5/4.0	.359	5/.035		
XYF	231	5/13.1	255	5/12.7	226	5/7.7	.330	5/.048	50%	5/12%
WZ	103	5/4.1	119	5/3.7	119	5/3.7	.449	5/.036	12%	5/5%
					108	5/1.9			72%	5/13%
PY	125	5/5.0			130	5/3.8	.372	5/.052		
WC	115	5/4.5	97	5/1.0	115	5/7.9	.451	5/.026	64%	5/5%

IVa

YJ	117	5/6.5	105	5/4.2	116	5/5.0	.295	5/.028	65%	5/23%
XY	124	4/3.8	98	4/4.0	110	4/2.6	.374	4/.019	45%	4/5%
XYF	260	3/3.7	214	3/5.4	252	3/5.0	.337	3/.008	53%	3/9%
					226	3/2.5			85%	3/4%
WZ	130	5/4.6	90	5/9.2	102	5/7.1	.529	5/.022	71%	5/7%
PY	135	5/5.0	122	5/4.0	137	5/6.5	.255	5/.030	45%	5/5%
WC	101	5/2.2	101	5/2.2	125	5/4.5	.250	5/.023	40%	5/5%

IVb

YJ	120	5/2.3	104	5/7.0	114	5/7.8	.343	5/.025	52%	5/7%
XY	109	5/7.1	97	5/1.7	112	5/8.7	.372	5/.050	44%	5/5%
XYF	230	2/2.0	249	2/7.5	219	2/2.5	.428	2/.008	25%	2/5%
					243	2/6.0			78%	2/8%
	256	2/3.5	207	2/3.0	252	2/7.0	.324	2/.016	70%	2/5%
					218	2/4.5			85%	2/0%
	231	1/0	211	1/0	247	1/0	.412	1/0	60%	1/0%
WZ	104	5/5.4	78	5/6.8	86	5/4.8	.526	5/.046	76%	5/2%
PY	121	5/4.5	112	5/1.9	141	5/5.4	.292	5/.057	39%	5/7%
EC	104	5/5.4	87	5/2.9	115	5/4.2	.415	5/.028	49%	5/2%

4 and 6, the following line types go with the dialects indicated :

YJ --------------
XY — • — • — • —
XYF-×-×-×-
WZ —————
PY -------------
WC —×-×-×-

Although no normalization was attempted, 120 Hz was subtracted from all of XYF's F_o values so that her tones would occur in the same range as the others. In Table 5 the *a* tones are shown with broken lines, the *b* tones with solid lines. (Which tones go together must be determined by comparison with the numbers from Table 2.)

Results

The most overwhelming aspect of this data at first glance is the sheer quantity of numbers that will have to be made predictable from any abstract characterization of the tones, whether as category labels like Ia, or as abstract phonological representations like [42]. Perhaps after a large amount of data has been processed, it will be possible to show that certain features are always predictable from certain others, but such predictabilities are not now at all obvious. Casual inspection of the data seems to indicate that length, distribution and quantity of amplitude and F_o curves are largely independent. It also seems obvious that in many cases, the aggregate data in any one feature vary pretty much continuously, not discretely, over the maximum range of values. It also appears from looking at all the dialect material that universal features of the historical tone categories are few and far between. Rather almost all data point to variation over gradients. The notations that are standard in the literature--the ones that mark only pitch and length, five levels of pitch, and two varieties of length--are clearly woefully inadequate for the PHONETIC record, In addition, in general, there seems to be a fairly poor fit between the published reports on sandhi in the two dialects and my data with respect to F_o levels, overall contours and/or length. Table 7 shows those values. (The Wenzhou data is taken from Zhengzhang 1980; Pingyang from Chen 1979.)

Table 2: Wenzhou Two-Syllable Lexical Sandhi Data

+Ia

Ia+	115		*94	.229	.199	.140	108		99
	2.9		*9.0	.033	.010	.030	4.3		9.5
Ib+	110		105	.294	.145	.235	116		106
	11.1		4.2	.021	.034	.032	1.9		2.2
IIa+	185	190−12%	114	.151	.160	.229	103		95
	4.1	2.9−6%	4.2	.017	.009	.007	3.6		5.8
IIb+ 2ex	91	91−73%	79	.128	.214	.282	148		146
	0	0−0%	4.5	.020	.010	.014	0.5		0
IIbY+ 2ex	145	179−53%	131	.174	.202	.238	112		98
	10.5	1.5−3%	8.5	.034	.050	.018	1.5		7.0
IIIa+ 4ex	179	188−19%	114	.171	.184	.192	100		88
	11.8	9.7−2%	12.1	.006	.016	.023	4.8		7.2
IIIb+	134	182−48%	126	.256	.176	.205	99		74
	2.9	2.5−8%	2.4	.029	.057	.015	7.3		1.2
IVa+	98		86	.079	.239	.303	115		111
	5.9		5.1	.026	.043	.027	2.1		1.2
IVb+	93		88	.143	.143	.307	114	114−83%	97
	0.5		3.3	.025	.016	.030	5.8	5.8−8%	6.6

+Ib

Ia+	105		*76	*.242	*.082	*.234	*82		68
	2.9		*0.5	*.030	*.002	*.006	*1.0		6.2
Ib+	104		91	.293	.133	.284	84	77−43%	87
	9.4		5.0	.027	.062	.042	1.2	3.3−5%	7.4
IIa+	181		104	.205	.033	.221	99		72
	11.6		3.9	.004	.024	.030	6.6		3.6
IIb+	119	157−48%	115	.252	.127	.213	93		70
	8.2	10.1−6%	0.8	.017	.027	.067	7.6		2.6
IIIa+	130		*100	*.238	*.100	*.362	*88	76*45%	86
	10.1		*1.0	*.034	*.040	*.010	*1.5	5.3*5%	10.6
IIIb+ 2ex	128	147−25%	99	.286	.032	.246	109	69**75%	77
	2.0	0−5%	11.0	.022	.020	.066	1.0	2.0**	8.5
IVa+	113		**75	*.348	(.644)	**.228	**83		76
	7.6		**	**	(.068)	**	**		6.1
IVb+	91	97−40%	*79	*.304	*.096	*.248	*80	*78*23%	76
	2.1	3.1−0%	*4.0	*.012	*.012	*.036	*0.5	*1.0*3%	2.2

Table 2 Continued

+IIa

Ia+	182 15.5	115 .131 2.4 .011	.205 .133 .018 .008	96 10.8			106 10.3
Ib+	135 157−42% 15.4 6.2−5%	117 .167 2.2 .027	.231 .116 .030 .006	84 4.5			90 7.9
IIa+ 2ex	198 198−38% 5.0 5.0−13%	126 .110 8.0 .002	.260 .166 .012 .010	98 105−65% 2.0 1.0−5%			97 5.0
IIb+	126 165−48% 9.5 4.7−8%	127 .177 14.4 .049	.263 .209 .004 .043	86 5.7			100 7.8
IIIa+	185 185−20% 13.9 13.9−8%	114 .143 5.7 .008	.201 .169 .027 .010	95 107−80% 2.1 6.0−11%			*93 *6.0
IIIb+	116 171−67% 2.4 5.7−5%	126 .225 4.1 .033	.235 .177 .012 .015	84 84−70% 2.4 2.4−7%			100 9.1
IVa+	100 2.9	84 .095 4.2 .021	.193 .175 .015 .016	109 103−12% 10.1 9.5−6%	142*83% 3.8*3%		*125 *7.5
IVb+	88 7.3	72 .092 6.6 .013	.193 .185 .014 .038	104 139−75% 9.5 0.8−4%			125 8.1

+IIb

Ia+	177 177−25% 8.8 8.8−4%	95 .224 8.7 .027	0 .235 0 .010	95 82−47% 8.3 0.5−5%			90 5.0
Ib+	114 163−50% 11.0 2.1−4%	120 .231 3.8 .028	.111 .189 .038 .005	82 2.5			100 6.0
IIa+	206 11.9	143 .133 20.4 .024	.095 .224 .017 .042	92 109−78% 9.0 9.8−2%			92 5.3
IIb+	123 169−60% 8.3 10.7−8%	121 .228 13.1 .013	.088 .277 .034 .020	88 82−35% 3.7 2.4−4%			104 6.5
IIIa+	196 196−20% 5.4 5.4−8%	105 .193 13.5 .023	*.062 .213 *.026 .021	94 *84*23% 6.2 *4.0*3%	*103*80% *6.0*0%		96 8.7
IIIb+	104 161−67% 7.1 6.1−5%	115 .245 7.0 .012	.093 .252 .012 .023	85 78−28% 4.6 3.3−2%			97 8.6
IVa+	100 100−38% 3.3 3.3−6%	85 .108 10.4 .011	.129 .201 .033 .010	87 87−33% 2.6 2.6−5%	140−92% 2.8−2%		131 6.9
IVb+	82 85−35% 4.9 4.5−29%	75 *.156 0.5 *.032	*.112 *.228 *.012 *.008	82 *82*43% 1.4 *0*3%	132*75% 12.1*0%		*107 *17.0

Table 2 Continued

+IIIa

Ia+	102	94—33%	113	.249	.080	.139	151	164—42%		149
	5.9	3.6—12%	2.1	.017	.028	.023	11.1	3,7—18%		9.2
Ib+	99	76—55%	91	.317	.165	.059	158			156
	4.9	5.2—11%	5.4	.081	.050	.008	4.1			0.9
IIa+	200		101	.219	*.136	*.072	*85	*91*28%		*71
	2.5		0.8	.029	*.052	*.012	*3.5	*1.0*3%		*6.0
IIb+	123	169—43%	118	.241	.177	.148	105			71
	19.8	26.8—10%	3.4	.027	.047	.030	13.7			0
IIIa+	188	188—25%	102	.233	*.108	*.164	*93	*81*23%		108
	12.0	12.0—0%	2.4	.036	*.008	*.040	*3.5	*3.0*3%		1.5
IIIb+	108	129—32%	93	.248	.179	.109	84	68—68%		80
	11.7	2.1—6%	12.6	.003	.032	.017	4.9	5.0—6%		6.9
IVa+	*125	*113*73%	*127	*.108	.155	.193	165			94
	*1.0	*6.0*3%	*8.5	*.0	.007	.016	6.3			15.6
IVb+	100		94	.151	.171	.155	154	154—22%		88
	9.1		6.7	.061	.034	.052	4.0	4.0—6%		11.8

+IIIb

Ia+	109	102—40%	114	.271	.056	.172	134	168—75%		153
	4.9	1.6—14%	9.0	.029	.046	.066	19.4	5.4—15%		7.8
Ib+	91	78—50%	93	.313	.075	.113	112	157—67%		*134
	5.9	3.9—0%	3.6	.030	.019	.021	5.6	0.9—24%		*0
IIa+ 4ex	201		108	.191	.076	.242	102			79
	3.3		7.6	.008	.035	.022	2.5			7.9
IIb+	128	149—33%	116	.200	.095	.328	97			80
	5.0	1.2—2%	2.8	.010	.047	.031	9.0			9.2
IIIa+	176	176—15%	113	.212	.067	.256	102			79
	2.1	2.1—4%	4.9	.023	.042	.037	3.1			2.8
IIIb+ 2ex	98	151—40%	108	.292	.044	.312	94			76
	5.5	4.5—0%	8.0	.016	.032	.004	1.5			0
IVa+	124	*124*68%	110	*.154	*.138	*.280	112	112*83%		99
	2.5	*2.7*8%	1.4	*.010	*.034	*.020	1.2	1.2*8%		2.6
IVb+	92	100—35%	101	.197	.081	.301	97			91
	1.7	0—15%	0.9	.035	.035	.065	5.4			4.1

Table 2 Continued

+IVa

Ia+	164	189—75%	180	.167	.239	.165	106			71
	3.7	3.6—4%	9.0	.010	.039	.048	8.3			3.3
Ib+	110	174—82%	168	.221	.196	.263	108			81
	4.2	4.0—10%	4.9	.032	.020	.023	5.2			5.7
IIa+	164	192—75%	174	.138	.186	.246	106			91
2ex	7.5	4.5—5%	3.5	.022	.010	.010	1.5			2.5
IIb+	109		144	.145	.191	.249	107	71**70%		*85
	8.5		4.8	.038	.050	.052	8.2	4.1**		*2.0
IIIa+	**142	*184*78%	*165	*.148	*.188	*.224	*120			72
	**	*1.0*3%	*8.0	*.024	*.016	*.012	*1.0			2.5
IIIb+	108		159	.204	.240	.180	97	65**88%		**75
2ex	5.5		9.0	.024	.012	.040	12.5	0**8%		**
IVa+	137		125	.065	.159	.356	133	74—87%		84
	9.9		5.9	.025	.031	.020	4.6	1.4—8%		1.9
IVb+	104	114—47%	106	.124	.209	.273	114			72
	4.5	4.0—2%	8.5	.041	.069	.004	5.9			1.4

+IVb

Ia+	169	188—85%	170	.231	.049	.237	143	69—78%		74
	13.5	11.1—4%	6.9	.073	.035	.051	19.2	2.5—6%		2.2
Ib+	111	182—60%	122	.365	.053	.144	105			70
	9.7	3.3—11%	21.0	.079	.022	.059	9.8			4.1
IIa+	166	183—58%	156	.153	.063	.320	137			71
	4.1	0—19%	10.1	.012	.017	.040	7.5			1.9
IIb+	109	160—58%	150	.220	.016	.317	150	73—78%		79
	4.1	2.1—2%	4.3	.006	.023	.018	4.3	2.1—6%		0.8
IIIa+	171	186—33%	155	.207	.037	.211	*152			68
	9.5	2.1—12%	4.3	.036	.037	.026	*2.5			3.7
IIIb+	95		147	.191	.161	.305	145			71
	3.6		10.0	.042	.073	.014	16.2			4.5
IVa+	131		124	.096	.120	.305	111	69—80%		86
	16.5		11.9	.024	.060	.062	3.6	2.4—7%		5.2
IVb+	103	134*50%	*124	.171	.075	.276	121	70—68%		70
	4.3	4.5*5%	*5.0	.025	.019	.007	5.3	1.4—6%		1.4

Table 3: Data For All Tones Plus IVb In The Oujiang Wu Dialects

Ia +IVb

YJ	130			143	.113	.023	.236	135	86—55%		121
	2.4			3.7	.026	.008	*.008	*7.0	*8.5—*5%		*0
XY	125	120—7%	140—65%	97	.244	.060	.300	112	90—40%		109
	5.4	*8.0—**	6.2—**	**	**	**	**	**	1.7—**		1.2
XYF	270	299—58%		278	.191	.037	.281	275	197—82*		213
	6.0	7.4—20%		14.8	.004	.007	.061	14.7	2.9—10%		8.7
WZ	169	188—85%		170	.231	.049	.237	143	69—78%		74
	13.5	11.1—4%		6.9	.073	.035	.051	19.2	2.5—6%		2.2
PY	152	168—47%		128	.223	.017	.236	116	105—15%	105—85%	124
	12.0	13.0—5%		20	.032	.002	.045	5.7	3.1—4%	3.1—7%	7.5
WC	147			113	.185	.079	.220	95			75
	8.5			9.5	.013	.004	.020	3.1			3.7

Ib +IVb

YJ	118			149	.167	.064	.233	147	95—60%		98
	2.9			5.4	.014	.006	.026	5.9	1.9—8%		3.7
XY	101	136—77%		128	.273	.083	.247	104	91—42%		103
	1.9	1.4—6%		9.4	.040	.010	.021	3.7	4.0—6%		3.7
XYF	220	277—82%		260	.196	.104	.189	234	195—63%		201
	13	13.3—10%		3.3	.057	.031	.011	6.9	5.2—10%		1.9
WZ	111	182—60%		122	.365	.053	.144	105			70
	9.7	3.3—11%		21	.079	.022	.059	9.8			4.1
PY	126	175—53%		120	.233	.020	.192	114	103—13%	103—77%	114
	4.1	8.5—10%		2.4	.012	.020	.025	7.6	3.3—6%	3.3—2%	7.6
WC	109	132—40%		101	.241	.055	.199	96			76
	2.4	1.4—4%		1.4	.008	.022	.019	3.3			0.5

Table 3 Continued

IIa +IVb

YJ	118	164*52%	140	.152	.013	.233	133	98—53%	98
	2.9	2.4*6%	4.2	.021	.002	.027	5.1	6.1—12%	6.1
XY	128	147—57%	111	.204	.060	.287	122	95—63%	113
	12.7	15.6—5%	7.7	057	.023	.025	4.2	1.9—5%	2.4
XYF	260	291—40%	245	.143	.068	.236	240	196—67%	204
	9.2	9.7—4%	5.2	.021	.035	.043	17.3	3.7—5%	9.0
WZ	166	183—58%	156	.153	.063	.320	137		71
	4.1	0—19%	10.1	.012	.017	.040	7.5		1.9
PY	152	165—47%	130	.144	.047	.205	111	86—47%	103
	4.2	7.4—5%	5.0	.039	.019	.015	8.3	5.3—12%	5.9
WC	138	145—25%	112	.156	.108	.193	96		75
	5.9	3.1—4%	7.9	.017	.024	.021	2.5		3.3

IIb +IVb

YJ	112		138	.151	.017	.311	142	93*80%	106
	4.3		5.7	.014	.008	.014	8.3	3.3*5%	5.7
XY	110	139—68%	109	.341	.023	.248	107	95—62%	114
	1.2	2.6—6%	4.1	.027	.018	.047	4.5	1.9—9%	3.3
XYF	226	270—58%	238	.223	.035	.236	238		200
	8.7	4.5—6%	11.3	.038	.024	.028	7.7		3.7
WZ	109	160—58%	150	.220	.016	.317	150	73—78%	79
	4.1	2.1—2%	4.3	.006	.023	.018	4.3	2.1—6%	0.8
PY	126	155—27%		(.420)				95—82%	109
	4.0	12.2—2%		(.054)				4.2—7%	5.6
WC	114	129—40%	108	.183	.092	.180	96		71
	2.6	1.2—0%	3.3	.015	.011	.011	1.2		2.5

Table 3 Continued

IIIa +IVb

YJ	125	143—73%	138	.123	.021	.276	132	95—73%	104
	3.3	7.9—2%	8.4	.025	.013	.017	3.6	2.6—10%	4.2
XY	136	148—65%	126	.243	.019	.345	120	94—43%	107
	2.4	2.2—4%	7.7	.041	.015	.033	10.6	1.6—12%	4.5
XYF	267	298*58%	*285	.108	.063	.303	277	202—78%	213
	6.9	8.2*18%	*1.5	.023	.021	.042	2.9	2.1—8%	2.2
WZ	171	186—33%	155	.207	.037	.211	*152		68
	9.5	2.1—12%	4.3	.036	.037	.026	*2.5		3.7
PY	164	182—55%	145	.132	.025	.220	128	111—57% 6.0—6%	122
	10.9	12.7—4%	13.5	.029	.014	.029	6.0		8.0
WC	125	125—30%	104	.179	.076	.152	94		74
	9.3	9.3—4%	8.2	.013	.024	.008	0.5		3.3

IIIb+IVb

YJ 2ex	108	144—70%	137	.176	.044	.216	112	98—58%	117
	3.0	13.0—5%	14.5	.012	0	.004	0	0.5—8%	3.5
XY	103	141—65%	107	.321	.036	.279	103	91—45%	105
	3.7	3.9—7%	3.9	.060	.035	.027	4.1	2.8—4%	9.0
XYF	227	271**70%	**242	**.196	**.044	.300**261		192**60%	211
	0.5	4.6**	**	**(.551/.040)**			**	3.3**	3.8
WZ	95		147	.191	.161	.305	145		71
	3.6		10.0	.042	.073	.014	16.2		4.5
PY	122	159—57%	128	.220	.035	.205	112	96—38%	106
	3.7	9.6—2%	11.9	.062	.034	.032	14.7	2.1—6%	3.6
WC	119	128—18%		(.439)					72
	4.9	2.6—5%		(.023)					0.9

Table 3 Continued

IVa +IVb

YJ	130		146	.085	.008	.319	138	101—45%		101
	4.5		5.9	.018	.003	.049	8.3	3.1—4%		3.1
XY	123	134—65%	111	.253	.015	.260	110	90—65%		106
	3.3	0.8—4%	3.4	016	.010	.034	3.3	1.2—4%		6.1
XYF	257		288	.077	.046	.272	269			202
	5.1		0.5	.002	.015	.033	0.9			3.1
WZ	131		124	.096	.120	.305	111	69—80%		86
	16.5		11.1	.024	.060	.062	3.6	2.4—7%		5.2
PY 2ex	135	162—45%	135	.102	.034	.176	120	94—58%		112
	7.0	5.0—10%	7.0	.014	.022	.020	14.5	3.5—13%		7.0
WC	108		90	.147	.037	.231	94			77
	1.7		9.4	.010	.007	.008	0.5			2.1

IVb +IVb

YJ	113	113—40%	128	.160	.009	.259	125	*124*23%	96—60%	96
	1.6	1.6—12%	2.2	.040	.008	.030	3.9	*3.5*3%	2.6—8%	2.6
XY	110	124—55%	105	.213	.035	.236	105	87—65%		97
	1.2	3.3—11%	5.4	.002	.028	.028	6.7	2.4—7%		4.9
XYF	251	271—73%	255	.119	.109	.208	234	*185*83%		197
	9.8	7.4—5%	8.6	.027	.010	.020	2.2	*4.0*3%		7.1
WZ	103	134—50%	124	.171	.075	.276	121	70—68%		70
	4.3	4.5—5%	5.0	.025	.019	.007	5.3	1.4—6%		1.4
PY	125	137—57%	122	.143	.017	.199	120	94—53%		114
	6.2	0.8—13%	4.7	.022	.011	.033	7.8	1.7—13%		5.6
WC	105		96	.160	.035	.181	99			74
	4.5		2.9	.023	.004	.017	5.0			4.5

TABLE 4: F_0 Graphs for Isolation Tones in the Oujiang Wu Dialects
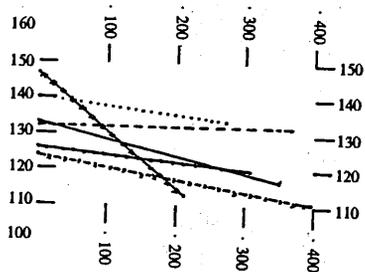
Ia
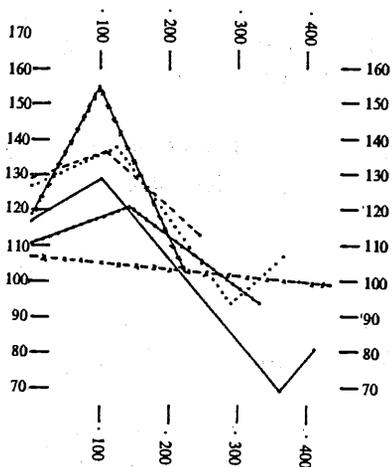
Ib
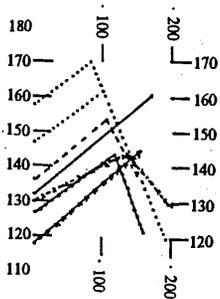
IIa
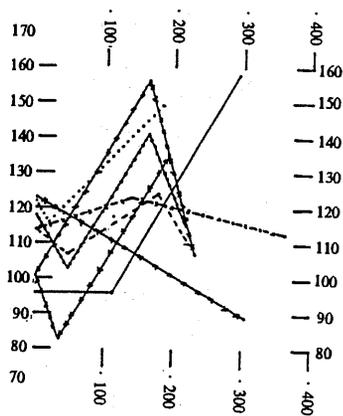
IIb

TABLE 4 Continued
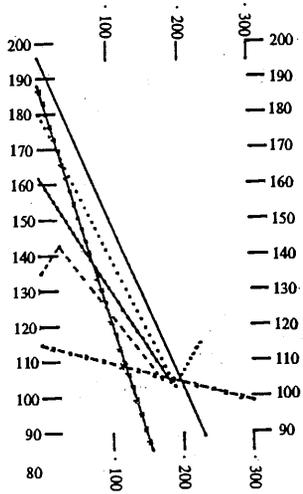
IIIa
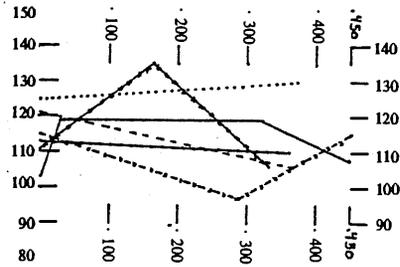
IIIb

IVa

IVb
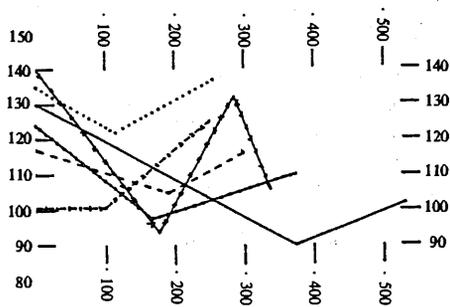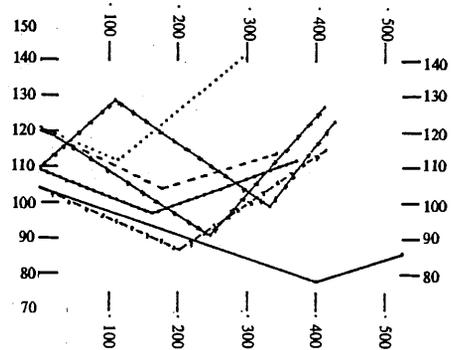
TABLE 5: F_O Graphs For Two-Syllable Lexical Sandhi Groups In Wenzhou

X + Ia

X + Ib

X + IIa

X + IIb

TABLE 5 Continued

X + IIIa

X + IIIb

X + IVa

X + IVb
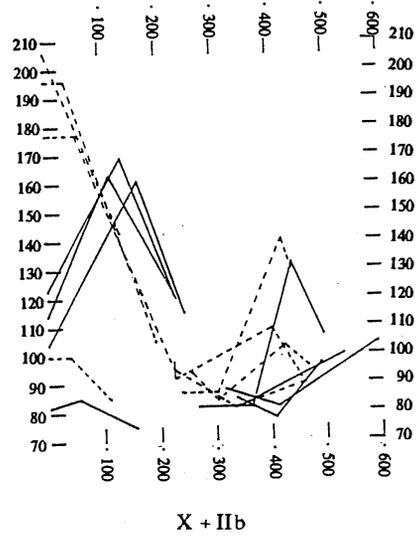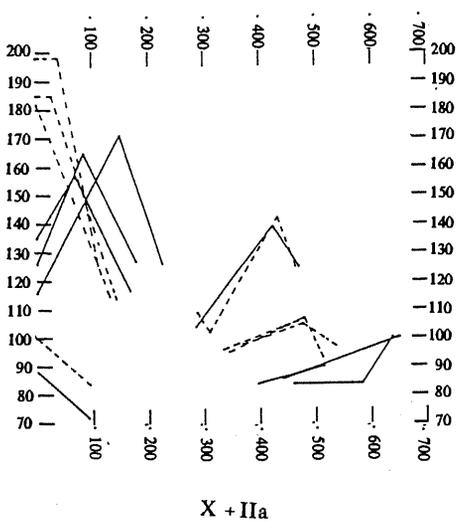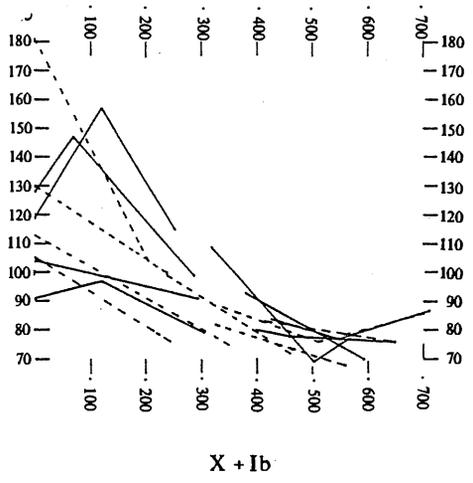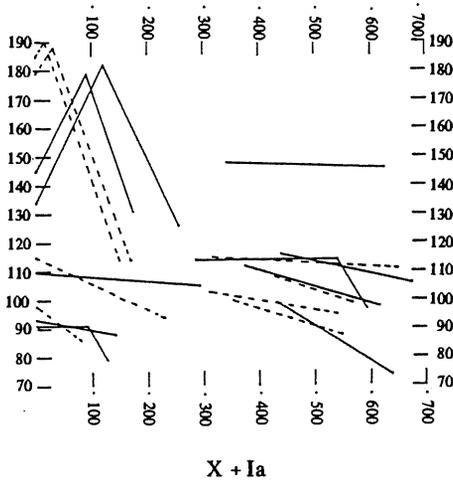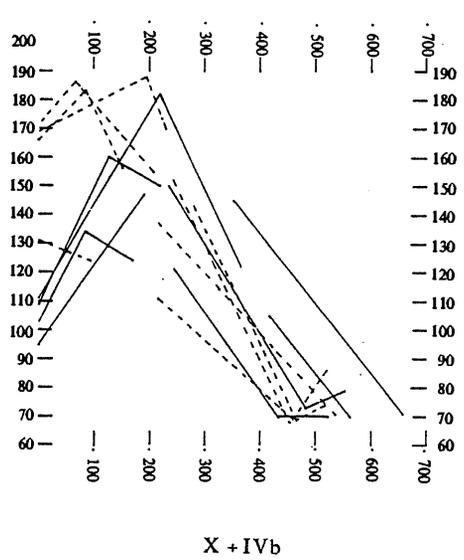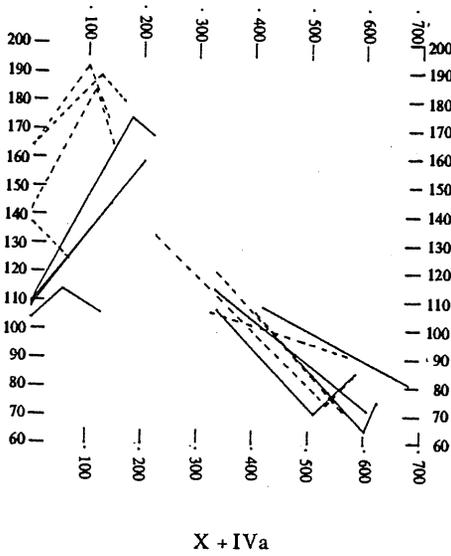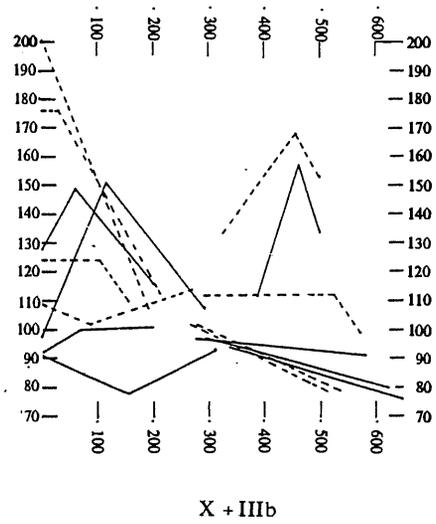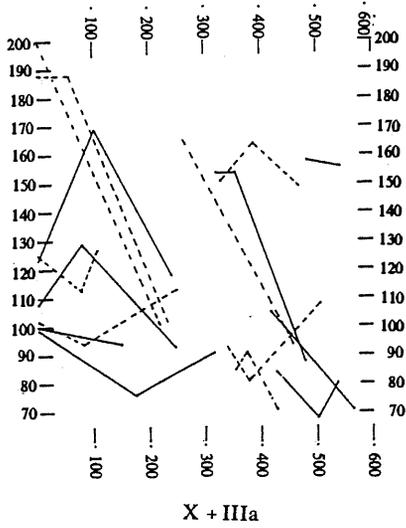
TABLE 6: F_o Graphs For All Tones + IVb In the Oujiang Wu Dialects
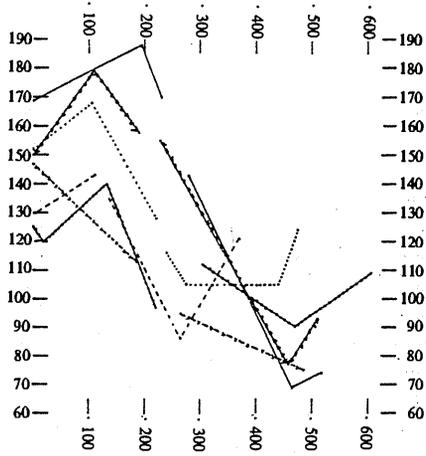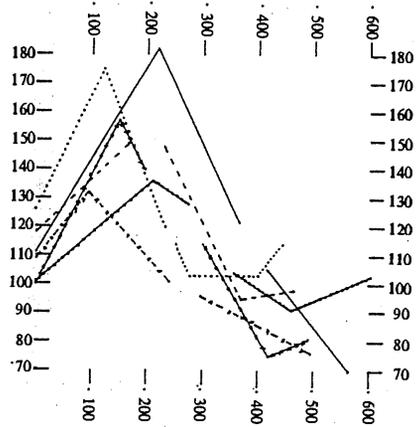
Ia + IVb

Ib + IVb
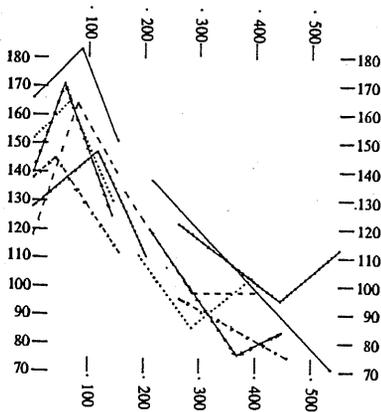
IIa + IVb
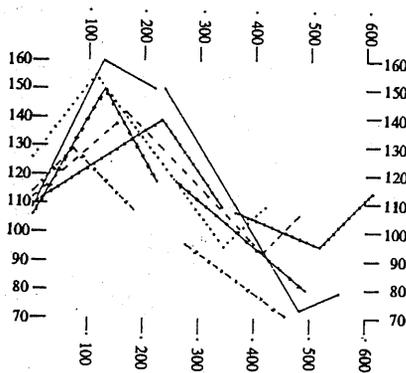
. IIb + IVb

TABLE 6 Continued
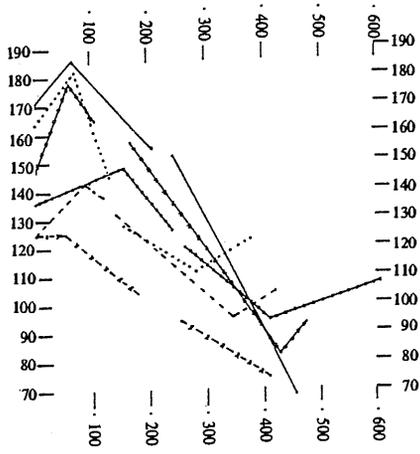
IIIa + IVb
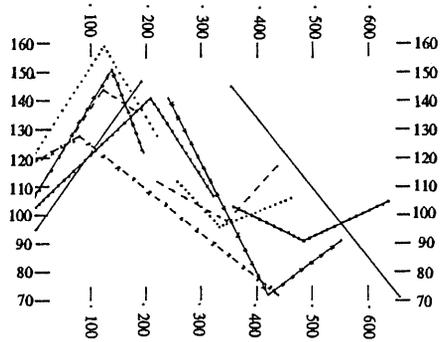
IIIb + IVb
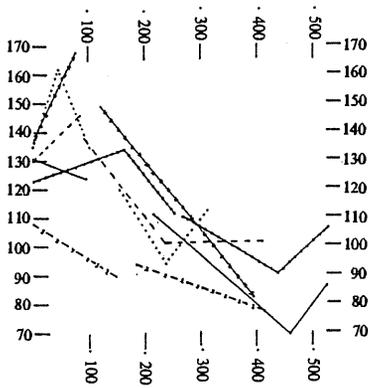
IVa + IVb
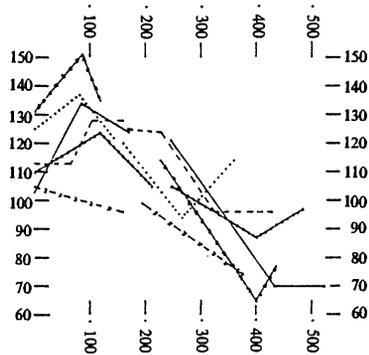
IVb + IVb

Table 7 : Published Tone Sandhi Values for Wenzhou and Pingyang

Wenzhou City Phonetic Tone Sandhi Chart :

	Ia 44	Ib 31	IIa 35	IIb 24	IIIa 42	IIIb 22	IVa 313	IVb 212
Ia/b	11—33	11—13	53—35		13—53	13—53	53—13	
IIa/b IIIb	42—33	42—1	53—35		42—1	42—11	53—13	
IIIa	42—33	11—13	53—35		42—1	42—11	53—13	
IVa/b	1—33	11—13	1—35		1—42	1—11	1—13	

Pingyang Tow Syllable Lexical Sandhi Phonetic Values Chart :

	Ia 33	Ib 22	IIa 54	IIb 35	IIIa 32	IIIb 21	IVa 33	IVb 22
Ia	33—44	33—24	32—54	32—35	34—54	34—43	54—24	54—213
Ib	22—44	22—24	21—54	21—35	24—54	24—43	43—24	43—213
IIa	54—44	32—21	32—54	32—35	32—32	32—22	54—24	54—213
IIb	35—44	32—21	32—54	32—35	32—32	32—22		35—213
IIIa	32—44	32—24	32—54	32—35	32—32	32—22	54—24	54—213
IIIb	21—44	21—21	21—54	21—35	21—32	21—22	43—24	43—213
IVa	3ʔ—44	3ʔ—24	3ʔ—54	3ʔ—35	3ʔ—32	3ʔ—22	3ʔ—24	3ʔ—213
IVb	2ʔ—44	2ʔ—24	2ʔ—54	2ʔ—35	2ʔ—22	2ʔ—22	2ʔ—24	2ʔ—213

One feature of the amplitude curves puzzles me. A number of amplitude curves in a number of tones and dialects show a kind of rolling , up-and -down gait. Sometimes this is smooth, sometimes jagged, sometimes both. It is more common in the *b* tones, but occurs indistinguishably in some upper tones as well. There is no obvious pattern in the tone sandhi combinations in which it shows up. I suspect that when the gait is regular, wave-like and concentrated in the *b* tones it may represent "breathy voice. " When it is more jagged, erose, irregular and concentrated in the *a* tones, that it may represent some sort of glottalization. But the appearance in the Visi-pitch records is too unpredictable to be clearly indicative of presence versus absence in any cell. The fact that it appears so clearly in the amplitude curve and not at all in the F_o curve surely indicates that we are dealing with a voicing feature that is not tied directly to fundamental frequency. The bumpiness, in all cases where it occurs, extends throughout the syllable, or appears mostly in the final 1/2 or 2/3 of the syllable, indicating a feature that is syllabic, rather than one associated directly with initial consonant type.

In most descriptions of tone sandhi, the investigators try to predict the tone sandhi value of a tone on the basis of its isolation value. There have been a lot of good arguments against this procedure by a number of people (including me) at the phonological level, but the data I am presenting here seem to argue against it phonetically too. For SOME tones the isolation values and at least one sandhi variable look very similar, but in general there does not appear to be any way to predict sandhi shape from isolation value. In looking at this material, I have begun to prefer to refer to the 65th position--the other 64 being the various combinations possible with 8 tones. It is quite interesting to note that the 65th position values seem in general to be closest to their cogener values in SECOND position. I think that this can be taken as a measure of a right-preserving, left-wards reduction type of sandhi that I have discussed in various publications. (Ballard 1988)

In describing the schematics, it is obvious that one wants not only to be able to speak of features such as rising or falling, but also of slope, or, in terms of numbers, the rate of

rise or fall. Rise and fall by themselves seem inadequate to the data. In comparing schematics of turned tones, it also seems clear that one needs to be able to speak of the locus of the turn. Again a mere underlining, such as 213 versus 213 versus 213, seems inadequate. This applies with even more force to the schematics where it sometimes appears that the tonal envelope for two cells is identical, but the locus of turn may be in the first syllable in one cell, in the second, or between the syllables in the second. Does the differing locus necessitate lack of identity ?

Comparison of the reconstituted curves across cells and dialects shows that the two-syllable pitch patterns must be treated as word intonation patterns; again and again (but not always) I found that the curve for the second syllable took up where the curve for the first syllable ended and continued its slope. This reminds me of vowel formant transitions across intervocalic consonants; Phil Rose spoke of determining an idealized curve with the consonant portion factored out later. It does not seem feasible to write precise rules that convert isolation or underlying values of single tones into their forms in word combinations. But it is possible to visualize the incremental changes across close dialects that constitute the history of the fundamental elements of pitch in this one dialect group. The speakers would appear to learn a word prosody over a unit—whether it is a single syllable (isolation tone) or a tone sandhi group. New groups are probably formed by analogy (Skousen 1989). Thus, given a prosody for a certain tonal category combination, A + B, then any new a + b will take the same prosody. Tone sandhi formation rules, then, are historical artefacts, not synchronic rules. Since all Wu dialects show some complex tone sandhi that is to various extents comparable, we cannot reconstruct a sandhi-less stage for Wu. In other words, phonological words always had a prosodic element. We can conclude that there is no meaning to rules that attempt to derive current in-sandhi values from values in the 65th position. Note that the latter also evolve, e. g. extreme length in Wenzhou's tone IV etc.

Taking into account all of the pitfalls along the way, on the basis of the graphs in

Tables 4 and 6, I would very hesitantly suggest these reconstructions, first for the isolation tones, and second for the various tones plus IVb :

Isolation tones :

Ia : mid, slightly falling, long

Ib : mid, convex, long

IIa : high, convex, short

IIb : high, convex, short

(but slightly lower and longer than IIa)

IIIa : high, falling, short

IIIb : mid, long, and perhaps level

IVa : mid, concave, long

IVb : low, concave, long

Tones plus IVb:

Ia, and IIa + IVb: high, short, then low, long, sigmoid

Ib, IIb, and IIIb + IVb: high, long, then low, short, sigmoid

IIIa + IVb: high, mid, then low, long, sigmoid

IVa + IVb: varies too much to determine

IVb + IVb: maybe high, short, then mid, long, sigmoid

(By sigmoid, I mean convex in the first syllable, concave in the second.)

CONCLUSION

The data show that most impressionistic descriptions of Wu tone sandhi have heen oversimplified; I hope that these results will contribute to the development of a realistic, phonetically-based description of tone, tone sandhi, and tonal history in the Wu dialects.

REFERENCES

Ballard, W. L.

   1988   The History and Development of Tonal Systems and Tone Alternations in South China. Study of Languages and Cultures of Asia and Africa Monograph Series No. 22. 239pp. Institute for the Study of Languages and Cultures of Asia and Africa, Tokyo.

Chen, Chengrong.

   1979   A sketch of the Pingyang dialect. Fang Yan 47-74.

Rose, Philip John.

   1988   On the non-equivalence of fundamental frequency and pitch in tonal description. In Prosodic Analysis and Asian Linguistics: To Honour R. K. Sprigg. Pacific Linguistics Series C- No. 1-4. 55-82. The Australian National University.

Skousen, Royal.

   1989   Analogical Modeling of Language. Kluwer Academic Publications. 212pp.

Zhengzhang, Shangfang.

   1980   The suffix erh and sandhi in the Wenzhou dialect (I). Fang Yan 245-262.

Towards A Typology of Aspect in Sinitic Languages

Hilary Chappell
La Trobe University, Melbourne

1. Introduction

1.1   The study of dialect grammar

Kratochvil (1968:15-16) and DeFrancis (1984:54-56) have made useful compari-sons of the Sinitic languages (or Chinese dialects) with the Romance languages of Europe as being on the same level of linguistic classification as a language family. Bloomfield (1933:44) also regarded Chinese as being composed of a group of mutually unintelligible languages, though ultimately related by means of a common proto-language. Contrasting to this, both Chinese popular and linguistic traditions have viewed Sinitic languages as 'dialects' (*fangyan* [方言]). This has resulted from the unique sociolinguistic situation in China with an unbroken history of more than three millennia in the use of a common written language, serving to unify the different linguistic areas. [1]

The question of 'dialect' versus 'language' has however led to negative consequences for the study of Chinese dialect grammar: While the study of dialect phonology and tone systems is well-advanced for Sinitic languages, the grammar of Chinese dialects other than Mandarin is relatively underresearched.

There appear to be two opposing views with regard to grammar: One view stresses the commonalities in grammar; the other, more recently advocated viewpoint stresses the divergences.

Chao Yuen-ren, as a proponent of the first view, claimed (1968:13) that 'in matters of Chinese grammar ···the greatest degree of uniformity is found among all the dialects of the Chinese language' to the extent that 'there is practically one universal Chinese grammar'. Hashimoto (1974:80) in her study of Cantonese phonology while pointing out that 'the systematic study of grammar began late in the Chinese field', attributes the relatively recent appearance of studies on Cantonese grammar as also being 'partly due to the fact, that, in its main features, the grammatical system of Cantonese (as well as of other Chinese dialects) agrees with that of Mandarin or the national language (1974:76) .

As proponents of the second view, Zhu Dexi & Lu Jianming (1987:45) claim that one of the priority areas in Chinese Linguistics which needs to be opened up and investigated is research on dialect grammar (*fāngyán yŭfă diàochá yánjiū* [方言語法調查研究]) . The situation is similarly assessed in Wu (1958:84-85) who states that the neglect of research into dialect grammar is a serious shortcoming and that the trend in emphasising phonetics continues to hinder the full expansion of dialect research. Y. C. Li (1986:393-395) also strongly takes issue with the view that Chinese dialects have a homogenous grammar, urging recognition of the view of Sinitic as being comprised of languages with both diverse phonological and grammatical systems.

These two views are not necessarily contradictory. [2] It cannot be denied that the

---

2   As is well-known, both Chao and Hashimoto have carried out studies and extensive surveys on
    dialect grammar.

Sinitic dialect groups share many common features that unite them as a language family: They can all be described as analytic tonal languages using means other than inflectional morphology to signal grammatical relations, typically word order. All display complex systems of aspect and modality yet do not mark tense on the verb. The noun phrase may not be marked by case yet is typically built up into a complex by means of the semantically-based system of noun classifiers with relative clauses preceding the head noun. The verb phrase may also be complex in terms of elaborate postverbal modification including resultative constructions and sentence-final rhetorical particles, reduplication and verbal measure words.

This paper sets out to analyse the grammatical category of verbal aspect in representative dialects of three dialect groups within Sinitic: Mandarin, Yue-Guangzhou and Min-Xiamen, in order to investigate what the general grammatical features of aspect in Sinitic are as opposed to the specific and unique features of aspect in each dialect. [3] In addition to this, some comparisons with the Wu dialect, Shanghainese, will be made, where appropriate. The syntactic strategies used to encode aspect in Yue and Min are discussed as well as their function and morphological form, contrasting them with the aspect system of Mandarin Chinese in order to set up a typology of Sinitic aspect systems. Diachronic relationships are also considered. Although this analysis strongly supports the second view current in Chinese linguistics which regards Sinitic as a language family, the main aim of this study will be to unify the two views regarding Chinese grammar by evaluating the

---

3   Note that alternative nomenclature for these three representative dialects is as follows: *Pǔtōnghuà* [普通話] (lit. 'common language) or *běifānghuà* [北方話] (lit. 'Northern dialect') are terms used mainly in People's Republic of China for the Mandarin dialect group which is, however, called *guóyǔ* ([國語] lit. 'national language' in the Republic of China (Taiwan) and Hong Kong. Cantonese is the anglicised name for the Guangzhou dialect of the Yue dialect group while 'Yuè' [粵], itself, is the Chinese literary appellation for this dialect group as a whole and is used here as a technical term referring to this particular Sinitic language following Hashimoto (1972). Similarly, the term 'Mǐn' [閩] is the Chinese literary name used in the term for one of the major dialect groups spoken in the southern region of Fujian province: Minnan, also known by the English name of 'Southern Min'. The term 'Amoy Hokkien' is the anglicised name for the Xiamen dialect of the Minnan dialect group. Note also that the major Hokkien dialects spoken in Taiwan which are very close to Min-Xiamen are commonly referred to as 'Taiwanese'.

categories of aspect in terms of contemporary cross-linguistic and typological studies of aspect, tense and modality such as Bybee 1985; Bybee, Pagliuca & Perkins (to appear), Comrie 1976, 1985 and Dahl 1985.

Secondly, this paper suggests that the feature of preverbal aspectual marking in Min-Xiamen may prove to be historically significant in terms of the general development of Sinitic aspect systems. An outline of the possible diachronic development of aspect markers in these two dialect groups will be presented and the speculated path of development will be contrasted with that attested for standard Chinese (Mandarin, or *pǔtōnghuà* [普通話]).

The synchronic descriptions as well as the diachronic outline are based on the following three premises advocated in analyses dealing with both cross-linguistic characterization of grammatical categories and diachronic linguistics such as, *inter alia* Comrie (1976), Wang Li (1980), Dahl (1985), Traugott (1978) and particularly in Bybee (1985) as well as Bybee et al (to appear) :

(1) Diachronic change is unidirectional proceeding from non-bound lexical morphemes to bound grammatical morphemes.

(2) Similar paths of development of lexical meaning into grammatical meaning can be identified in different languages enabling grammatical categories to be identified cross-linguistically.

(3) Grammaticized meaning is determined, in part, by the original lexical source and hence is not entirely arbitrary. It will be seen below, however, that there are some cases of aspect markers in Sinitic languages for which the source has not yet been ascertained, such as Min-Xiamen *te?*[5] .

Analysis of data for Min-Xiamen, Yue-Guangzhou and Mandarin is carried out in terms of two main categories of aspect-bounded and unbounded. [4] 'Bounded' aspect refers to predicates aspectually modified to code events which have or contain a well-defined limit-either a specific beginning or endpoint, such as resultatives, perfectives, inchoatives

---

4   The notion of boundedness used here is slightly broader than that found in Dahl (1985:29).

and perfects of anteriority. In contrast to this, 'unbounded' aspect refers to those markers which code the limitless or ongoing nature of an event such as progressive, continuous and habitual aspects (see Chappell 1988, 1989a, 1989b). These main categories of aspect broadly conform to those identified as cross-linguistically recurring in studies such as Comrie (1976, 1985), Bybee (1985) and Dahl (1985).[5] A brief linguistic outline of each of the three languages treated in this analysis follows.

1.2. Northern Chinese –Mandarin

The Mandarin group or Northern Chinese *běifānghuà*(北方話) is the largest dialect group of Sinitic both in terms of number of speakers and geographical dispersion. About 72% of mainland China's population speak a dialect of Mandarin as their first language, that is, close to 700 million (Ramsey 1987), while in Taiwan where Mandarin is also the official language, 15% of the population use it as their first language, combined with the fact that the majority of the population is bilingual (Kubler 1982:156–7).

Mandarin has the following verbal aspect system:[6]

BOUNDED		UNBOUNDED	
–le	Perfective	*zài*+V	Progressive
–guo	Experiential	*–zhe*	Continuous
–qilai	Inchoative		

In standard Chinese, the preferential strategy for marking aspect is by means of suffixes to the main verb. The set of aspect markers does not however form a clear-cut

---

5   The criteria used to distinguish the same category of aspect marker in each language is based on defining characteristics and language universal definitions given in Comrie (1976, 1985), Bybee (1985), Bybee et al (in prep.) and Dahl (1985) in combination with aspectual features specific to Sinitic languages, outlined in this paper and based on Chappell (1988), (1989a) and (1989b). The general definitions of each type of aspect marker resulting from this overview of cross –linguistic studies are given in section 2.1. Thanks to Randy LaPolla, Academia Sinica, for drawing this to my attention.

6   The transcription system used for Mandarin is pīnyīn [拼音], as is commonly accepted practice, in conjunction with the following diacritics for tone: *Tone* (1): High level 55 V̄; *Tone* (2): High rising 35 V́; *Tone* (3): Falling-rising 214 V̌; *Tone* (4): High falling 51 V̀ cf. Chao 1968:26.

paradigm, as we find a preverbal marker *zài* encoding the progressive aspect. [7]

In terms of both diachronic evolution of aspect markers and grammatical studies of aspect, Mandarin has been most thoroughly researched of the three dialect groups dealt with in this study, not surprising given its sociolinguistic status . Descriptions of Yuè and Minnan dialect groups follow, both located in southeastern China, where the Sinitic languages are immigrant languages (Li 1988:32).

1.3   Yuè–Guangzhou

The Yuè group of dialects are spoken in the provinces of Guangdong and Guangxi in southeastern part of the People's Republic of China (PRC).

The prestige dialect and regional standard of the Yuè group centres on the capital city of Guangzhou but extends to the surrounding Pearl River delta and the British crown colony of Hong Kong. There are roughly 50 million speakers of Yuè dialects in China, which constitutes approximately 5% of the present population (Ramsey 1987:98; Norman 1988:214). In addition to this, large numbers of Yuè speakers are found in both continental and insular Southeast Asia, N. America and Australia, the result of large scale migrations in the last few centuries (Hashimoto 1974 : 12 and Wurm & Hattori 1981). [8]

The Yuè dialects are of great significance in the reconstruction of Middle Chinese, due to the fact that they preserve the sound system–particularly the finals or rhymes–and tonal categories of the literary standard of the Tang dynasty better than any other dialect group in the Sinitic family (see Norman 1988; Ramsey 1987) .

Furthermore, if we compare the lexicon and morphology (grammatical particles) of

---

7   Abbreviations used in the interlinear glossing are: CL = classifier; CONJ = conjunction; CONT = continuous; EXP = experiential; HAB = habitual; IMP = imperative marker; INC = inchoative; NEG = negative marker; PERF = perfect/anterior; PFV = perfective; pl = plural; PROG = progressive; Q = question particle; RP = rhetorical particle; sg = singular; SUB = subordinating particle; 1, 2, 3 = first, second and third person pronouns respectively. Abbreviations used for language names are the following: Ma = Mandarin; YG = Yue-Guangzhou; MX = Min-Xiamen; Fr = French; Ger = German and Eng = English.

8   Most of the population in Hong Kong are immigrants from the Pearl River delta area (Li Xinkui 1988:29). For this reason, I follow the common practice in treating the forms of Yue spoken in Hong Kong and Guangzhou as belonging to the same dialect area, as do Chao (1947); Kwok (1971), Cheung (1972), Hashimoto (1974:70) and Bauer (1984).

the Yuè dialect spoken in Guangzhou and Hong Kong (Yuè-Guangzhou) with standard Chinese in terms of basic vocabulary, it is often hard to find direct correspondences in standard Chinese. It is not merely a question of the well-known differences in register in colloquial lexical items such as nouns and verbs denoting daily activities (e.g. YG *sik* [6] (食), Ma *chī* (吃) 'eat'; YG *jam* [2] (飲) Ma *hē* (喝) 'drink') but much more thorough-going in that many grammatical function morphemes are non-cognate (see Hashimoto 1972 for a detailed description).

Similarly to Mandarin, aspect marking in Yuè-Guangzhou, makes use of the strategy of suffixing aspect markers to the main verb, however, in contrast to Mandarin, in a consistent manner since Cantonese strictly adheres to the principle of suffixing.

Yuè-Guangzhou has six main fully grammaticized aspect markers acting as suffixes on the main verb. [9]

BOUNDED		UNBOUNDED	
$-tso^2$	Perfective	$-kan^2$	Progressive
$-kwo^3$	Experiential	$-tsy^6$	Continuous
$-hei^2(søng^5) lai^4$	Inchoative	$-hoi^1$	Habitual

It needs to be pointed out that Yuè-Guangzhou possesses a far richer inventory of aspect markers than the scope of this study allows us to discuss. Lexical aspect markers such as $y{:}n^4$ (完) 'terminative', $sa{:}i^3$ (晒) 'completive (of all objects)', $ma{:}i^4$ (埋) 'completive (of remaining objects)', $fa{:}n^{2\prime}$ (翻) resumptive' and $ts'an^1$ (親) 'resultative with undesirable effects' are discussed in Kwok (1971) and Cheung (1972).

---

9   The transcription system used for Yue-Guangzhou is the International Phonetic Alphabet (IPA). The tone numbers follow Lau (1977, 1978): *Tone* (1): High level/falling 55/53; *Tone* (2): High rising 35; *Tone* (3): Mid level 33; *Tone* (4): Mid falling 21; *Tone* (5): Low rising 23; *Tone* (6): Low level 22. The three entering tones (*rùshēng*) for syllables ending in –p, –t and –k are subsumed under the high level, mid level and low level categories q.v. Chao 1947:24.

1.4   Min-Xiamen

The Min dialect group is one of the smallest in the Sinitic family with only 4.1% of speakers (approximately 39 million) of the Chinese languages in P. R. China (Ramsey 1987:87). According to Wurm et al. (1988: Map B-12), there are 52.5 million speakers of Min dialects in China and Taiwan. In Taiwan, 71% of the population speaks a variety of Southern Min that is very close to Min-Xiamen (or Amoy) as their first language (Kubler 1982). Overseas, large concentrations of Min speakers are also to be found, for example, in Singapore where 53% of the population speak a Min dialect as their first language (Kuo 1980).

The heartland of Min dialects is concentrated largely in the modern day province of Fujian in mainland China. This area was one of the last to be colonized and settled by the Han people. It is also one of the most geographically inaccessible areas of China with high mountain ranges and few major rivers (Norman 1988:228). This may partially account for the heterogeneous nature of the Min dialect group. It is reputed to be the most highly divergent group within Sinitic from the point of view of phonology. Norman (1970, 1973, 1988) classifies the Min dialects into eastern and western groups with finer subdivisions within these, according to phonological and morphological features, a classification which supersedes Yuan's earlier one into northern and southern groups (1960). It is also pointed out by Norman (1988:228), among others, that Min appears to have been isolated from mainstream Sinitic at a very early stage, preserving, as a result, many archaisms.

The late Ming dynasty (1368-1644 AD) witnessed several waves of migration of Min Chinese who crossed the Formosa Strait to settle on the island of Taiwan. They also moved southwards along the coast of Guangdong province where large groups of Min speakers are to be found in northeastern Guangdong. Similarly, migration by seafaring Min Chinese to Hainan island off the southeast coast of China, has resulted in a population of 4.4 million Min speakers today, found concentrated in the eastern and southern coastal areas of this island (Ramsey 1987:107). Sociolinguistically, Min-Xiamen acts as a regional standard in

southern Fujian and is used in this analysis as the representative dialect for Minnan.

In general, Southern Min uses the strategy of preverbal adverbs and auxiliary verbs [10] to encode aspect rather than the use of suffixes or particles following the verb. Preverbal marking of aspect can be considered a special characteristic of the Min group, particularly the Xiamen dialect (see also Brosnahan 1972:52). Hence, from a diachronic point of view, the analysis of the Xiamen dialect of Southern Min-known as Amoy Hokkien in English-may provide an indication of the form of aspectual constructions at an earlier stage. We will return to this point later in a brief overview of diachronic developments in section 2. The main verbal aspect markers of Min-Xiamen are given in the table below: [11]

BOUNDED		UNBOUNDED	
wu^2	Perfect	(ti^2)-$te?^5$	Progressive
bat^1	Experiential	V-$.te?$	Continuous
V-$k'i^3.lai$	Inchoative		

Possible loans from Mandarin:

$-ke^4$	Experiential
$-liao^3$	Perfective

2   Typology of aspect systems

2.1   General definitions of aspect markers

The category of verbal aspect typically expresses the completion or non-completion of events, actions or states of affairs. Perfectives, perfects and anteriors, completives and

---

10   For examples of these two grammatical categories used as aspect markers, see example (5) with an auxiliary verb and example (9) with a preverbal adverb below.

11   The transcription system used for Min-Xiamen is the International Phonetic Alphabet (IPA). The tone values, indicated by raised numbers, are as follows: *Tone* (1): High level 44; *Tone* (2): Low level 22; *Tone* (3): High falling 53; *Tone* (4): Low falling 21; *Tone* (5): Mid rising 24; *Tone* (6): *Yīnrù* 32; *Tone* (7): *Yángrù* 4. See Xiamen dictionary (1982) and Brosnahan (1972). The initial /t/ of the progressive morpheme *te?* is realised as a flap for some speakers and an alveolar lateral for others (Robert Cheng, p.c.).

resultatives belong to the first type of bounded aspect, expressing completion whereas imperfectives, progressives and habituals belong to the second type of unbounded aspect expressing the ongoing nature of the event. Unlike tense, the category of aspect is not deictic: It does not encode the time at which an event took place with respect to the moment of speech which enables aspect markers, in general, to freely occur in most temporal contexts (cf. Comrie 1976).

This study concentrates on the most semantically and syntactically generalised aspect markers in each of the three Sinitic languages for the purposes of setting up a preliminary typology of aspect, with minor reference to the Wu dialect of Shanghainese.[12] Cross-linguistic studies such as Bybee et al (to appear, Ch. 1:2, 11-13) use as a starting point the definition of a grammatical morpheme as one which typically falls into a closed class occurring in a fixed position with respect to the verb. This provides one diagnostic for discerning the main aspect markers in each language[13] Thus, sentence-final particles in Sinitic languages that express both aspect and modality and lexical aspect coded in the form of verbs that inherently express or imply aspectual meanings fall outside the scope of this study. It will be seen from the following discussion that tense, aspect and modality are meanings which are not, however, easily disentangled from one another. [14]

---

12 A more complete typology of aspect systems would need to include full details on the relevant aspect markers in Wu-Shanghainese as well as representative languages of the other 3 major dialect groups in Sinitic such as Kejia (Hakka), Xiang and Gan, for which however only minimal data is as yet available.

13 Note that this definition does not refer exclusively to affixes, since preverbal adverbs are included in this study of aspect. Nor is the definition intended to provide the sufficient and only condition for acting as a grammatical morpheme as a functional approach to the description of aspect markers is taken in this analysis.

14 The argumentation and examples for the following section are in the main to be found in Chappell 1989a and Chappell 1989b. Due to restrictions on space, most of these arguments cannot be reproduced here. Language specific studies of aspect in the Sinitic family which discuss aspect and modality in detail include Kwok (1971), (1985) and Cheung (1972) for Yue-Guangzhou (Cantonese) and Cheng (1978), (1990) for Taiwanese Min among others. These are the main references used as a basis for the comparison with Mandarin for Yue and Minnan, in conjunction with recorded texts and elicited data from native speaker language consultants (see footnote 1 for details). The Mandarin analysis is based on Chappell (1988), (in prep. [a], and (in prep. [b]), using data from the Chinese Pear/Guava Stories (compiled by Erbaugh 1976) and other transcriptions and data elicited by the author (Consultants are also acknowledged in footnote 1).

2.2   Perfectives

1. <u>Mandarin</u>

   Tă   *zhāi*   *–le*   *sān*   *lŏu*   *guŏzi*

   3sg   pick   PFV   three   basket   fruit

   'He picked three baskets of fruit.'

   (Chinese Pear Stories 1.4:4)

2. <u>Yue-Guangzhou</u>

   ngo^5 $tsau^6$ hai^6 $Kwong^2tsau^1$ $tsut^1sai^3$ ke^3

   1sg   then   at   Guangzhou   be:born   SUB

   m^5 kei^2 nin^4 ne^4 $tsau^6$ lai^4 tso^2 $H\phi ng^1$

   five   many   year   RP   then   come   PFV   Hong

   $Kong^2$

   Kong

   'I was born in Guangzhou, and in the fifties,

   I came to Hong Kong.' (Narrative II : 1-2)

Perfectives code that an event has ended or is finished, without necessarily implying that it is complete (cf. Comrie 1976:18–20). This semantic definition is not surprising, given that it has been observed cross-linguistically that perfectives typically develop out of verbs meaning 'finish', 'conclude' and 'complete'; also 'throw away', 'go' and 'lose' (cf. Bybee et al, in prep., ch.3:8). [15] In Mandarin, it is claimed that the perfective marker *–le* evolved from the verb *liao* 'finish', according to Wang Li 1957, Cheung 1974 and Mei 1978 *inter alia*. Even in earlier periods of Chinese such as during the Nanbeichao (420–581) and the Tang (618–907) dynasties, the markers indicating perfectivity were all

---

15   Note that Bybee et al (in prep.) lists *yun* [4] and *maai* [4] as completive markers for Cantonese, the
      representative language for Sinitic in their sample, and does not include the more generalised
      tso [2] (see below).

related to verbs meaning 'finish, complete' such as *bì* (畢), *jìng* (竟), *qì* (訖) and *yǐ* (已) (Mei 1981b).

Yue has *tso²* as its perfective suffix. The origins of *tso²* are, however, not attested, although Mei (1978) suggests Middle Chinese *tiwo* as a source, which has separately developed into the continuous marker *-zhe* in Mandarin. Min-Xiamen appears not to have a perfective aspect in the form of a grammaticized marker of verbal aspect, but traditionally uses the strategy of resultative complement verbs to code perfectivity such as *tsia?⁵ -pa³* 'eat-replete, to eat one's fill'. [16] In contrast to Min-Xiamen, other dialects of Minnan such as Hainanese and Chaozhou (Teochiu) have borrowed Mandarin *liǎo* into their aspect systems as the perfective (cf. Yuan 1960:276, see also Nakajima 1977, 1979). Note that sentence-finally, all three dialects use modal particles to express inception of a new state of affairs (Ma.: *le*, Y. *la¹*, MX: *le /la*) which is semantically closer to the category of perfect (see below).

2.2.1 Specific characteristics of Sinitic perfectives

First, it should be noted that although aspect is not required grammatically in Sinitic languages, perfectives in some of these languages are used obligatorily in past contexts in the presence of quantified or definite postverbal nouns, exemplified by (1)above. In this function, they express completion of a specific individuated event. This holds true for both

---

16 Note that, in this case, as a marker of lexical aspect, *liao³* may be used as a resultative complement meaning 'finish', equivalent to Mandarin *wán* cf. Wu Zhongping 1958:88. The Xiamen consultant I worked with , similarly, did not use *liao³* in his dialect in the same functions as Mandarin *le* but only as a resultative complement to a main verb. For example, in past contexts with a referential postverbal object where *le* is obligatory in Mandarin, the consultant used an unmarked verb form. Robert Cheng has stressed the status of *-liao³* as a native morpheme (p.c.). In this paper, we claim only that the perfective use has possibly been borrowed from Mandarin. Finally, note that, according to Cheng (1990) cited in section 2.3 below, the marker of the perfect *wu²* has a secondary function of marking the perfective in past contexts. Cross-linguistically, it has been observed that perfectives develop out of perfects (cf. Comrie 1976; Bybee 1985) so that this function of *wu²* is not at all linguistically surprising. The fact that MX has a perfect aspect marker but not a grammaticized marker of the perfective could well serve as another piece of evidence in favour of the view that MX reflects an historically earlier stage of Sinitic languages (if one accepts the view that perfectives develop out of perfects). For other Min dialects, it is claimed that there are grammaticized markers of aspect such as the sentential-clitic *a* in data from the reviewer:

i k'i -a 'S/he has gone'
gina kun - a-be 'Have the children slept?'

Mandarin (Chappell 1988, 1989a) and Yue (Cheung 1972:145-6) and correlates with the fact that in languages possessing both tense and aspect, perfectives may be confined to past time reference (see Dahl 1985).

Second, Sinitic perfectives may also be used in irrealis contexts in the first clause of an *if* conditional construction to denote, for example, the condition which must be fulfilled to enable another action or event to take place.

3. <u>Yue-Guangzhou</u>

P'ei³ju⁴   tsǿng¹lai⁴   a¹   pi¹   tsai²   peng⁶ -tso²
if   future   RP baby sick   PFV
'If baby becomes ill in the future...' (Kwok 1971:106; my numbering and glosses)

Thirdly, they can be used in imperatives to stress the urgency or necessity of a certain action being carried out and thus brought to completion. [17] These three uses of the perfective markers are all semantically related by the feature of the completion of an event, whether projected or real.

4. <u>Mandarin</u>

Yàn   -le   nèi-ge   yào   wánzi!

swallow   PFV   that-CL   medicine   pill

'Swallow that pill!'

Since perfective aspect markers encode the positive realization of an event, it is not surprising that they do not co-occur with negative markers in negated statements. This applies equally well to both Mandarin *le*, in the case of the negative morpheme *bù* (不) , and to Yue *tso²* . The semantically-based nature of aspect contrasts with the more gram-maticized nature of tense which marks verbs in both affirmative and negative clauses, for example, in English.

Bybee et al (to appear, ch.3) note that if perfectives are restricted to modifying certain

---

17   This feature is described for Mandarin in Li & Thompson (1981:207). Example (4) above is taken from in Li & Thompson (ibid) and is their example (89).

verb classes, it will typically only be dynamic verbs. This is true for both Mandarin and Yue-Guangzhou where the perfective markers cannot modify many semantically stative yet syntactically transitive verbs such as *rènshi* (認識) 'know, be acquainted' or *xǐhuan* (喜歡) 'like' in Mandarin and *hái*[6] (係) 'be' in YG (Cheung 1972:156). Light (1986:418) points out that verbs meaning 'know', 'recognise' and 'know how to' in YG, can, however, take *tso*[2] as opposed to the Yue dialect he examines–Toishan, which means Yue-Guangzhou *tso*[2] is less subject to semantic restrictions on verb type than is Mandarin *–le*.

Other stative intransitive verbs such as Ma *pàng* (胖) and YG *fei*[4] (肥) 'be fat' do on the other hand co-occur with perfective markers. This does not constitute a counterexample to the cross-linguistic generalisation, however, as the aspectual meaning coded is rather one of the inchoative 'to become/get fat'. Again, the identical phenomenon is found in a large number of unrelated languages in Bybee et al's survey (to appear, Ch.3:41-44), including Engenni (Kwa, Niger-Congo); Island Carib and Slave (Athapaskan). They note that for languages which permit co-occurrence of perfectives with stative verbs, the meaning is of change to present state. Comrie (1976:20) points out that 'there is some functional value in utilising the perfective forms of stative verbs to denote entry into the appropriate state, since otherwise there would be little use for the perfective forms of these verbs ⋯'.

2.3 Perfect/Anterior

5. <u>Min Xiamen</u>

Gua^3	wu^2	sia^3	$p'ue^1$	ho^2	yi^1
1sg	PERF	write	letter	to	3sg

'I have written a letter to him/her.'

Minnan stands out in contrast to both Mandarin and Yue in possessing a verbal construction to express the perfect by means of the verb *wu*[2] 'have, exist' which is cognate

to Mandarin *you* (有) . *Wu2* is a preverbal auxiliary which retains its full tonal value. The perfect or anterior [18] implies a currently relevant state as a result of a prior event. The aspectual construction it forms is remarkably similar to perfect constructions in Indo-European languages. For example, French, German and English all use the verb 'to have' to form the perfect; Fr: *je l'ai vu(e),* Ger: *ich habe sie /ihn gesehen,* Eng: I've seen her/him, MX: *gua³ wu² k'uã⁴ ki⁴ yi¹* (我有看見伊.)

Cheng (1978, 1990) describes the use of *wu²* as a modal marker of emphatic assertion, translating it by English 'did'. [19] In Bybee et al's survey (to appear, ch.3:12), perfect constructions are described as being typically formed by means of stative auxiliary verbs such as 'be', 'have' and 'remain' in conjunction with the main verb. Other functions of *wu²* are noted by Teng (1990) who points out a generic use and Cheng (1990) who lists a perfective use in past contexts.

Overlapping areas of use for perfects and perfectives are not an uncommon feature of aspect systems. A well-documented problem in Sinitic is the fact that the distinction between the Mandarin perfect (or anterior) and the Mandarin perfective, that is, between sentence-final *le* and verb suffix *le,* is often neutralized, specifically in verb-final constructions. Cross-linguistically viewed, this does not constitute a problem in analysis, since there are many attested cases of perfective aspects developing out of perfects or anteriors, for example, French and German among other Indo-European languages. In Mandarin, the two functions of *le,* have not yet become completely separate, as the following example shows where the perfect function of *le* (translated as past perfect in English) can only be contextually and not structurally determined (for details, see Chappell 1988).

18　Bybee (1985) uses the term 'anterior' in preference to 'perfect' to avoid confusion with the separate category of perfective.

19　Yue-Guangzhou also uses the verb *jau²ᐟ⁵* 'to have' as a marker of emphatic assertion (see Kwok 1971). Here we do not consider this, however, to be part of the aspect system proper in Cantonese as it does not appear to have a generalised use as a marker of the perfect.

6. Mandarin:

Tāmen	*jiù kandao*		*tā*	*diē-dǎo*	*le, bǎ*
3p1	then	see	3sg	fall : over	LE BA

tá	*fúqilai.*
3sg	help : up

'They saw that he had fallen over (*fell over), so helped him
up.'   (Chinese Pear Stories II.5 : 51-52)

It has been argued that perfective *le* diachronically developed from a construction

with the form VERB-OBJECT-LIAO common in the Bianwen texts of 8th to 10th

centuries (Cheung 1977, Mei 1978, 1981b). The particle *liǎo* (瞭) was subsequently

preposed to a position after the main verb (common in some 10th–12th century vernacular

texts) under structural pressure of resultative and potential complements. Phonetic

reduction of *liǎo* resulted in the eventual form *le* of modern spoken Mandarin. If we

regard the two *le's* of modern Mandarin as ultimately having the same lexical source, the

neutralisation and overlapping of function is not difficult to explain. [20]

2.4   Experiential perfect

7. Mandarin

Wǒ	*mèimei*	*qù-guo*	*Aòmén*
1sg	sister	go EXP	Macau

'My sister's been to Macau (before).'

8. Yue-Guangzhou

Ngo⁵	*hφi³*	*–kwo³*	*O³tsau¹*
1sg	go	EXP	Australia

'I've been to Australia.'

---

20   *Contra* Chao 1968 for Mandarin and Mei 1981a for Wu-Ningbo who claim that sentence-
final *le* and its Ningbo counterpart have their source in the verb *lái* (來) 'come' or are homo-
phonous with it. Note also, in favour of this view, that verbs meaning 'to come' are also cross-
linguistically plausible sources of inchoatives and perfects.

9. <u>Min-Xiamen</u>

Yin^1 bat^1 $k'i^3$ $Pak^1ki\bar{a}^1$

3pl   EXP   go   Beijing

'They've been to Beijing.'

The experiential perfect codes that an event has taken place at some point in the past, indicating in addition to this, that the subject gains experience or knowledge of the situation as a result. Experiential perfects such as Ma *guò*, YG *kwo* [3] and MX *bat*[1], also Wu-Shanghai *ku*, are however rare in the languages of the world. [21]

In Bybee et al's sample of 75 languages, only Cantonese (the representative for Sinitic languages) is indicated as possessing this kind of aspect marker. Similarly, Dahl (1985:139-144) found only eight occurrences of the experiential perfect in his sample of 64 languages from different language families. [22] He observes that it is a relatively uncommon category with languages possessing it concentrated in the two areas of East Asia and Africa. Mandarin Chinese proved to have the highest frequency of this aspect marker in terms of the questionnaire administered to all the language consultants, in fact, a mininum of double the frequency of any other of the seven languages.

The lexical source for Ma and YG, also Wu-Shanghai, is transparent in that a fully lexical verb Ma *guò*, YG *kwo* [3] is found in use side-by-side with the aspect marker in each language. This verb means 'to pass/cross through space (or time)'. It is also used as a directional complement in all three languages named above to modify motion verbs with the meaning of 'over, across'. It is easy to conceive of a semantic extension and generalisation taking place from movement through space to the more abstract movement through time, then to the experiencing of an action or situation. The latter can, itself, be likened to 'going

---

21   Thanks to Eric Zee, Chinese University of Hong Kong, and Shi Shiqing, East China Normal University, Shanghai for data and judgements on Wu-Shanghainese.
22   The languages were Japanese, Thai, Javanese, Indonesian, Sundanese, Isekiri (Kwa, Niger-Congo) and Sotho (Bantu, Niger-Congo), apart from Mandarin. Comrie (1976:59) also notes that Kpelle (Niger-Congo) has an experiential perfect.

through an event'.

The Yue experiential perfect is not identical in its range of functions to its counterpart in Mandarin. Yue kwo^3 may also be used with a different function in future contexts and in the imperative to code intention to repeat an action (Cheung 1972:148). Note however that Kwok (1971:95; 108-109;112) treats this function of kwo3 as a different albeit homophonous aspect marker which she labels the 'repetitive aspect' (Kwok's example 1971 : 112, my numbering). [23]

    10. <u>Yue-Guangzhou</u>

$Ma:i^5$	m^4	$ma:i^5$	kwo^3	ko^3	po^1
buy	NEG	buy	EXP	CL	ball

    'Are you buying another ball ?'

Min-Xiamen traditionally uses the preverbal aspect adverbial bat^1 which means 'to have experienced something once in the past' and is equivalent to the literary language wényán: céng(曾) q.v. Wu 1958:89; Yuan 1960:377. In addition to bat^1, many dialects of Minnan have borrowed Mandarin guò, in the case of Xiamen, as ke^4 (Brosnahan 1972 : 54). The suffix ke^4 can be used with or without preverbal bat^1 (see Bodman 1955:369; Brosnahan 1972:54). [24]

In contrast to markers of the perfect (anterior) which imply a currently relevant result state, the experiential perfects in Yue, Minnan and Mandarin share the semantic feature of coding that the situation no longer holds.

Consequently, the examples of the experiential perfect given in the introductory sections on each dialect all code that the subject is no longer in the given place or country: For example, MX: $Yin^1 bat^1 k'i^3 Pak^1 kiã^1$ 'They've been to Beijing.' can only be stated if

---

23 In favour of a unified treatment of the experiential perfect in Yue-Guangzhou is the fact that in other languages such as Japanese, this aspect marker may also have the meaning of repetition (see Dahl 1985:141).

24 The language consultant from Xiamen, Xu Ante, noted that, for him, ke^4 was more formal than bat^1, which tallies well with the fact that it is a borrowing from Mandarin, the sociolinguistically more prestigious language.

the subject is not in Beijing at the time of speech (see also Cheung 1972:148 for this feature of *kwo* [3] in Yue).

2.5 Inchoatives

11. Mandarin

    Tiānqi   *jiān–jiàn*   *rè–qilai*   *le*
    weather   gradual   hot–INC   LE
    'The weather's getting hotter.'

12. Yue–Guangzhou

    Ngo[5]   *nau*[1]   *–hei*[2]   *nei*[5]   *sφng*[5]*lai*[4]
    1sg   angry   INC   2sg   INC
    'If I start to get angry with you,......' (Cheung 1972 : 153 ; my numbering, glosses and translation)

13. Min Xiamen

    Yin[1]   *ts'a*[3]   *–k'i*[3]*lai* ·
    3pl   quarrel   INC
    'They began quarrelling.'

Separate from perfects and anteriors coding an inchoative meaning with stative verbs (e.g. Ma *hóng –le* (紅了) 'to get red'; YG *fei*[4]*–tso*[2] (肥咗) 'to get fat'), all three dialects use a disyllabic or polysyllabic suffix based on a directional complement to code the inchoative aspect meaning 'begin to do something' or 'begin to be in a certain state' : Ma *– qilai*; YG *–hei*[2] ···(*sφng*[5])*lai*[4], MX *–k'ilai*.

As an independent verb, these all mean 'arise, get up' while as a directional complement, they denote a direction upwards in combination with a motion verb in each of the three languages. Note that YG is represented by a discontinuous morpheme when there is an object noun, otherwise, *–hei*[2] *(sφng) lai* is directly affixed to the verb (Cheung 1972). The extension of use from directional complement to a marker of inchoative aspect conforms with cross–linguistic findings in that inchoatives typically derive from verbs with the meaning 'to come' (cf. English inchoative verb *become*).

2.6   Progressives

14.   <u>Mandarin</u>

Pángbian   yǒu   *sān-ge*   *xiǎo   háizi*
side   there:be   three-CL   small   child
zài   wán
PROG   play

'On the side there were three small children playing.'
(Chinese Pear Stories I.6:9)

15.   <u>Yue-Guangzhou</u>

Nei⁵   jiu³   mat¹   je⁵   ja¹?
2sg   want   what   thing   Q

'What do you want ?'

K'ɸi⁵   sik⁶   -kan²   ko²   ti¹   la¹
3sg   eat   PROG   that   some   RP

'The stuff he's eating.'

16.   <u>Min Xiamen</u>

Tsaʔ⁵lit⁵   gua³   teʔ⁵   kun⁴   si⁵
yesterday   1sg   PROG   sleep   time

tsit⁵-e⁵   sian¹sĩ¹   lai⁵   la
one-CL   teacher   come   RP

'Yesterday while I was sleeping, a teacher came."

The progressive aspect is defined narrowly in this paper to denote markers which modify only agentive verbs to code an ongoing event or action, following Comrie (1976) and Bybee (1985). Bybee et al (to appear, ch.5:12) define the progressive as containing the following elements of meaning: 'an agent who is located spatially in the midst of an activity at the reference time'.

Cross-linguistically, lexical sources of progressives are found in three main types of stative verbs: *be+locative marker+Verb*, verbs meaning 'be at' and postural verbs such as

sit, stand, lie (see Comrie 1976, Foley & Van Valin 1984, Bybee 1985, Dahl 1985). Both Mandarin and Wu-Shanghai conform to this generalisation in their use of the preverbal markers *zài* and *la* ʔ respectively to code the progressive, since as independent verbs both mean ' be at'. As coverbs or prepositions preceding noun phrases, both express the similar meaning of 'at' or 'on'. [25] This is reminiscent of the English construction with the present participle: *be on VERB-ing > be a VERB-ing* as two earlier stages of the progressive, for example, *he was on hunting/he is a thinking* (Jespersen 1933/79:263).

The progressive marker in Yue-Guangzhou is the suffix *kan* [2] whose written form is based upon that for the verb *kan* [2] 'be tight, firm'. [26] Although orthographic evidence is particularly unreliable when it comes to written forms for the dialects, the semantic link between a resultative complement verb of enduring state meaning 'be firm, tight' and the progressive is a plausible one, although it does not fit in with the three main sources of progressives listed above.

In Min-Xiamen, the progressive is coded by *te*ʔ in preverbal position, whose lexical source is yet to be traced or reconstructed.

Progressives in all three dialect groups seem to share a special semantic feature which Bybee et al (to appear, ch 5:12) note for Spanish : This allows verbs modified by this YG aspect to be compatible with expressions coding that subjects cannot or should not be disturbed, given that they are involved in an ongoing activity, precisely at the moment of reference. This appears to be true for Sinitic, at least, for certain kinds of speech acts, although certainly not for every use of the relevant aspect markers in each language.

Compare the Spanish and Taiwanese Min examples below (Spanish example is from Bybee et al):

---

25 Wu-Shanghai *la*ʔ can also be used in reduplicated form as *la*ʔ *la*ʔ before the verb.
26 The written form of the resultative complement has an additional radical on the left-hand side (the mouth radical). Cheung (1972:149) points out in a footnote that this is merely to distinguish the two grammatical functions.

17. <u>Spanish:</u>

No puede venir al telefono, se está bañando.
'He can't come to the telephone, he's having a bath.'

18. <u>Taiwanese Min:</u>

$Ts'ia^3$ tan^3 $tsit^5 si^5$ gua^3 $te?^5$ $ts'ing^2$ sa^1 $-la$
please   wait   a:bit   1sg   PROG   wear   clothes   -RP
'Please wait a bit, I'm just putting on my clothes.'
(Zhang 1983 : 135)

Comrie points out (1976:34-40) that many English stative verbs such as *know* , for example, do not normally take the progressive aspect: ? *I am knowing Susie well.* He also considers such restrictions on the progressive in other languages.

Dahl (1985:91) similarly found that specific markers of the progressive in many languages could not combine with (semantically) stative verbs. He tested the verb *know* with the result that it was unable to take the progressive for any of the languages in the sample possessing this aspect category (1985:93). This includes Mandarin, since *zài* cannot co-occur with *zhīdao* (知道) 'know' nor with most non-agentive or non-control verbs such as *xǐhuan* (喜歡) 'like'; *míngbái* (明白) 'understand'; *diū-qián (丟錢)* 'lose money' and *ting-dao* (聽到) 'hear involuntarily' (see Chappell, in prep [b]). Cheung (1972:156) notes that *kan*[2] is not compatible with *hai*[6](係) 'be'. However, in general, this YG aspect marker is able to combine with action, quality and status verbs of both transitive and intransitive types, which means that Yue-Guangzhou is again less subject than Mandarin to semantic restrictions on co-occurrence with verb type.

In Dahl's sample, 85% of the languages with a progressive marker used periphrastic means which corresponds to the situation in Sinitic for Min-Xiamen, Mandarin and Wu-Shanghai which all use non-bound preverbal markers. Bybee et al (to appear, ch.5:17-30) also observe that progressive is the marked member of the set in opposition, for example, to zero-marked present tenses with habitual or generic meanings. Diachronically, older progressives develop into habituals and general imperfectives (Dahl 1985:93; Bybee et al, to

appear, ch.5:3) which leads into the final section on continuous and habituals.

2.7. Continuous

19. <u>Mandarin</u>

Niē-zhe   *bízi*   *yě*   *děi*   *wăng-xià*   *guàn*
pinch-CONT   nose   also   must   to-below   pour
'You just have to pour it down (your throat), holding your nose'
(Bing 1988 : 15)

20. <u>Yue-Guangzhou</u>

$tsau^6$ jau^5 jat^1-KO^3 ... ho^3 $leng^3$ ke^3
then   have   one-CL   very   beautiful   SUB

$ts\phi k^3-tsy^6$ $hung^4$ $sa:m^1$ ke^3 ... jat^1-ko^3
wear-CONT   red   clothes   SUB   one-CL

$n\phi i^5 tsai^2$
young   lady
'Then there was a very beautiful young lady ... wearing a red gown.'
(Reborn Red Plum Lady 1989 : 12-15)

21. <u>Min-Xiamen</u>

Li^3 tse^2 $te?^5$ $t'i\tilde{a}^1$ yim^1 gak^7
2sg   sit   CONT   listen   music
'You're sitting down listening to music.'

This kind of aspect marker is found in Mandarin, Min-Xiamen, Yue and Wu. Its function is to stativize action verbs to denote ongoing situations that often form the background in clause combining or serial verb constructions. Consequently, continuous markers are usually able to combine with a larger range of verbs than the progressive, that is, with stative verbs as well as with dynamic ones.

In Mandarin, the continuous marker is -*zhe* which is claimed to be the grammaticized form of a stative verb *zhuó* 'adhere, be attached to, be in contact with' that has undergone phonetic reduction (Wang Li 1980:311; Chao 1968:248). In Yue, the continuous is the suf-

fix *tsy* [6] which is used side-by-side with its homophonous independent verb *tsy* [6] 'live, stay' and resultative complement verb meaning 'be tight, firm'. The lexical sources of these two markers are thus compatible with the meaning of a continuing state of affairs coded. [27]

Although atypical for Min-Xiamen, there is a postverbal means of expressing the continuous which appears to be homophonous to the preverbal progressive marker: *te?/te*. [28] The same situation applies in Wu-Shanghai where the postverbal continuous marker *la?/* or *la? la?* appears to be phonetically identical to the preverbal progressive marker(see Xu 1988). According to Bodman (195:325), the variety of Amoy Hokkien spoken in Malaysia also allows postposing of the progressive marker *te?* to act as a verbal suffix to code the continuous. Bodman states explicitly that *te?* loses its tonal value in this function while the complex of *Verb + te?* usually acts a 'modifier' preceding another verb. Hence, in all three languages, the continuous can be used to modify the first verb in a V_1-CONT V_2 series with a backgrounding function, typically to indicate the manner in which the action den d by V_2 is carried out (see examples 19 & 21 above).

22. Mandarin

> *Háizimen   zuò-zhe   tīng   yīnyuè*
> children   sit-CONT   listen   music
> 'The children are sitting down listening to music.

Note that neither Bybee et al (to appear) nor Comrie (1976) give examples of the continuous from any languages. Bybee et al explain (ch.5:15) that no 'clear category of 'continuous' emerges' cross-linguistically and attribute this partially to the problematical

---

27 Note however, that Mei (1981b) proposes that *tsy* [6], identically to *tso* [2], may have evolved from Karlgren's Middle Chinese etymon *tiwo*.

28 Zhang (1983:126) treats both preverbal and postverbal *te?* [5] as belonging to the same category of aspect. The Dictionary of Putonghua and Min Dialect (1982:484) treats both markers under the same entry. The anonymous reviewer has pointed out an interesting semantic restriction to me that needs further research: In Min-Xiamen, the postverbal *-te?* [5]' only occurs with certain posture verbs and seems to be a derivational affix for manner adjuncts. Mandarin *chàng-zhe gē tiàowǔ* 'singing while dancing' and *tiào-zhe wǔ chàng gē* 'dancing while singing' are both grammatical while none of their Min-Xiamen counterparts are.'

nature of identifying this aspect in the reference grammars they consulted. Dahl question-marks Ma *zhe* (1985:180) as a kind of progressive. Nor did his survey apparently turn up any examples of this category. In contrast to these three cross-linguistic studies, we find that the continuous is a clearly-identifiable aspectual category in Mandarin, Yue, Minnan and Wu and moreover one which is syntactically and semantically distinct from the progressive and other imperfective markers (even in languages where the two forms are homophonous). Hence, I believe detailed descriptions of these markers in Sinitic languages, particularly those other than Mandarin will provide important criteria for discerning continuous aspects in other languages. [29]

2.8 Habitual

23. Yue-Guangzhou

$Jan^1 wai^6$ nei^5 $jat^1 lau^4$ $tso^6\text{-}hoi^1$
because   2sg   always   do -HAB
je^5 ja^1 ma^3
things RP   RP

'Because you have always been working.' (Kwok 1971:105, my numbering and glosses)

The habitual is used to code usual situations pertaining to personal habits and customs, as opposed to generic sentences that express the 'lawlike' character of a situation such as typical properties of an object (cf. Dahl 1985:96-102). For example, Cheung (1972:150) explains that in Cantonese, the predicate $sik^6\text{-}hoi^1 faan^6$ (食開飯) [eat-HAB rice] can be used in the appropriate context to mean 'usually or always eat rice' as opposed to other kinds of staple foods. Examples (24) and (25) reproduce a minimal pair from Cheung (1972:150-151) (my numbering, glossing & translations), neatly illustrating the

---

29 The functions of the Mandarin continuous marker *zhe* have been well- documented in Chinese linguistic literature (see Chappell, in prep [b] for a bibliography). The problem here is that it has generally been labelled the progressive, which brings us back to Bybee et al's difficulties in identifying such morphemes in reference grammars.

semantic contrast between the aspect markers tsy^6 and hoi^1

24. $ta:i^3$ $-tsy^6$ $nga:n^5 keng^3$

     wear   CONT   glasses

     'wearing glasses (at reference time)'

25. $ta:i^3$ $-hoi^6$ $nga:n^5 keng^3$

     wear   HAB   glasses

     'wearing glasses (always has to)'

In fact, only Yue-Guangzhou, as opposed to both Mandarin and Minnan, possesses a grammaticized marker of the habitual in the form of the suffix hoi^1 which is semantically related to the independent verb hoi^1 'open, be opened'. Such a lexical source for an imperfective is not unexpected, given its stative nature. However, according to Bybee et al's cross-linguistic survey, habituals typically evolve out of verbs with meanings such as 'sit', 'know', 'see' or 'live' the latter verb being, on the contrary, the possible source for the continuous in Cantonese (see section 2.7 above).

Nonetheless, special markers for the habitual are not common in either of the surveys by Dahl and Bybee et al. Dahl (1985:96) found that only 4 languages met the requirements for the habitual marker as a major TMA [tense, aspect, mood] category.

The source of habituals was less easy to ascertain than for progressives and was often not given in the reference grammars consulted by Bybee et al (to appear, ch.5:30). There were, for example, only 6 sources given for 20 attested cases of habituals with respect to the category of 'habituals without tense restrictions'.

2.9   Verb reduplication

The process of verb reduplication to encode aspect represents a widespread phenomenon in Sinitic languages. Two related aspectual meanings are expressed: these are the delimitative– 'to do something for a little while' and the tentative– 'to try something out'. Both meanings can be regarded as belonging to the unbounded or imperfective class of aspect. This syntactic strategy is found, for example, in at least Northern Chinese, the

Yue dialect group and in Minnan. Furthermore, in all three dialect groups it expresses the identical ideas of either short duration or tentative nature of the action, depending on the verb class.

26. <u>Mandarin</u>

   Ràng   *wǒ*   *xiǎng-xiǎng*

   let   I   think-think

   'Just let me have a think about it.'

27. <u>Yue-Guangzhou</u>

   Nei^5 si^3 .si^3 gin^6 saam^1,   t'ai^{2}t'ai^2

   2sg   try-try   CL   clothes   see–see

   ngaam^1-m^4-ngaam^1 tsɸk^3

   fit-not-fit   wear

   'You just try these clothes on to see if they fit.'

   (Cheung 1972 : 164 ; my numbering, translation and glosses)

28. <u>Min-Xiamen</u>

   Gua^3 sue.^{3}-sue^3 k'uã^4

   I   wash-wash   see

   'I'll just wash it and see.' (Yuan 1960 : 277 ; my numbering, translation and glosses)

The examples of verb reduplication for the three dialects, given above, show that the idea of tentative action may be considered to be unbounded aspectually. Neither a definite beginning point nor a definite endpoint is placed into focus by such an interpretation of the internal temporal framework of an event.

This appears to be a possibly unique typological feature of Sinitic, as in Bybee et al's survey of 75 languages, reduplication was consistently used to express the different meaning of action carried out over an extended period of time. There were three main meanings identified in this survey for reduplication, all iconic to the form (ch.5:42-50):

(i)   iterative – doing an action over and over again;

(ii)   frequentative – for oft-repeated actions and

(iii)   continuative – to keep on doing something.

Dineen (1989) in an examination of reduplication in 41 Australian languages, from both Pama-Nyungan and non-Pama-Nyungan families, found a majority used reduplication to express the iconic meanings. Notably however, three languages – Ngiyambaa (western NSW), Yankunytjatjara (central Australia) and Bandjalang (north-eastern NSW) used reduplication to express the non-iconic meaning of attenuation. An example from Ngiyambaa is provided below:

29. *yuw–yuwa–y–ga:-dha*

    lie–lie–CONJ–a:bit:IMP

    'Have a nice little lie in !' (Donaldson 1980).

From this we can conclude that Sinitic is not alone in pairing such a meaning with verbal reduplication, but does stand out in making this its main function, thereby 'choosing' the non-iconic meaning as the major typological feature.

3.   Conclusion

A comparative study of aspect has been made for the three Sinitic languages, Mandarin, Yue-Guangzhou and Min-Xiamen. Within the two broad categories of bounded and unbounded aspect, the experiential perfect, the inchoative, the progressive and the continuous aspects were found to be present in the three systems. In addition to this, verbal reduplication was shown to be used by all three languages to encode the tentative and delimitative aspects.

For the perfective, Mandarin and Yue both have specific markers which are non-cognate, whereas Min-Xiamen uses the strategy of lexical aspect to encode perfectivity by means of resultative complement verbs. Minnan also uses a preverbal auxiliary *wū* to express the perfect or anterior which is coded by the use of sentence-final particles in

Mandarin and Yue (-*le* and *la* [1] respectively).

Yue was shown to have a finely nuanced system of aspectual contrasts, particularly in the unbounded or imperfective class, where in addition to a progressive and continuous marker, we find a marker of the habitual -*hoi* [2].

Hence, in addition to the major categories of aspect found to recurr in cross-linguistic studies such as Bybee et al (to appear), Comrie (1976) and Dahl (1985), the three Sinitic languages dicussed in this paper are also typologically significant in that they make use of an experiential perfect aspect marker, to date, instantiated only for a handful of other languages of the world.

The category of continuous aspect was also shown to be a common feature of the three languages, clearly possessing a backgrounding function as one of its main uses. These findings similarly contrast with those for recent cross-linguistic studies of aspect where the continuous proved not to be a clear-cut category, with the consequence that it is neither well-exemplified nor adequately discussed. It was also shown that Sinitic possesses a language-specific meaning for the syntactic strategy of verbal reduplication which is infrequently attested in other language families. This is the non-iconic meaning of tentativeness or short duration of an event. The study of Sinitic languages may therefore in future supply more adequate and precise criteria to fill such gaps in cross-linguistic studies.

With respect to diachronic paths of development, the verbal origins of most of these aspect markers are transparent. -In Mandarin and Yue, it can be speculated that the process of grammaticization has moved from the status of verb to verb complement of direction or result to aspectual suffix. Many of the aspect markers in these two dialects are in fact still being used side-by-side with either or both the related homophonous independent verb and resultative complement verb, which enables easy identification of lexical sources. Mandarin also displays one preverbal marker of aspect for the progressive.

This relates the discussion back to Min-Xiamen where the preferential strategy for aspectual modification is to use preverbal auxiliary verbs or adverbs in periphrastic

constructions. Only continuous and inchoative aspects are marked postverbally. The lexical sources for the progressive and continuous in Minnan ($te^{?5}$ and te respectively) are not attested, although possibly they have evolved from a verb meaning 'to adhere', reconstructed as $tîwo$ in Middle Chinese. Similarly, in Yue, the sources for progressive $-kan^2$ and perfective $-tso^2$ still await resolution.

A second subsidiary aim of this paper is to suggest the possibility that in grammar, as in phonology, Minnan may show evidence of an earlier stage of Sinitic in general: one where aspect was indicated by the use of preverbal adverbs, which is attested for written records from the period of Middle Chinese (see Norman 1988:123; Cheung 1977, Mei 1981b). In Mandarin and Yue, these aspectual constructions were replaced by other strategies for encoding aspect, such as postverbal complements: This was possible with the rise of resultative compound verbs from serial verb constructions which exerted pressure on the grammatical system (see Li & Thompson 1974, Mei 1978). Particularly, complements of direction and result extended in use to performing aspectual functions as well.

The second stage of evolutionary development for these compound verbs was for the postverbal complement to lose its tonality (in some dialect groups, for example, Mandarin, but not in Yue), become further desemanticised and grammaticized into exclusive use as an aspect suffix. The desemanticisation did not, however, lead to complete semantic bleaching but rather to generalisation and abstraction of meaning which shaped the eventual synchronic function of each aspect marker. This can be observed in the semantic constraints and co-occurrence restrictions of contemporary use in Yue and Mandarin. This hypothesis regarding the status of Minnan is further supported by the fact that its aspect system is less grammaticized, shown by the use of periphrasis as the favoured strategy as opposed to bound suffixes.

REFERENCES

Bauer, Robert S.

1984   The Hong Kong Cantonese speech community. *Cahiers de Linguistique Asie Orientale* 14.1:57–90.

Bloomfield, Leonard.

1933   *Language.* New York

Bodman, Nicholas,

1955   *Spoken Amoy Hokkien.* Kuala Lumpur: Government of Federation of Malaysia.

Brosnahan, Irene Teoh.

1972   *Interrogative Structures in Amoy Chinese, A transformational approach.* Georgetown University dissertation 1972. Ann Arbor: University Microfilms.

Bybee, Joan L.

1985   *Morphology.* Amsterdam: John Benjamins

Bybee, Joan L.; W. Pagliuca & Revere Perkins (To appear.) *The grammaticization of tense, aspect and modality in the languages of the world.*

Chao, Yuen Ren.

1947   *Cantonese Primer.* Cambridge, Mass. Harvard UP

Chao, Yuen Ren.

1968   *A Grammar of ßoken Chinese.* Berkeley: UC Press

Chappell, Hilary.

1988   Aspectually-bounded structures in the Chinese Pear Stories: The two *le's* in Chinese: A case of homonymy, polysemy or neither?. *La Trobe Working Papers in Linguistics* 1:107–134.

Chappell, Hilary.

1989a   On so-called 'empty particles' in Yue-Guangzhou. A study of aspect. In *La Trobe Working Papers in Linguistics* 2:91–112.

Chappell, Hilary.

 1989b   The grammatical category of aspect in Southern Min: preverbal coding of aspect in Min-Xiamen. In *La Trobe Working Papers in Linguistics* 2:113-127.

Chappell, Hilary. In prep.[a] Perfect and anti-perfect in standard Chinese. The case of *le* and *guo*.

Chappell, Hilary. In prep.[b]. On going Chinese: A discourse study of progressive *zai* and continuous *zhe*.

Cheung, Samuel Hung-nin.

 1974   Perfective particles in the Bian Wen language. *Journal of Chinese Linguistics* 5:55-74.

Cheung, Samuel. Hung-nin

 1972   *Xianggang Yueyu Yufa de Yanjiu.* [Research on Hong Kong Cantonese Grammar] Hong Kong: Chinese University of Hong Kong.

Cheng, Robert L.

 1978   Tense interpretation of four Taiwanese modal verbs. In *Proceedings of Symposium on Chinese Linguistics* Taipei: Student Book Co.

Cheng, Robert L. [Zheng Liangwei]

 1990   Taiwanhua de shitai xitong [The aspect system of Taiwanese]. In H-C Gong and D-A Ho (eds.) *Proceedings of the First International Symposium on Chinese Languages and Linguistics.* Taipei: Academia Sinica.

Comrie, Bernard.

 1976   *Aspect.* Cambridge: CUP

Comrie, Bernard.

 1976   *Tense.* Cambridge: CUP

Dahl, Osten.

 1985   *Tense and Aspect Systems.* Oxford: Basil Blackwell.

DeFrancis, John.

1984   *The Chinese Language. Fact and Fantasy.* Honolulu: University of Hawaii Press.

Dineen, Anne. H..

1989   *A comparative survey of reduplication in Australian languages.* Unpublished M. A. Subthesis, Australian National University.

Donaldson, Tamsin.

1980   Ngiyambaa: the language of the Wangaaybuwan. Cambridge: Cambridge UP.

Foley, William & Robert Van Valin.

1984   *Functional Grammar and Universal Syntax.* Cambridge: CUP

Hashimoto, Oi-kan Yue.

1972   *Studies in Yue Dialects 1:Phonology of Cantonese.* Cambridge: Cambridge UP

Jespersen, Otto.

1933/79   *Essentials of English Grammar.* London: Allen & Unwin.

Kratochvil, Paul.

1968   *The Chinese Language Today.* London: Hutchinson University Library.

Kubler, Cornelius.

1982   The influence of Southern Min on the Mandarin of Taiwan. *Anthropological Linguistics* 27.2:156-176.

Kuo, Eddie.

1980   The sociolinguistic situation in Singapore: unity in diversity. In A. Afendras & E. Kuo (eds.) *Language and Society in Singapore.* Singapore: Singapore UP.

Kwok, Helen.

1971   *A Linguistic Study of the Cantonese Verb.* Hong Kong: Centre of Asian Studies, UHK.

Kwok, Helen.

1984   *Sentence Particles in Cantonese.* Hong Kong: Centre of Asian Studies, UHK.

Lau, Sidney.

   1977   *A Practical Cantonese-English Dictionary.* Hong Kong: Government Printer.

Lau, Sidney.

   1978   *Elementary Cantonese.* Hong Kong: Government Printer.

Li, Charles N. & Sandra A. Thompson.

   1974   An explanation of word order change: SVO-SOV. *Foundations of Language* 12:201-214.

Li, Charles N. & Sandra A. Thompscn

   1981   Mandarin Chinese : A Functional Reference Grammar. Berkeley: University of California Press.

Li, Xinkui.

   1988   *Xianggang fangyan yu putonghua* [The dialect of Hong Kong and standard Chinese] Hong Kong: Zhonghua Shuju.

Li, Y.C.

   1986   Historical significance of certain distinct grammatical features in Taiwanese. In McCoy & Light (eds.) *Contributions to Sino-Tibetan Studies.* Leiden: E.J. Brill.

Light, Timothy.

   1986   Toishan affixal aspects. In McCoy & Light (eds.) *Contributions to Sino-Tibetan Studies.* Leiden: E.J. Brill.

Lin Lian-xian.

   1964   Yueyu dongci ciwei xuzi yongfa de tantao [An investigation of the use of verbal suffixes in Cantonese] *The Ch'ungchi Journal.*

Mei, Tsu-lin.

   1978   The etymology of the aspect marker *tsi* in the Wu dialect. *Computational Analyses of Asian & African languages* 9:39-57.

Mei, Tsu-lin.

   1981a   Mingdai Ningbohua de 'lai' zi he xiandai Hanyu de 'le' zi.[The character *lai* in

the Ningbo dialect of the Ming dynasty and the character *le* in modern Chinese] *Fangyan* 1:66.

Mei, Tsu-lin.

    1981b   Xiandai Hanyu wanchengmao jushi he ciwei 'le' de laiyuan [The origins of the modern Chinese perfective construction and the suffix *le*]. *Yuyan Yanjiu* 1:65-77.

Nakajima, Motoki.

    1977   *A Study of the Basic Vocabulary of the Min dialect in the Tung Shan Island.* Tokyo: Tokyo Gaikokugo Daigaku.

Nakajima, Motoki.

    1979   *A Comparative Lexicon of Fukien Dialects.* Tokyo: Tokyo Gaikokugo Daigaku.

Norman, Jerry.

    1970   A characterization of the Min dialects. In *Chilin* [Unicorn] 6:19-34.

Norman, Jerry.

    1973   Tonal development in Min. *Journal of Chinese Linguistics* 1:222-238.

Norman, Jerry.

    1988   *Chinese.* Cambridge: Cambridge UP

Ramsey, S. Robert.

    1987   *The languages of China.* Princeton: Princeton UP.

Song, Margaret M-Y.

    1974   *A study of literary and colloquial Amoy Chinese.* Stanford University dissertation. Ann Arbor: University Microfilms.

Teng Shou-hsin.

    1990   Diversification and unification of negation in Taiwanese. In H-C Gong and D-A Ho (eds.) *Proceedings of the First International Symposium on Chinese Languages and Linguistics.* Taipei: Academia Sinica.

Traugott, Elizabeth C.

1978   On the expression of spatio-temporal relations in language. In J. Greenberg et al
        (eds.) *Universals of Human Language,* vol. 3: *Word Structure* pp. 369-400.
        Stanford: Stanford UP.

Wang Li.

1980   *Hanyu Shigao* [Draft History of Chinese] Beijing:Kexue.Chubanshe

Wu Zhongping.

1958   Xiamen hua de yufa tedian. *Fangyan yu putonghua jikan. Di-yi ben* [Special
        grammatical characteristics of the Xiamen dialect. *A collection of papers on
        dialects and putonghua.* Vol 1:84-109] Beijing: Wenzi Gaige Chubanshe.

Wurm. S.A. & S. Hattori (eds.)

1981, 1983   Language Atlas –Pacific Area. Canberra: Pacific Linguistics, ANU C-66,
              C-67.

Wurm, Stephen, Benjamin T'sou & David Bradley.

1988   *Language Atlas of China, Part I.* Hong Kong: Longmans.

Xiamen Daxue Zhongguo Yuyan Wenxue Yanjiusuo Hanyu Fangyan Yanjiushi [The
Chinese Dialect Research Office of the Chinese Language and Literature Research Insti-
tute of Xiamen university]

1982   *Putonghua Minnan Fangyan Cidian* [A Dictionary of Putonghua and Minnan
        Dialect] Hong Kong: Joint Publishing Co.

Xu Baohua.

1988   *Shanghai Shiqu Fangyanzhi* [A Record of the Dialect of Shanghai City] Hong
        Kong: Joint Publishers.

Yuan Jiahua.

1960   *Hanyu Fangyan Gaiyao* [An Outline of Chinese Dialects]. Beijing: Wenzi Gaige
        Chubanshe.

Zhang Zhenxing.

    1983   *Taiwan Minnan Fangyan Jilu* [Notes on the Southern Min dialect of Taiwan]

         Fuzhou: Fujian Renmin Chubanshe.

Zhu Dexi & Lu Jianming. 1987.

Hilary Chappell

試論漢語語言中體的分類

本文對漢語中的三種方言：北方話【國語】，粵方言【廣東話】和閩南話，體的表現手段，進行了比較。研究表明，這三種方言都具有經歷體，起始體，進行體和持續體。此外，這三種方言也都使用了動詞重疊式，作爲表達嘗試體的手段。

儘管如此，這三種語言所使用的體態表達手段，又各有千秋。就完成體而言，北方話和粵方言都採用了特殊的標志，但是兩種方言所使用的標志，來源不同。在閩方言中，完成體一般依靠詞彙手段，即結果補語進行表達。不過，某些閩方言借用了北方話中的【了】來表示完成體。

閩南話還使用置于動詞前的助動詞【有】表達前完成體。這在北方話和粵語中是以句尾助詞來實現的。

粵語中，體的表達方式，十分細膩。尤其是未完成體這一類。粵語中的未完成體，不僅包括進行體和持續體，而且還有一種用【開】表示的慣常體。

以上的研究結果，與跨語言研究(比如Bybee(1985), Bybee et al (to appear)，Comrie (1976) 和 Dahl (1985)) 對語言中體的分類，大致吻合。但是在以下三個方面，與之有所不同。

第一、本文所討論的三種漢語方言，都相當廣泛地使用了經歷體。而到目前爲止，跨語言研究所涉及的各種語言中，只有極少數具有這種體。

第二、關于持續體，這些跨語言研究所列舉的語言種類，不僅數量少，解釋也不夠充分。本文所研究的三種方言，都具有這種體，其主要功能是表示背景性的動作或狀態。

第三、跨語言研究對于動詞重疊式也作了調查。然而，這些研究只描述了一種功能，即動作的反復性。本文的研究表明，這三種漢語方言都使用動詞重疊式，來表達嘗試性的或短暫的動作。

總而言之，我認爲，對漢語方言進行研究是很有意義的。看來，漢語方言中含有丰富的體的現像。對于漢語方言中的體加以研究，將有助于對語言中體的分類作更

充分，更確切的描述，從而彌補跨語言研究中現存的缺陷和不足。

一、北方話：

    了：完成體   在＋動詞：進行體

    過：經歷體   著　：持續體

    起來：起始體

二、廣東話：

    咗：完成體   嘅：進行體

    過：經歷體   住：持續體

    起(上)來：起始體   開：慣常體

三、閩南話：

    有＋動詞：前完成體   咧：進行體

    bət[1] (八)：經歷體   V＋咧：持續體

    起來：起始體

例句：

1.他摘了三簍果子。

2.我就係廣州出世嘅………

    五几年呢就來咗香港。

3.譬如將來呀啤仔病咗。

4.咽了那個藥丸子！

5.我有寫批給伊。

6.他們就看到他跌倒了，把他扶起來。

7.我妹妹去過澳門。

8.我去過澳洲。

9.伊們bət[1] (八) 去北京。

10.買唔買過個波呀。

11.天氣漸漸熱起來了。

12.我嬲起上來。

13.伊們吵起來。

14.旁邊有三個小孩子在玩。

15.～你要乜嘢呀？

　　～佢食嘞個的啦。

16.昨日我哋睏時，一個先生來囉。

17. (Spanish Example)

18.請等一時，我哋穿衫啦。

19.捏著鼻子也得往下灌。

20.就有一個…好靚嘅…

　　著咗紅衫嘅……一個女仔。

21.汝坐咧聽音樂。

22.孩子們坐著聽音樂。

23.因爲你一樓做開嘢呀嗎。

24.戴住眼鏡。

25.戴開眼鏡。

26.讓我想想。

27.你試試件衫睇睇啱唔啱著。

28.我洗洗看。

From Middle Chinese to Modern Peking : An Interflow between the Shang and Qu Categories

Chen Chung-yu

National University of Singapore

1. Introduction.

From Middle Chinese (hereafter, MC) to modern Peking, there has been a large amount of interflow between the Shang and Qu categories which apparently has not been receiving the kind of attention it deserves, both in terms of the number of characters involved as well as the recognition of the genetic relationship involved. By this I mean changes between Shang and Qu which do not conform to the generally accepted rules have been dismissed, almost without exceptions, as "unaccountable" (i.e. '不可考' or '無據'). This is comparable to a denial of a genetic relationship when the father and the son do not look alike. 漢語方音字匯 (1962, hereafter, Zihui), for example, provides only the MC reading(s) of a word which are accountable for its present-day reading(s) in Peking. For instance, characters 去, 瀉, 宴 had both Shang and Qu readings in MC and Zhongyuan Yinyun (hereafter, ZYYY), but only the Qu readings are listed in Zihui as their MC sources. Likewise, 苦, 灸, 引 also had two tonal readings in MC, but only the Shang-sheng readings are given in Zihui. Similarly, Stimson (1966) also provides a selective presentation of the MC readings in his word list of Zhongyuan Yinyun. For instance, characters 恐, 侃, 巧, 偶 had both Shang and Qu readings in MC, but only the Shang readings are given in his list; characters 扣, 怒, 賑, 晏 also had two readings in MC; again, only their Qu readings are presented in Stimson's word list.

Such a selective representation of the MC readings, together with the limited corpus

(approximately 2169 characters) contained in Zihui, yields only 19 cases of irregular development between Shang and Qu in Peking Mandarin, as shown in a quantitative summary of Zihui by Wang and Cheng (1987). This pilot study, however, reveals a total of 375 instances of irregular development between Shang and Qu from MC to modern Peking, to the exclusion of 46 examples of tonal disparities that have become neutralized under the generally accepted rule of Zhuo-Shang changing into Qu.

Before presenting the instances of such an interflow in Peking as well as the other dialects, it is necessary to clarify on the definition of the regular refiexes for MC Shang and Qu. Moreover, to put the various dialects on par for comparison, it is necessary to impose the same set of rules to these dialects. Hence, the common standard adopted here is: MC Shang-sheng in the environment of a voiced obstruent initial (hereafter, Zhuo-Shang) becomes Qu in modern dialects; other than that, Shang remains Shang and Qu remains Qu.

For the study of the Peking dialect, three types of material have been used: (1) modern dictionaries 國語辭典 (1947), 國語字典 (1947), 重編國語辭典 (1981) for the 1932 system of 標准國音; and 現代漢語辭典 (1978), 普通話異讀詞三次審音總表初稿 (1963) and 普通話異讀詞審音表 (1985) for the 1963-85 revision system; (2) reported current pronunciation of Peking Mandarin by Li Kai(1985, for 北京) and Chen (1988a and 1991, for 台北); (3) rime books: 廣韻聲系 (1969) for Middle Chinese and the word list of ZYYY as arranged by Stimson (1966) for Old Mandarin.

A few characters from the MC Ru-sheng category which have undergone changes between Shang and Qu after the 1932 system have been included. However, excluded from this study are a large number of characters which fall into three categories: (1) characters which have been carrying Shang-Qu two readings from MC through modern Peking; (2) characters which had Shang-Qu two readings in MC but have later become obsolete; (3) MC Ru-sheng characters which underwent changes between Shang and Qu in the period between ZYYY and the 1932 system. In the tables of examples given in the follwing discussion, the different tonal readings for the characters are carried by the same

segmental forms, unless specified otherwise.

Here a few words on the inclusion of ZYYY may be in order. Whether ZYYY represents the language spoken in 開封, 洛陽, 商邱, or 大都 (now Peking), it was the prestige language of the time. As such, its position as a link between MC and modern Peking should not be a question.

For the study on the various dialects, both the data in Zihui (1962) and Wang and Cheng's (1987) quantitative summary have been utilized. Reports on other dialects other than those recorded in Zihui have also been cited.

2. An Interflow between Shang and Qu Observed in Peking.

2.1. Expected Shang-sheng Emerging as or Moving towards Qu.

In this pilot study, a total of 52 characters are found to have carried or be carrying a Qu-sheng, instead of the expected Shang, in their development from MC to Peking Mandarin. They are presented in Table 1, classified into different types according to their modes of development.

The 11 characters of Type 1 emerged in Qu in ZYYY, with 2 of them still retaining Shang-sheng as well. In modern Peking, 6 of them remain in Qu; the other 6 have reverted to Shang.

The 13 characters of Type 2 emerged in Qu-sheng in the 1932 system; of which 10 are high-frequency words.

The 18 characters of Type 3 split into two readings in the 1932 system. Since then, 6 have evolved into one reading in the 4th-Tone; 6 are given as remaining in two tones in the 1963-85 system (although except for character 紀, which at least in Taipei occurs predominantly in the 4th-Tone, the other 5 have their 3rd-Tone readings as the chief pronunciation); and another 6 have reverted to one reading in the 3rd-Tone in the 1963-85 system (although at least two of them, 鄙 and 莠, are still fluctuating between the two tones in actual speech).

The 2 characters of Type 4 began to move toward the 4th-Tone after the 1963 system, in so far as the documented material is concerned. Character 鞅, in its most frequent use as in 〝商鞅變法〞 (in the speech of the educated speakers), has changed into the 1st-Tone, probably due to an analogy of a high-frequency character 央.

Under Type 5 are 8 characters from MC Ru-sheng, which have changed between Tones 3 and 4 after 1932. In the 1963-85 system, 3 of them emerged in Tone 3, another 3 in Tone 4, and 2 in two readings.

2.2. Expected Qu Emerging as or Moving towards Shang.

Both MC Qu-sheng and Zhuo-Shang are expected to emerge as Qu in modern Peking as well as ZYYY. In this study, a total of 139 characters are found to have violated this rule in one way or anther (Table 2).

Under Type 1 are 35 characters which first emerged in Shang-sheng in ZYYY, with or without retaining the original Qu-sheng. 17 of them remain in Shang in modern Peking; 15 have come full circle and reverted to Qu; one remains in two readings since the 1932 system, one has changed into the Yin-Ping category and one has become obsolete.

The 49 characters under Type 2 largely remained in Qu up to the time of ZYYY; from there they developed in various ways and at various pace. In the 1985 system, 35 are in Shang-sheng; 9 have two readings in Shang and Qu; and 5 have reverted to Qu-sheng.

The 8 characters under Type 3 have changed to Shang in the 1963-85 system; with one still retaining the Qu-sheng in certain usages.

The 11 characters of Type 4 are annotated with the 4th-Tone in the dictionaries of both the 1932 and the 1963-85 systems. However, with the reported current pronunciation in Peking (Li 1985) and Taipei (Chen 1991) taken into consideration, they are definitely moving towards the 3rd-Tone.

The 35 characters of Type 5 can be characterized as the 〝slow developers〞, as they came from MC Zhuo-Shang and hence should have changed to Qu long ago. Yet, the first

8 characters began to assume a Qu-sheng reading only in Peking Mandarin instead of ZYYY; the next 6 are largely fluctuating between Shang and Qu (although as far as the 1985 system is concerned, 4 are in the 4th-Tone, 1 in the 3rd-Tone, and 1 has two readings); the last 21 generally remain in Shang-sheng, although one of them, 罕, often appears in Qu in the lexical item "稀罕" in actual speech (Chen 1991).

The sole member under Type 6, character 辱, came from MC Ru-sheng. Emerging in Qu in ZYYY, it split into Shang and Qu in the 1932 system, and in 1963, only the Shang reading was retained.

Table 3 presents a quantitative summary of these 139 instances of expected Qu emerging as Shang, in terms of their phonological features in MC and their present-day pronunciation in Peking Mandarin. The statistics here indicate that the change from an expected Qu into or towards Shang has been taking place in characters of all types of initials in MC. For instance, among the MC Qu-sheng characters which have been heading for Shang-sheng, 55.5 had voiceless initials in MC (one character had two initials, one voiceless and one voiced), 37.5 had voiced obstruent initials, and 11 had sonorant initials. And among the 37.5 characters with MC voiced obstruent initials, 25.5 came from MC Qu-sheng, 9 from Shang, and 3 had both Shang and Qu readings in MC. (Of course, all the 33 "slow developers" came from MC Shang-sheng with voiced obstruent initials.)

2.3. Characters Expected to Carry Two Tonal Readings Emerging with Only One Reading.

In this pilot survey, there are 122 characters which are expected to carry both the Shang-sheng and the Qu-sheng in modern Peking, yet have turned out to be carrying only one of the two tones. As a matter of fact, the number of characters bearing Shang-Qu two readings in MC is by far larger than 122. However, many of them are not found in ZYYY and have become obsolete in modern Peking (e.g. 傽, 潒, 蛴, 褪, 癠, 襡, 敠, 麩, 輢, and many more) and are thus excluded from the discussions.

45 of these characters have retained only the Qu-sheng readings (Table 4); of which 29 had voiceless initials in MC, 12 had sonorant initials, 3 had both voiceless and voiced obstruent initials and 1 had a voiceless obstruent initial and a sonorant one. Moreover, at least 21 of them had one reading in Qu by the time of ZYYY.

Listed in Table 5 are 77 characters which have retained only their Shang-sheng readings. 48 of them had voiceless initials in MC, 17 had sonorant initials, and 12 had both voiceless and voiced obstruent initials. 35 of them had one reading in Shang by the time of ZYYY.

A comparison of the types of initials in the two tables reveals that no correlation can be established between the types of initials and the categories of the surviving tones.

Characters which still carry two readings for either similar or different meanings/ usages are not discussed here.

To sum up, there are 216 characters (Tables 2 and 5) that have been moving towards Shang-sheng and 97 characters (Tables 1 and 4) that have been moving towards Qu. (In both cases, characters that have turned back either halfway or after coming a full circle are included.) The two figures are in the ratio of 69.0% to 31.0%.

2.4. Tonal Disparities That Have Become Neutralized under the Generally Accepted Phonological Rule.

Table 6 presents 46 characters that had two tonal readings in Shang and Qu in MC (for the same segmental forms and for either the same meanings or some obviously over-differentiated meanings) which, however, have become neutralized under the generally accepted rule of Zhuo-Shang changing into Qu. Of these 46 characters, 39 (Type 1a and 1b) had voiced obstruent initials in Shang-Qu two readings in MC, 7 (Type 2) had voiced obstruent initials in Shang-sheng and voiceless initials in Qu-sheng. In addition, given at the bottom of this table for reference are 17 more characters of such MC origins, which either emerge in Shang in modern Peking or have involved Yang-Ping as well in their de-

velopment from MC to modern Peking, or involve other types of changes.

The 39 characters under Type 1 and the 17 characters given for reference together make 56 examples of MC Shang-Qu two readings in characters with voiced obstruent initials. (There are a few more such examples; which, however, have become obsolete in modern Peking and are thus excluded from the present discussion.)

The assumption that MC Zhuo-Shang regularly changed into Qu has been a universally accepted rule in the realm of Chinese phonology (e.g. "T2-Merger is straightforward and requires no comment, except that its effect extended to a large area of Chinese dialects···", M. Chen 1976: 151). Probably because of this generally accepted rule, the two readings for these characters have never appeared to be a warrant for much attention, as most of them have merged into Qu as they are expected to. However, in the face of the large number of interchanges between Shang and Qu, in particular the 139 instances of expected Qu emerging as Shang in Table 2, the 56 characters having voiced obstruent initials in both Shang and Qu in MC seem to be gleaming with new light.

These 56 examples indicate that at the time of MC, interchange between Shang and Qu, even in characters bearing voiced obstruent initials, was already a common phenomenon. Hence, MC Zhuo-Shang changing into Qu may not be a necessary or natural result of the loss of voicing in the initials. From the time of MC till now, characters with all kinds of initials may vary or fluctuate between readings in Shang and Qu. Therefore, that there have been more cases of MC Zhuo-Shang changing into Qu may be merely a matter of fortuity rather than a phonologically conditioned result.

2.5. Changes Involving Shang, Qu and Yang-Ping.

There are many characters which have assumed not only the Shang and Qu tones, but also the Yang-Ping, either at the same time or at different phases of their evolution. 62 examples are given in Table 7. As of the present, 17 carry the 3rd-Tone; 13 the 4th-Tone; 19 the 2nd-Tone; and 9 carry more than one of these tones. Other than these, 3 characters

have assumed the lst-Tone and one has become obsolete in that particular usage.

The examples here indicate that in addition to the two-way interflow between Shang and Qu, a three-way interflow between Yang-Ping, Shang and Qu has also been operating since the time of MC.

2.6. The Diffusion of a Sound Change in Different Lexical Items of a Character: a Micro-case Study.

A micro-case study on the tonal readings of character 載 in MC and modern Peking is presented in Table 8, which should afford a good insight into the mode of the diffusion of a tonal change in the different lexical items of a character.

In this case, the change from a Qu-sheng to a Shang-sheng began before the time of MC and is still in progress to date. Furthermore, a comparison between the MC readings and the modern readings of this word strongly suggests that it may very well have had only one reading in Qu with a voiced initial at the Pre-MC stage for all its usages or meanings and that it will soon be a Shang-sheng word for all the usages in modern Peking.

The information here also furnishes clear indications that different readings for different usages/meanings of the same character may very often be more assumed than real. For instance, character 載, as in 刊載, actually can be read in either tone nowadays. Here are a few other examples: character 假 as in 假期 is often read in Shang instead of the prescribed Qu; 肚 as in 豬肚 is often read in Qu instead of the expected Shang; in 盡管, character 盡 is expected to appear in Shang, yet it often appears in Qu. Likewise, the assumed tonal distinctions between Shang and Qu for different meanings or usages may no longer be realistic in the following characters: 處, 濟, 轉, 飲, 倒, 解, 采, 跛, 瓦, 吐, 簸, 父, 散, 與, etc.

Moreover, that considerable change has taken place in the readings of character 載 in the short span between 1932 and 1985 shows that tonal distinctions in the same character for different meanings may be more transient than has hitherto been realized.

3. The Two-Reading Stages and Their Implications.

The data in the previous sections contain a large number of characters that have started with, gone through, or are still undergoing, a stage (or stages) of documented two readings in Shang and Qu for either exactly or roughly the same meanings. Table 9 presents the numbers of such characters in the various systems from MC to modern Peking.

As far as the corpus under study is concerned, there have been 195 cases of two readings in MC, 81 cases in the 1932 system, and 22 in the 1963-85 system. (There are overlappings between these figures.) While the descending figures seem to suggest that our tonal readings are becoming more and more regular (possibly due to the effect of education and mass communication), they may also be indications that our dictionaries are becoming more and more prescriptive rather than descriptive. (The data of ZYYY show only 31 such instances. This, I believe, is caused by two factors: (1) Many characters under study have not been included in ZYYY; hence their readings at the time of A.D. 1324 are not available. (2) The readings recorded in ZYYY were more prescriptive than descriptive in nature.)

Such are indeed documented cases of free variation between Shang and Qu. In actual speech, needless to say, discrepancies in tone are even more commonplace (e.g. the reported current speech of Taipei, Chen 1991). (A free variation of this nature also obtains in modern dialects. In Xiamen, for example, characters 老, 鹵, 也, 比, 俸, 趁, 養, 癢 (Zihui 1962) have two readings in both Shang and Qu, annotated as the literary versus the colloquial; that are in identical segmental forms.) From a historical point of view, the two tones have been interchanging freely and frequently. The implication here is that the distinction between the two tones is more transient than has hitherto been realized.

The transiency in the distinction between Shang and Qu, from a historical point of view, and the arbitrariness and fortuity in the outcome of the evolution constitute the main thesis of this paper.

4. An Interflow between Shang and Qu on a Cross-Dialectal Spectrum.

The 375 instances of irregular development cited in the previous sections give plain indications of a steady interflow between the two categories in the Peking dialect (not to mention the participation of Yang-Ping in some of the cases, as well as the exclusion of the large number of MC Ru-sheng characters that had undergone such changes between the time of ZYYY and the 1932 system). In this section, a simple comparison will be made to test whether an interflow of this nature also obtains in other dialects and, if it does, of what magnitudes.

4.1. A Comparison on the Numbers of Irregular Reflexes.

To put the various dialects on par for comparison, it is necessary to adopt one standard or interpretation of regularity. Hence, the rules specified for the Peking dialect in the previous section shall apply to the other dialects as well. As a matter of fact, that MC Zhuo-Shang merges into Qu has generally been taken as a common development for many Chinese dialects.

In Suzhou, MC Shang-sheng in the environment of a sonorant initial most frequently emerges as Lower-Qu instead of Shang. In Nanchang, MC Qu-sheng in the environment of voiceless aspirated initials has mostly evolved into Shang instead of Qu. In Wenzhou and Chaozhou, Lower-Shang (rather than Qu) is the most common reflex for Zhuo-Shang. Furthermore, in Chaozhou, about half of the Qu-sheng in connection with MC voiced (obstruent and sonorant) initials have evolved into Shang-sheng. These exceptional cases are treated as irregular development in the following comparisons.

A readily available reference is Wang and Cheng's (1987) tabulation of the development of MC tones into the major modern dialects, which is a quantitative summary of the data in Zihui.

Table 10 presents the numbers of irregular reflexes between Shang and Qu in the 17

dialects. The numbers range between 18 to 212 with an average of 53.2 characters per dialect.

Peking, which shows 19 instances of irregular development, is near the bottom in the range, next only to Changsha. The pilot survey presented in the previous section reveals a total of 375 attested examples of such an interflow from MC to modern Peking. (Notwithstanding, a small portion of this figure represents irregularities occurring at the stage of ZYYY.) Such being the case, it is only logical and probable that the statistics in Table 10 are extreme understatements of the actual situations in other dialects as well. Hence, the figures in Table 10 should be taken as indexes, rather than approximations, to the numbers of irregular reflexes between the two tonal categories in the various dialects.

Instances of interchanges between, or the merging of, the Shang and Qu categories can also be found in sources other than Zihui. For example, the merging of Yang-Shang into Yang-Qu in the literary stratum of Cantonese (O.Y. Hashimoto 1972: 665); the merging of Yin-Shang and Yin-Qu on the one hand, and Yang-Ping, Yang-Shang and Yang-Qu on the other, in Shanghai (Pan 1982); the merging of Yang-Ping, Yang-Shang and Yin-Qu in Danyang (Lu 1980); the merging of Yang-Shang into Yang-Qu in Luxu (蘆墟); etc.

4.2. Samples of Disparities in the Tonal Development of Individual Characters.

The irregular development between Shang and Qu can be viewed from another perspective. Table 11 below lists 16 characters which are expected to carry Shang-sheng under the imposed common set of rules, yet emerge in Qu in 3 to 13 of the 17 dialects, with an average of 5.3 dialects per character. (There are another 12 characters carrying the Qu-sheng in two of these dialects, and many more in one of these dialects.)

Table 12 presents 64 characters which emerged in Qu, instead of the expected Shang, in 3 to 15 of these dialects, averaging 5.1 dialects per character. (There are another 80 characters which do so in two of these dialects and many more in one of the dialects.)

The 80 characters listed in Tables 11 and 12 are high frequency words. (So are the 92

unlisted characters emerging with irregular tonal reflexes in only two of the dialects.) They have each portrayed a very arbitrary swing between the two categories in their development into the various dialects.

5. Conclusions.

It has been shown with ample evidence that MC Qu-sheng may develop into Shang and MC Shang-sheng, with all types of initials, may develop into Qu. Such developments may be considered as non-conforming, or even irregular, yet the genetic linkages must be recognized as legitimate rather than "unaccountable" ("無據").

The 375 attested cases of irregular changes between Shang and Qu (as listed in Tables 1, 2, 4, 5 and 7) in Peking Mandarin furnish ample proof that there has been a steady interflow since the time of MC. This figure, nevertheless, represents merely the result of a pilot study; not to mention the exclusion of a large number of instances, which fall into three categories: (1) characters which have been carrying Shang-Qu two readings from MC to modern Peking, (2) characters which had Shang-Qu two readings in MC but have become obsolete, (3) MC Ru-sheng characters which have undergone changes between Shang and Qu in the period between ZYYY and the 1932 system. Hence, this figure is believed to represent only a portion of the actual instances of this interflow, which had been in progress long before the time of MC and is still operating in modern Peking. An interflow of this nature has also been obtaining in the other dialects, where it has (as indicated by the figures in Table 10) attained even greater magnitudes.

Leaving aside cases which involve the Yang-Ping Tone, in this interflow in Peking, there are 216 instances of changes moving towards Shang-sheng (to the exclusion of MC Ru-sheng characters). The figure for the instances of changes towards Qu is 97. The two figures show a ratio of 69.0% to 31.0%. (The 62 cases which involve Yang-Ping as well have not been included in this calculation of the ratio.) The ratio here seems to suggest that in the process of the interflow, Shang has been winning an advantage. This is true

only in so far as we adhere to the conventional assumption that MC Zhuo-Shang merging into Qu was a "regular" development.

The seeming imbalance in the ratio of 69.0% to 31.0% actually balances the loss of Shang-sheng to Qu under the aforementioned assumption of "regular" development. Casting aside this assumption and taking the instances of MC Shang-sheng (in the company of voiced obstruent initials) merging into Qu as the fast movers (or the early birds) in this interflow, we will be able to see the interflow between the two categories in perspective. The interflow will then appear with well-balanced distribution. (The changes in MC Ru-sheng characters between ZYYY and the 1932 system of modern Peking have not been taken into account in this study.)

A new assumption that follows is that the changes between Shang and Qu from MC till modern Peking are largely arbitrary and fortuitous in nature and that MC Zhuo-Shang merging into Qu is not a phonologically conditioned change but a mere tendency.

In this paper I attempt to point out, with attested examples, that an interflow of considerable magnitude between Shang and Qu has been operating in the language since the pre-Middle Chinese time. And today it is still in progression. While this appears to be a purely factual observation, it actually carries far-reaching implications when put next to other findings. I have about the same amount of data for such an interflow between Yang-Ping and Qu, and a smaller amount of data for Yang-Ping and Shang. I have also observed that there has been a steady increase of the Yin-Ping characters in the language (Chen 1988b). These factual observations added up should lead to an interesting projection of the ultimate result.

Table 1. Examples of Shang Emerging as or Moving towards Qu

類別	字例	中古音		中原音韻	北京音系		注（中古音字義）
		調類	聲母		1932	1963-85	
1.1.	燥	上	s	去（s-）	4（ts-）		中古音：°sâu，乾~也。（參看：'躁'：tsâu°）
	玷	上	t	去	4		
	謦	上	k′	去	4		
	愇	上	?	去	4		
	貯	上	t	去	3* 4	4	廣韻注丁呂切。*國語字典(1947)注二讀。（參看'佇'：°ḓ'-）
1.2.	拊	上	p′	去	3		
	誄	上	l	去	3		
	洧	上	?	去，陰平	3	—	
	醥	上	p′	去	3	—	中原音韻聲母不送氣。
	染	上	ńź	上，去	3		
	慘	上	ts′	上，去	3		
2.	境	上	k	上	4		
	垢	上	k	上	4		
	墅	上	ś	上	4		
	禦	上	ng	上	4		
	誘	上	∅	上	4		
	愈	上	∅	上	4*		* 按台北口語中時有2聲讀。
	遠	上	ńź	上	4		
	讞	上，入	ng	上	4		中古二讀皆議獄也。北京，yàn；中原音韻聲母 n-。
	黯	上，平	?	上	4		中古二讀皆深黑色也；上聲又黯然傷別也。
	逛	上	k	—	4		
	飪	上	ńź	—	4		
	瘓	上	t′	—	4		癉瘓，病也。同聲符字多去聲曉母讀。今 huàn。
	撟	上，平	k	—	4		中古二讀皆舉手也。
3.1.	賄	上	x	上	4 3：又讀	4	
	塢	上	?	上	4 3*	4	*國語字典(1947)注3,4聲二讀。
	腌	上	?	上	3 4：又讀	4	àn，暗也。中古至今(yǎn)尚有上聲三等韻讀，陰暗也。

	估	上	k	上	4/3/1 又讀	4/1*	4，3聲：'～衣'；1聲：'～計'。*按'～計'實際語音仍有3聲讀。
	礦(鑛)	上	k	上	4/3: 又讀	4	kuàng : gǒng。
	鄺	上	k	—	4/3: 又讀	4	kuàng : guǎng。中古尚有平聲曉母讀，亦姓也。
3.2.	把	上	p	上	3*/4		*3聲：'～持，～柄'；4聲：柄也。中古義，持也。
	寫	上	s	上	3/4*		*4聲：'～意兒'，猶'～（3聲）意'。
	亶	上	t	上	3/4		3聲：誠然；4聲：但也。中古信也，厚也。
	剗	上	tʂ'	上	3/4	3/4:<方>	1932，二讀皆削平。1963-85，4聲：<方>'一～'，一概也。
	撒	上	s	—	3/4:<方>		3聲：'抖～'；4聲：<方>'～火'。
	紀	上	k	上	4/3		1932，4聲：'～律'，姓；3聲：'～律'又讀。1963-85，4聲：'～律'；3聲：姓。
3.3.	隕	上	j	上	3*/4	3	*國語字典(1947)注二讀。
	始	上	ś	上	3/4:讀音*	3	*語助詞之讀音。
	啃	—	—	—	3/4	3	1932，3聲：齧也；4聲：俗謂吃也。（聲符中古至今上聲。）
	鄙	上	p	上	3/4: 又讀	3	4 北京(李1985)讀作4聲；台北(陳1991)41.7％4聲讀。
	莠	上	∅	上	3/4:讀音	3	4 按，台北多作4聲讀。
	往	上	∅	上	3/4	3	1932-63，3聲：來～；4聲："～哪兒去？"
4	獷	上	k	—	3*		*4 北京(李1985)讀作4聲；台北(陳1991)89.2％4聲讀。guǎng : kuàng
	鞅	上	ʔ	上	3/1: 又讀	4*/1	1932馬頸革；1963，4聲：'牛～'；1聲：馬背上的皮套子。
5.1.	甲	入	k	上	3/4*	3	*4聲：'～魚'；'～子'又讀。
	乞	入	k'	上	3/4*	3	*4聲：與人以物之謂。
	忸	入	n	上	3/4:讀音	3	niǔ : nǜ。
5.2.	壁	入	p	上	3*/4	4	*3聲：'隔～儿'。
	室	入	ś	上	3/4	4	1932：國語字典(1947)注二讀。
5.3.	血	入	x	上	3/4		xuè : xiě（語音）。
	帖	入	t'	上	3，4，1		3：請～，庚～；4：畫～，碑～；1：服～，姓。
5.4.	髮	入	p	上	3	4	

Table 2. Examples of Qu Emerging as or Moving towards Shang

類別	字例	中古音		中原音韻	北京音系		注（中古音字義）
		調類	聲母		1932	1963–85	
1.1.	統	去	t'	上	3		中古，緫也（聚束也，合也）。
	館	去	k	上	3		
	靄	去，入	ʔ	上	3		中古二讀皆雲狀。
	舫	去	p'	上	3		中古三等韻讀，并兩舟也；一等韻讀，舫人也。
	蒯	去	k'	上	3		
	洒	去	ṣ	上	3		'～埽'；中古另有上聲四等韻讀，同'洗'。
	擠	去，平	ts	上，陰平	3		中古平聲：'排～';去聲：排濟。
	忏	去	ng	上	3		
	珥	去	ńz	上	3		
	脘	去	k	上，k-	3 k-/∅-	3 ∅-	'胃～'。1932，guǎn：wǎn（語音）。
	鵾	去/平	b'/p	上	3		中古二讀皆'～鼓'，鳥名。
1.2.	藹	去	ʔ	上	3/4*	3	國語字典(1947)注二讀。
	吼	上，去	ɣ	上	3/4*	3	國語字典(1947)注二讀。中古上聲：牛鳴；去：聲也。
	僅,饉,瑾	去	g'	上	3/4: 又讀	3	
	覲,殣,墐	去	g'	上	3/4: 又讀	4	
	漂	去	p'	上	3*/4		中古音水中打絮也。中古至今另有（陰）平讀，浮也。*3:'～白';4:'～亮'。
1.3.	瞬	去	ś	上	4		
	疢	去	k	上	4*		1 北京俗讀(李1985)1聲。
	夬	去	k	上	4		
	鬶	去	tś	上	4		
	僝	去	dẓ'	上	4		
	酹	去	ɗ'	上	4		
	僄	去，平	p'	上	4		中古二讀同義。
	蹮	去	d'	上	4		
	勖	去	p'	上	—		
	稍	去	ṣ	上	1/4: 又讀	1	按，在台北'～微'偶有shǎowéi之讀音。
1.4.	詫	去	ʈ'	上，去	4		
	袉	去	ńz	上，去	4		
	噤	上，去	g'	上，去	4		中古上：寒而閉口；去：口閉。
	訪	去	p	上，去	3		

	嚩	去	î	上，去	3	4	
2.1	佐	去	ts	去	3		
	屢	去	l	去	3		
	譴	去	k′	去	3		
	詛	去	tṣ	去	3		
	俵	去	p	去	3		
	裱	去	p	—	3		
	骶	去	t	—	3		
	餉	去	ś	去	3		
	醋	去	s	陰平	3		
	誹	平，去	p′	—	3		
	詠 (咏)	去	j	去	3		
	泳	去	j	—	3		
	哄	去	γ	去	3/1		3聲：′～騙′；1聲：′～堂′。
	虖	去	γ	—	3		
	哺	去	γ	去	3		
	窏	上，去	dz′	去	3		中古，上：坑也；去：′陷～′。
	靶	去	b′	去	3		中古，轡革；今：′～子′，′打～′。
	翡	去	b′	—	3		
	輔，釜	上	b′	去	3		
	緩幌,迥	上	γ	去	3		
2.2	埵	上	d′	去	3/4		中古，射也。北京，3聲：′城～′，′～子′；4聲：′麥～′。
	擋	去	t	去	3/4		4聲：′摒～′；他處多作3聲。
	漲	去	î	去	3/4		3聲：′～價′；4聲：′頭昏腦～′。
	宿	去	s	去	3/4		xiǔ：′～留′；sù：′星～′。另有中古入聲，今陰平，舍也。
	餔	去	b′	陰平	1/3/4		1聲：晚餐；3，4聲：餵也。
	逮	去	d′	—	3/4		3聲：′～到′；4聲：′～捕′。
	緯	去	j	去	3/4*	3/4:舊讀	*國語字典 (1947) 注二讀。
	檻	上	γ	去	3/4		kǎn：′門～′；jiàn：′～車′。
	晃	上	γ	去	3/4		3聲：閃耀；4聲：′～蕩′。中古音，明也，光也。
	慨	去	k′	去	3/4:又讀	3	
	嘅	去	k′	去	3/4:又讀	3	1963-85 併入′慨′。
	柄	去	p	去	4/3:又讀	3	
	導	去	d′	去	3/4:語音	3	

節	字	中古調	聲母	今調	讀音值	規範值	北京	台北	備註
	纜	去	l	去	4 / 3: 又讀	3			
	娶	去	ts	去	3 / 4: 讀音	3			中古另有平聲心母讀，問娶之媒。
	署	去	ź	去	3 / 4	3			1932，3聲：'警~'；4聲：'~名'。
	豉	去	ź	去	3 / 4: 讀音	3			chǐ：shì。
	儉	上	g'	去	3 / 4: 又讀	3			
	闖	去	ȶ'	—	3: 語音 / 4	3			chuang。中古韻沁開三，馬出門貌，1932作 chèn。
2.3.	亞	去	ʔ	去	4 / 3: 又讀	4		3	北京(李1985)，台北(陳1991)俗讀3聲。
	當~是	去	t	去	4 / 3	4			'以為是'。中古至今另有平聲讀。
	較	去	k	去	4 / 3: 又讀	4			台北12.5%讀3聲(陳1991)。
	闞	去	k'	去	4 / 3: 又讀	4			視也，又姓。中古與北京音系另有曉母上聲讀，虎聲，犬聲也。
	詐	去	tʂ	去	4 / 3	4			3聲：以語言試探，'拿話~我'。
	會	去	x	去	4 / 3	4			3聲：'一~兒'。中古至今另有見母去聲讀，'~計'。
	對	去	t	去	4 / 3*	4			*國語字典(1947)3聲讀，'exchange'。
3.	蹈	去	d'	去	4	3			
	綮	去	m	去	4	3			
	曙	去	ź	去	4	3			
	惋	去	ʔ	去	4	3			
	諷	去	p	去	4 / 1: 又讀	3			
	載刊~	去	dz'/ts	去*	4	3			*假定中原音韻上聲讀僅見於'年載'。
	偽	去	ng	—	4	3			
	摒	去	p	—	4	3 / 4			3聲：'~棄'；4聲：'~擋'。
4.							北京	台北	北京：李(1985)；台北：陳(1991)。
	誨	去	x	去	4		3	3	
	腕	去	ʔ	去	4		—	3	
	悼	去	d'	去	4		3	3,4	台北19.2%讀3聲。
	阜	上	b'	去	4		3	3,4	
	載*~重	去	dz'	去	4		3	4	*'~重'，'~波'。
	猋	去	ʔ	去	4		3	4	台北僅1.7%讀作3聲。
	創*	去	tʂ'	去	4		3	4	*'~造'，'~業'。
	燦*	去	ts'	去	4		3	4	*'~爛'。
	附*	去	b'	去	4		3	4	*'~近'，'~和'，'~耳'。
	嚮*	去	x	—	4		—	3	按，'~導'台北多作3聲。

節	字	調	聲母	讀					注
	檔*	(去)	t	—		4	3	3,4	*'~案'。檔字廣韻注平聲，木名也。假定此處源自聲符之去聲讀。
5.1.	杼	上	ɖ'	上，去		4			
	煸	上	b'	上		4			
	苕,窖	上	d'	上		4			中原音韻聲母送氣，北京音系不送氣。
	給	上	d'	上		4			
	駭	上	ɣ	上		4			
	淬	上	ɣ	上		4			
	沆	上	ɣ	上		4			'~瀣'。中古與1932另有（陽）平讀，渡也。
5.2.	蟹	上	ɣ	上	4/3		4		
	牝	上	b'	上	4/3		4		1932，4聲：國語辭典(1947)；3聲：國語字典(1947)。
	件	上	g'	上	4/3*		4		*'什~儿'。
	汞	上	ɣ	上	3/4		3		gǒng：hòng。中原音韻聲母h-。
	梃	上	d'	上			3/4		中古，木片也。今，3聲：棍棒；4聲：'~豬（之鐵條）'。
	浣（澣）	上	ɣ	上		3	4		
5.3	殍	上	b'	上			3		
	挑~戰	上	d'	上			3		中古與北京尚有（陰）平讀，'~選'，'肩~'。
	艇,挺,珽,颋	上	d'	上			3		
	町	上	d'	上			3		tǐng，田界也。中古與北京尚有平聲全清讀，用於地名。
	祖	上	d'	上			3		中古另有澄母去聲讀，衣縫也。
	窘	上	g'	上			3		中古與中原音韻-n尾，1932，-n，-ŋ二尾；1963-85，-ŋ尾。
	吮	上	dź'	上			3		
	趱	上	dz'	上			3		
	永	上	ɣ	上			3		
	罕	上	ɣ	上			3*		*'稀~'，北京影視節目中讀4聲；台北(陳1988b)3，4二讀。
	夥	上	ɣ	上			3		
	潭	上	ɣ	上		3*	—		*見重編國語辭典(1981)。
	很	上	ɣ	—			3		
	莞~爾	上	ɣ	—			3		中古與北京另有見母平聲讀；草也，地名也。
	腐	上	b'	—			3		
	沮（止也）	上	dz'	—			3		中古與北京尚有去聲'~洳'；中古至今另有（陰）平讀，水名也。
	掊（擊也）	上	b'	—			3		中古與北京尚有（陽）平讀，聚斂，挖掘也。
	培（~塿）	上	b'	—		3	—		pǒu。中古、中原音韻與北京(péi)尚有（陽）平讀，'~養'。
6.	辱	入	ńź	去-q	4/3：又讀		3		

Table 3. **An Analysis of the Data of Qu Changing into/towards Shang (as in Table 2):** **Possible Conditioning Factors and the Progression.**

類別	上聲讀初次出現於：	中古音					1985系統讀音				合計
		去		全濁	上	上,去	3聲	4聲	3,4聲	其他	
		清	次濁								
1	中原音韻	20	3	10	—	2	17	15	1	2	35
2	1932系統	25	6*	9	9	1	35	5	9	—	50
3	1963系統	3.5	2	2.5	—	—	7	—	1	—	8
4	北京與台北俗讀	7	—	4	—	—	—	(11)	11**	—	11
合計		55.5	11	25.5 / 37.5	9	3	60	20***	22	2	104
5	發展遲緩之中古全濁上聲	—	—	—	35	—	22	12	1	—	35
* 其中一字，中古入聲，中原音韻去聲。 ** 1932與1963-85系統皆注4聲；台北與北京已有3聲讀。 *** 此處之4聲讀乃是經過3聲一讀或3,4聲二讀之後的讀音。											139

Table 4. Examples of Expected Two Readings Merging into Qu

類別	字例	中古音		中原音韻	北京音系		注（中古音字義）
		調類	聲母		1932	1963-85	
1.	涕	上，去	t′	去		4	上：目汁；去：～淚。
	宴	上，去	ʔ	去		4	二讀皆安也。
	濘	上，去	n	去		2｜4	2｜北京 (李 1985) 俗讀 2 聲。二讀皆泥也。去聲另有霽開四讀，濘陷也。
	汕	上，去	ṣ	去		4	上：魚浮水上；去：魚乘水上。
	詬	上	k	去 k-		4 k-	上：恥也；去：罵。另有曉母去聲讀，怒也。
		去	k′				
	歉	上：II IV 去：II	k′	去		4*	上：食不飽；去：′～嗛′；同義也。*國語字典 (1947) 注3，4 聲二讀。
	跪	上	k′ g′	去		4	清母；拜也；濁母：′賬～′。
	快	上，去	ʔ	去		4	二讀皆恨也。
	墮	上	t′ d′	去		4	清母又讀也。（見廣韻聲系勘誤表。）
	潋	上，去	l	去		4	二讀皆水波也。
	扣	上，去	k′	去		4	二讀皆扣擊也。
	醞	上，去	ʔ	去		4	二讀皆醞釀也。
	蘊	上，去	ʔ	去		4	中古尚有平聲。平，上：積藏也；去：習也，又音上聲。
	晏	上，去	ʔ	去		4	上（一等）：晚也；去（二等）：晚也，柔也，又姓。
	賑	上，去	tś	去		4	上：隱賑，說文，富也；去：贍也。
	琇	上	∅	去		4	二讀皆玉名也；上聲：又音秀。
		去	s				
	旺	上，去	j	去		4	上：德也，是也，光也；去：美光也，又寫作暀。
	怒	上，去	n	去		4	二讀皆恚也。
	鼐	上，去	n	去		4	二讀皆大鼎也。
	漾(瀁)	上，去	∅	去		4	瀁，二讀皆水灙也；漾，去聲一讀，水名也。
	右	上，去	j	去		4	二讀皆左右也。

2.	衽	上，去	ńʑ	上，去	4		上：臥席也；去：衣衿。今二義皆去聲。
	姹(妭)	上，去	ȶ'	上，去	4		上：嬌也；去：美女。
	去	上，去	k'	上，去	4		上：除也；去：離也。
	懊	上，去	ʔ	上，去	4		二讀皆懊惱也，悔也，另有入聲讀，貪也，愛也。
	堰	上，去	ʔ	上，去	4		去聲有二韻；三讀皆同義。
	懣	上，去	m	上，去	4		上聲有二韻；三讀皆煩悶也。
	舍	上，去	ɕ	上，去	4		二讀皆止息也，（1963-85，字形與'捨'合併，故又3聲。）
	瀉	上，去	s	上，去	4		二讀同義。
3.	卉	上，去	x	上	4		二讀同義。
	盥	上，去	k	上	4		二讀皆洗也。中原音韻聲母 h-；北京 guàn。
	蚒(蠁)	上，去	x	上	4		上：知聲虫也；去：蛹中虫也。今水稻害虫。
	剽	上 / 去	p / p'	上	4	1	上：輕也；去：輕也，強取也。中原音韻送氣；北京不送氣。
	繞	上，去	ńʑ	上	4 3	4	上：'纏~'；去：卷取物也。
4.	漚	上，去	ʔ	陰平	1 4		上聲，1聲：'浮~'；去聲，4聲：久漬也。
	映	上，去	ʔ	—	4		3│北京俗讀3聲(李1985)。上：影也；去：照也。
	暵	上，去	x	—	4		二讀皆日乾也。
	焊(熯)	上，去	x	—	4		二字相通，焊：上聲；熯：上，去二讀。
	贛	上，去	k	—	4		上：水名；去：~榆縣。
	灨	上，去	k	—	4		上：水名；去：縣名，章貢二水合流。
	罵	上，去	m	—	4		上：罵詈，又去聲；去：惡言。
	愴	上，去	tʂ'	—	4		二讀皆失意，悽愴也。
	併	上 / 去	p,b' / p	—	4		上，幫母：合和也；上，並母：立竝也；去：兼也，並也。
	靉	上，去	ʔ	—	4		上（一等）：'~靆'，雲狀；去（三等）：'~靆'，不明也。
	媚	上，去	m	—	4		上（一等），去（一，四等）；皆夫妬婦也。

Table 5. Examples of Expected Two Readings Merging into Shang

類別	字例	中 古 音		中原音韻	北 京 音 系		注(中古音字義）
		調類	聲母		1932	1963–85	
1.	阻	上，去	tʂ	上	3		上：隔也，憂也；去：馬阻蹄。
	炙	上，去	tʂ	上	3		二讀皆灼也。
	診	上 / 去	tɕ / ȡ′	上	3 1:又讀	3	1 北京 (李 1985) 俗讀 1 聲，二讀皆候脈也；上聲又視也。
	馶	上，去	ʂ	上	3		二讀皆疾也。
	守	上，去	ɕ	上	3		上：′主~′，又姓也；去：′太~′。
	醒	上，去	s	上	3		上：酒醒也；去：醉歇也。中古至1932另有（陰）平讀，酒醒也。
	苦	上，去	k′	上	3		上：勤也，患也；去：困也。
	坷	上，去	k′	上	3		二讀皆坎坷也。
	軻	平,上,去	k′	上	3		三讀皆′轗~′，坎坷也。去聲又人名，′孟~′，今 1 聲。
	遣	上，去	k′	上	3		上：送也，縱也；去：人臣賜馬車曰′~車′。
	圃	上，去	p′	上	3		二讀皆′園~′。
	禱	上，去	t	上	3		二讀皆求福也，請也。
	侃	上，去	k′	上	3		上：強直也；去：正也。
	恐	上，去	k′	上	3		上：懼也；去：疑也。
	巧	上，去	k′	上	3		二讀皆巧偽；上又好也。
	繑	上，去	k′	上	3		去：又讀。
	褁	上，去	k	上	3		二讀皆包也。
	倚	上，去	ʔ	上	3		上：依也，又姓；去：倚也，因也。
	昶	上，去	ȶ′	上	3		上：通也，舒也；去：通也，日長也。
	隱	上，去	ʔ	上	3		上聲：藏也，私也，痛也；去聲：隱隱之貌。
	鏟	上，去	tʂ′	上	3		上：平木器；去：削木器。
	悔	上，去	x	上	3		上：~吝；去：改~。
	閃	上，去	ɕ	上	3		上：出門貌；去：窺頭門中也。
	傻	上，去	ʂ	上	3		上：傻俏，不仁；去：傻俅，不仁。
	柢	平,上,去	t	上	3		三讀皆根也。
	羽	上，去	j	上	3		上：鳥長毛，又音芋；鳥翅也，又音禹。
	衍	上，去	∅	上	3		上：達也；去：水行溢也。

	漭	上，去	m	上	3		上：~沆，水大；去：~浪，大野。
	狃	上，去	n	上	3		上：相狃也；去：習也，就也；又狐狸也。
	偶	上，去	ng	上	3		上：合也，對也；去：不期也。
	引,朒,靷	上，去	∅	上	3		三字去聲皆又讀。
	頗	平,上,去	p'	上	1 3：讀音	1	三讀皆頭偏也。
	語	上，去	ng	上	3 4：<書>		上：論也；去：說也。
	鄅	平,上,去	ʔ	上	1		三讀皆地名也；上聲又姓也。平，上聲一等韻；去聲三等韻。
	沽	平,上,去	k	上，陰平	1		平：水名；上：'屠~'；去：賣也。
2.1.	左	上，去	ts	上，去	3		二讀皆左右也；上聲亦姓。
	載(年~)	上／去	ts／ts,dz'	上，去*	3		三讀皆年也。*中原音韻二讀語義未詳。
	選	上，去	s	上，去	3		去：又讀。
	首	上，去	ś	上，去	3		上：頭也，始也；去：'自~'。
	鉸	平,上,去	k	上，去	3		三讀皆鉸刀。
	仰	上，去	ng	上，去	3		去：又讀。
2.2.	斂	上，去	l	上，去	3 4：又讀	3	上：收也，又姓；去：聚。另有平聲一等曉母讀，欲也。
	使	上，去	ṣ	上，去	3 4：又讀	3	去：又讀。4聲：部份用法之又讀。
	遠	上，去	j	上，去	3/4	3	中古與1932，去：'敬而~之'。
	養	上，去	∅	上，去	3/4	3	中古與1932，去：'棄~'。
2.3.	疸	上，去	t	—	3		二讀皆黃病。
	侹	上，去	t'	—	3		二讀皆直也，敬也。
	攩	上(開) 上去(合)	t' γ	—	3		三讀皆搥打。今，dǎng，遮攔，搥擊。
	輡	上，去	k'	—	3		二讀皆'~軻'，坎坷也。
	廠	上，去	tś'	—	3		上：屋也；去：露舍也。
	菲	上 去	p' b'	—	3		上：薄也，亦菜也；去：菜也。中古至今尚有(陰)平讀，芳~也。
	偬	上，去	ts	—*	3		二讀皆'倥~'也。*（中原音韻有平聲s-母讀。)

	字		聲				說明
	胐	上,去	p′	—		3	上（開口）：月未盛之明；去（合口）：向曙色也。今 fěi，新月之光。
	鬔	上,去	ts	—		3	上：垂髮；去：女鬢垂貌。
	琬	上,去	ʔ	—		3	二讀皆珪也。
	嘝(闞)	上,去	x	—		3	上：虎聲也；去：犬聲也。北京：虎聲。中古至今另有他讀他義。
	倥~傯	上,去	k′	—		3	二讀皆′~傯′也。中古與今另有（陰）平讀，′~侗′。
	洱	上,去	ńź	—		3	二讀皆水名。
	忝	上,去	t′	—		3	二讀皆唇也。
	蜚	上 / 去	p / b′	—		3	二讀皆蟲名。中古至今另有（陰）平讀，通′飛′。
	娩(產子)	上,去	m	—		3	廣韻，去聲；生也，又音免（上聲）。
	娓	上,去	m	—		3	上（開口二韻）：美也，順也；去（開口）：從也，又音眉，音尾。
	愞	上 / 去	ńź / n	—		3	二讀（不同韻）皆弱也。重編國語辭典 (1981)：ruǎn。
3.	綣	上,去	k′	去		3	二讀皆′繾~′。中原音韻，k–；北京：quǎn。
	繾	上,去	k′	去		3	去：又讀。中原音韻，k–；北京：qiǎn。
	耒	上,去	l	去		3	二讀皆田器。
	絧	上,去	l	去		3	二讀皆雙履也。
	饟(餉)	平,上,去	ś	去		3	平,去：饋也；上：餉食。中原音韻，h–；北京，xiǎng。
4.	企	上,去	k′	—	4	3	二讀皆望也。
	曩	上,去	x,ś	—	4	3	四讀皆少時也,不久也。今,從前,往昔。
5.	痞	上	p,b′	上		3	清母二韻皆病也；濁母：腹內結痛。
	桶	上	t′,d′	上		3	二讀皆木器。
	喊	上	γ II / x I,III	上		3	濁母：喊聲；清母：聲也。
	咀	上	ts,dz′	上		3	二讀皆嚼也。
	仳	上*	b′ III / p′ IV	—		3	二讀皆離也。*中古尚有平聲並母讀，~倠，醜女也。
	炯	上	k,γ	—		3	二讀皆火明貌。
	髹	上	t,d′	上,去	3*	—	定母，又讀也。*重編國語辭典 (1981)。

Table 6. Shang-Qu Two Readings That Have Been Neutralized under the Phonological Rule of Zhuo-Shang Changing into Qu

類別	字例	中古音		中原音韻	北京音系		中古音字義
		調類	聲母		1932	1963-85	
1a.	伴	上，去	b′	去		4	二讀皆侶也。
	飯	上，去	b′	去		4	上：餐～；去：炊穀爲飯。
	被	上，去	b′	去		4	上：寢衣；去：～服，覆也。
	憊	上，去	b′	去		4	上：疲劣；去：病。
	弟,娣,悌	上，去	d′	去		4	上：又音。
	惰	上，去	d′	去		4	上：嬾惰也；去：僻也。
	遯	上，去	d′	去		4	二讀皆逃也。
	遞	上，去	d′	去		4	二讀皆更代也。
	饌	上，去	dẓ′	去		4	二讀皆盤饌（不同韻）。
	掉	上，去	d′	去		4	四等韻；另有娘母入聲二等讀；三讀皆搖也。
	近	上，去	g′	去		4	二讀皆遠近也。
	詎	上，去	g′	去		4	二讀皆豈也。
	仗	上，去	ɖ′	去		4	去：又音。
	在	上，去	dz′	去		4	上：居也，存也；去：所在。
	坐	上，去	dz′	去		4	上：骨節挫屈也；去：被罪。
	聚	上，去	dz′	去		4	去：又音。
	餞	上，去	dz′	去		4	二讀皆酒送人。
	棧	上，去	dẓ′	去		4	上（開口）：閣也（另有合口，棚也）；去：木～道。
	樹	上，去	ź	去		4	上：扶樹；去：木總名。
	壽	上，去	ź	去		4	二讀皆壽考。
	甚	上，去	ź	去		4	二讀皆劇過也。
	綬	上，去	ź	去		4	上：組綬；去：綵衣貌。
	單	上，去	ź	去		4	二讀皆地名，又姓。中古至今另有丹，禪二音，他義。
	譔	上，去	dz′	去		4	上：專教也；去：專敬。中古尚有清母平聲四等讀，善言也。

	字						註
	夏	上，去	γ	去	4		上：大也，亦州名；又去聲。去：春夏也，又上聲。
	下	上，去	γ	去	4		上：賤也，去也，降也。去：行下；又上聲。
	后	上，去	γ	去	4		上：君也，亦姓；又去聲。去：君也，皇后也。
	後	上，去	γ	去	4		二讀皆先後也。
	厚	上，去	γ	去	4		二讀皆厚薄也。
	脛	上，去	γ	去	4		二讀皆腳～也。
	圈	上，去	g′	去，陰平	1 4		上：獸欄也；去：邑名。中原音韻與北京，陰平送氣，去聲不送氣。
1b	屟	上，去	ź	上	4		二讀同義。
	辨	上，去	b′	—	4		二讀皆別也。
	視	上，去	ź	—	4		上：瞻也，比也，效也；去：看～。
	捍	上，去	γ	—	4		上：握～；去：抵～。
	僤	上，去	d′	—	4	—	二讀皆疾也。1932，見重編國語辭典(1981)。
	錞	上，去	d′	—	4		二讀皆矛戟；北京：duì。中古至北京另有禪母平聲，樂器。
2	造	上 去	dz′ ts′	去	4		上：～作；去：至也。
	訂	上 去	d′ t′	去	4		二讀同義。
	斷	上 去	d′ t′	去	4		二讀同義。
	蕩	上 去	d′ t′	去	4		上：蒗～渠；去：大也，水名，又姓。
	盪	上 去	d′ t′	去	4		上：～行；去：滌～，搖動貌。
	併	上 去	b′, p p	去	4		上，並母（合口）：立竝也；非母（開口）：合和也。去（開口）：兼也。
	槊	平，去 上	ts′ dz′	陰平	4		平：削皮；上：削版牘；去：斷片。
參　看：		上，去	全濁聲母				吼，穽，噤（表2）。 鋤，但，淡，啖，俵，渾，靰，疿，比，氊，吭（表7）。 鱒，奘，攮（其他類型變化。）

Table 7. Examples of Changes Involving Yang-Ping, Shang and Qu

類別	字例	中 古 音		中 原 音 韻	北 京 音 系		注（中古音字義）
		調類	聲母		1932	1963-85	
1.	枕	平 / 上，去	ȡ' / tɕ	上，去	3 4	3	中古，平：繫牛杙；上：枕席；去：枕頭，曲肱枕之。1932，3：枕席；4：枕戈待旦。
	請	上 / 平，去	ts' / dz'	上，去	2 3 4	3	中古，平：受也；上：求也；去：延請。1932，qíng：～受；qǐng：～客；jìng：朝～。
	比	平上去入	p, b'	陽平,上,去	3 4	3	中古音字義讀音，見廣韻聲系470-2頁。1932，3：～較；4：～鄰。
	歗	平，上	l	—	2 4	3	二讀皆草名，中古另有曉母平聲，芋之辛味也。
	堇	平 / 上	g' / k	—	3 / 4:又讀	—*	中古平上皆黏土也；上又菜也。1932，塗抹也。*1963-85，3聲一讀，菜也。
	捕	去	b'	陽平，去	3 / 4:又讀	3	
	扔	平，去	ńʑ	—	1 / 3:又讀	1	中古二讀皆牽引也。
	捲	平 / 上，去	g' / k	上		3	中古，上：'～衣'；去：縣名；平：氣勢也。
	撢 ~子	平，去	d'	—		3	二讀皆觸也；今dǎn。中古至今另有他讀他義。
	獫	平,上,去 / 上	l / x	— / —		— / 3	三讀皆長喙犬名。 / 中古：'～狁'，同'玁狁'，古代北方民族。北京xiǎn，長嘴狗。
	諞	平，上	b'	—	2 3	3	上聲三、四等二韻；三讀皆巧言也。
	餌(誀)	平，去	ńʑ	上，去		3	餌，食也，去聲；誀，誘也，平去二讀。
	嶃	平，上	dʐ'	—		3	平：～嵒，山貌；上：高峻。
	褫	平，上 / 上	ȡ' / ʈ'	—		3	三讀皆奪衣也。
	筒	平，去	d'	陽平	2 / 3:又讀	3	中古，平：竹筒也；去：簫達，又平聲。
	甉	平,上,去	ng	—		3	三讀皆甋也。今，yǎn。
	唪	平，上	b'	上		3	中古平（三等）：口高貌；上（一等）：大笑。北京：fěng，誦也，大笑。

	字	中古調	聲母	今調			註
	窄	入	tʂ	上	2, 3, 4	3	zé : zhǎi : zè。
	法	入	p	上	1, 2, 3, 4	3	1：没~儿；2：~子；3：辦~；4：~國，~蘭絨。
2.	但	平,上,去	d'	去		4	三讀皆語辭也；平聲亦姓；上，又空也，徒也。
	彳	平，上	∅	去		4	二讀皆病也。
	鏨	平,上,去 / 平	dz' / dẓ'	去		4	中古五讀，小鑿或鑴石也。
	啖 (餤)	平,上,去	d'	陽平		4	平上二讀皆食也；去：誑也。今，'~飯'，'~以重利'。
	潦	平,上,去	l	陽平，去		4	中古三讀皆水名，去聲又淹也。北京，淹也。
	淡	平,上,去	d'	去		4	平：水貌；上：水滿貌；去：水味。
	痱	平,上,去	b'	—		4	中古，平同疿；上：痱癗；去：熱瘡。
	暫/摲	去/平	dz'	去		4	3 北京俗讀 zǎn（李 1985）。摲：說文，暫也。1932：zh-，z-；1963：z-。
	墕	上，去	ng	—	2	4	中古二讀皆'埲~'。
	苑	上	ʔ	上	4 / 2*	4	*2聲：姓也，又作4聲。
	爂	入	b'	上 *	4 *		（入聲全濁聲母應作陽平。）
	築	入	t̂	上	2	4	
	質 物~	入	tś	上	2	4	3* * '~量'，'~變'北京（李 1985）讀 3 聲。台北至今 2 聲。
3.	鋤(耡,鉏)	平,上,去	dẓ'	陽平		2	三讀皆田器。
	盟	平,上,去	m	陽平		2	平（三等）：~約，古文從明聲；上（三等）：又音；去（二等）：~津，又音明。今 méng, míng。
	輮	上，去	ńʐ	—		2	二讀皆車網（車外框也）。
	鞄	上，去	b'	陽平，去		2	中古二讀皆柔革工。今 páo；另有 bāo 讀，柔革小箱。
	佟	平,上,去	d'	上		2	三讀皆安也。
	欸	平,上,去	∅	陽平		2	三讀皆歟也。

	字	聲調	音	讀			注釋
	蹂	平,上,去	ńz	陽平		2	三讀皆踐也。
	吭	上,去	γ	—		2	上:聲也;去:鳥咽。今,háng,引~高歌;另有 kēng 讀,~聲。
	揉	平,去	ńz	陽平,上		2	去:又讀。
	瀏	平,上	l	去		2	二讀皆水清也。
	繯	上	γ	—	2 4:又讀	2	中古四等,繯繫也;另有二等去聲,縞文也。
	劃	平,上,去	l	去	3 2	2	平:分破也;上:刀刺也;去:割破。
	撽	上	g′	去	2 3:又讀	2	
	幪(幪)	平,去	m	—	2 3	2	中古,北京,2:覆也,蓋衣,~縠。北京3:茂盛也,麻麥~~。
	孌	上,去	l	上	3 2:又讀	2	上:美好;去:順也。
	渾	平,上,去	γ	陽平	2 4	2	平:'~濁';上:'~元'。
	茹	平,上,去	ńz	陽平,去	2 4:又讀	2	
	識	入	s	上	4	2	
	迮	入	tṣ	上	2 4:又讀	2	zé:zuδ。
4.	瞭	平,上	l	上	3 4*		二讀皆明也。3:'~解';4:'~望'。*按,'~望'台北多作2聲。
	燎	平,上,去	l	上	2,4 3	2	平:庭火也;上:放火也;去:照也。2,4:'~原';3:'~毛'。
	僂	平,上,去	l	上	2 3		三讀同義。lóu:'佝~';lǔ:'傴~'。
	強(弨)	平,上	g′	陽平 k′ 去 k	2,·3,4		平:健也;上:追也,勉力也。qiáng,qiǎng,jiàng。
	混	上	γ	去	2 3,4	4	2:'~蛋';3,4:'~亂'。
	閬	平,去	l	去	3 4:又讀	2 4	中古與1932二讀皆高門也。1963,2聲<方>'閬~';4:地名。
	昔	入	s	上 -q	2 4	1	1932,國語字典(1947)注二讀。
	刾	入	l	去 -∅ 上 -q	1, 2, 4		中古,僻也,戾也。
	別	入	b′	陽平 -q 上 -q	2 4		2:~離,~人;4:~扭。
	撐	—	—	—	2, 3, 4		2:~毛巾;3:~不開;4:脾氣~。
5.	槁	平上去入 入	s ṣ	—	1		五讀皆打也,擊也。今,xiāo。

Table 8. An Example of the Diffusion of a Sound Change in Different Lexical Items of a Character.

詞＼讀音		中　古　音	1932 系統		1963-85 系統	
			字典注音	台北語音 (陳 1991)	字典注音	北京語音 (李 1985)
載	年～	去　去　上 dz′　ts　ts	上	上	上	上
	刊～ (乘也)	去　去 dz′　ts	去	去：52.5% 上：44.2% 陽平：3.3%		
	～重 (運也)	去 dz′		去：88.3% 上：11.7%	去	

Table 9. Numbers of Shang-Qu Two Readings at Various Stages.

	中　古　音	中原音韻	北　京　音　系	
			1932	1963-85
表 一	—	2	26	8
表 二	3	6	37	11 *
表 四	44	8	1	—
表 五	76	10	4	—
表 六	44	—	—	—
表 七 **	28	5	13	3
合 計	195	31 ***	81	22

　＊　第4類例字之俗讀音不屬於1963-85審音系統，故不在統計之內。
　＊＊　此處僅計同一時期內，上去二讀字；其他聲調二讀字不計。
＊＊＊　許多例字中原音韻時期之讀音從缺。

Table 10. Numbers of Instances of Irregular Development between Shang and Qu on a Dialect Spectrum. *

	北京	濟南	西安	太原	漢口	成都	揚州	蘇州	溫州	長沙	雙峰	南昌	梅縣	廣州	廈門	潮州	福州	總數	平均
預期上聲 現出去聲	12	18	11	12	18	12	15	78	90	12	21	16	33	33	35	102	24	542	31.9
預期去聲 現出上聲	7	8	17	8	10	11	8	12	11	6	11	87	36	8	7	110	6	363	21.4
合計	19	26	28	20	28	23	23	90	101	18	32	103	69	41	42	212	30	905	53.2

* Statistics: deduced from a tabulation by Wang and Cheng (1987), which was based on Hanyu Fangyin Zihui (1962).
Common interpretation of regularity imposed:
  1. MC Shang-sheng with a voiced obstruent initial becomes Qu.
  2. Other than that, Shang remains Shang and Qu remains Qu.

Table 11. Characters Expected to Carry a Shang-sheng Emerging in Qu in Three or More of the 17 Dialects.

例字	中古音 調類	中古音 聲母	北京	濟南	西安	太原	漢口	成都	揚州	蘇州	溫州	長沙	雙峰	南昌	梅縣	廣州	廈門	潮州	福州	合計
鄙	上	P		去					去		去									3
吐～痰	上	t′													去	去	去	去		4
境	上	k	去		去	去			去	去	去	去	去	去						9
礦	上	k	去	去	上/去	去	去	上/去	去		去	去	去		去	去	去			13
紀	上	k	去	去	去	去	去	去	去	去	去			去	去					11
顆	上	k′	*	*	*/上	*	*		去	*	去		去	*	去		*			4
擠	上	ts									去						去	去		3
娶	上	ts′					去	去					去				去			4
悔	上	x									去		去		去	去		去	去	6
賄	上	x	去	去	去	去	去	去	去						去				去	9
蕊	上	ńź								去			去	去						3
壤、攘、嚷	上	ńź								去			去		去					3
五	上	ng								上/去						去	去	上/去		3
藕	上	ng								去							去	去		3

＊：其他調類

Table 12. Characters Expected to Carry a Qu-sheng Emerging in Shang in Three or More of the 17 Dialects.

例字	中古調類	聲母	北京	濟南	西安	太原	漢口	成都	揚州	蘇州	溫州	長沙	雙峰	南昌	梅縣	廣州	廈門	潮州	福州	合計
諷	去	p	上		上	上	上	上	上			上						上		8
遍，偏	去	p								上	上	上	上	上						5
竟	去	k													上	上		上		3
假（放～）	去	k					上	上				上		上	上			上		6
概	去	k					上	上						上	上					4
卷	去	k			上										上			上		3
潤	去	k						上						上	上					3
振	去	k				上	上	上							上					4
業	去	ʔ			上									上	上		上			4
聱	去	p′									上		上	上	上				上	5
聘	去	p′								上				上	上					3
塊	去	k′					上	上					上	上	上					5
媿	去	k′									上			上	上			上		4

9	3	6	3	4	3	3	10	5	4	8	4	4	3	15	3	15	10	4	4	3
			上	上										上					上	
			上		上	上	上		上		上	上	上			上		上		上
			上													上	上	上	上	
			上	上											上			上	上	
上	上	上		上		上								上	上	上				
上	上	上		上		上	上			上	上			上	上	上	上			
		上			上	上	上	上	上					上		上	上			上
	上									上			上	上		上	上			
														上		上		上	上	上
	上													上		上				
上				上		上	上	上	上					上		上	上			
上	上						上						上	上		上	上			
上		上				上	上	上						上		上	上			
上						上				上	上			上		上	上			
上	上	上			上	上				上	上	上		上		上	上			
上						上					上	上		上		上				
上						上				上			上		上	上	上			
k'	k'	ts'	ṣ	x	x	∅	ng	ńź	l	b'	b'	d'	ɗ	ɣ	ɣ	b'	b'	b'	b'	b'
去	去	去	去	去	去	去	去	去	去	去	去	去	去	去	去	上	上	上	上	上
概	控	剏	稍	諱	憲	銳	僞	刃	䎡	捕	埠	導	撞	哄	潰	輔	腐	倍	念，慎	犯

字	聲母	調	次數
婦,抱	b'	上	3
盾	d'	上	6
僅	g'	上	12
窘	g'	上	10
儉	g'	上	10
跪	g'	上	7
菌	g'	上	4
舅,近	g'	上	3
巨,拒,距	g'	上	3
兆,丈	d͡z'	上	3
坐	dz'	上	4
聚	dz'	上	3
似	z	上	4
是	ź	上	3
腎,祉,恃	ź	上	3
緩	γ	上	13
蟹	γ	上	8
晃	γ	上	10
旱	γ	上	3
混	γ	上	4
厚	γ	上	3

REFERENCES

陳重瑜

1988a　″1932到1963-85聲調轉變的一些趨勢″，Journal of the Chinese Language Teachers Association 23.3: 69-106. U.S.A.

1988b　″北京音系裡陰平字增加的趨勢″，中央研究院歷史語言研究所集刊 59.1: 173-209。台北。

1991　″聲調的轉變與擴散：台北不同年齡群的取樣″，Journal of the Chinese Language Teachers Association 26.1:69-99. U.S.A.

丁邦新

1989　″漢語聲調的演變″，中央研究院第二屆國際漢學會議論文集 395-408頁。台北。

李　愷

1985　″北京俗讀音調查錄″，第一屆國際漢語教學研討會論文。北京。

李新魁

1983　《中原音韻》音系研究，中州書畫社。河南。

呂叔湘

1980　″丹陽方言的聲調系統″，方言 1980.2: 85-122。北京。

潘悟雲

1982　″關於漢語聲調發展的幾個問題″，Journal of Chinese Linguistics 10.2: 359-385. U.S.A.

王洁心（編述）

1988　中原音韻新考，商務印書館。台北。

葉祥苓

1983　″吳江方言聲調再調查″，方言 1983.1: 32-35。

曾光平

1989　″《中原音韻》的語音基礎是大都音″，古漢語研究第二輯：55-62。河南大學。

Chen Chung-yu

Chen, Matthew Y.

    1976   "From Middle Chinese to Modern Peking", Journal of Chinese Linguistics 4.2/3: 113–277. U.S.A.

Cheng, Chin-chuan and William S-Y. Wang.

    1972   "Tone Change in Chaozhou Chinese: a Study of Lexical Diffusion", Papers in Linguistics in Honor of Henry and Renee Kahane 99–113.

Hashimoto, Oi-Kan Yue.

    1972   Studies in Yue Dialects 1: Phonology of Cantonese. Cambridge University Press.

Stimson, Hugh M.

    1966   The Jongyuan In Yunn. New Haven (Conn.).

Wang, William S-Y.

    1990   "Theoretical Issues in Studying Chinese Dialects", Journal of the Chinese Language Teachers Association 25.1: 1–34. U.S.A.

Wang, William S-Y. and Chin-Chuan Cheng.

    1987   "Middle Chinese Tone in Modern Dialects", In Honor of Ilse Lehiste. Robert Channon and Linda Shockey (eds.). Foris Publications. U.S.A.

重編國語辭典

    1981   商務印書館。台北。

廣韻聲系

    1969   沈兼士編。中華書局。台北。

國語辭典

    1947   （刪節本，漢語詞典簡本。1857）商務印書館。上海。

國語字典

    1947   趙元任，楊聯陞合編。Harvard-Yenching Institute. U.S.A.

現代漢語詞典

    1978   商務印書館。北京。

Syllable–Based Dialect Classification
and Mutual Intelligibility

Chin-Chuan Cheng
University of Illinois at Urbana-Champaign

While various views have been presented to subgroup Chinese dialects based on the lexicon and phonological features, few attempts have been made to investigate mutual intelligibility beyond anecdotal observations. This paper discusses a quantitative method that uses the initial, medial, vocalic, ending, and tone of the syllable of cognates as a basis for calculating unidirectional and mutual intelligibility. The correspondence patterns of these five elements determine whether a correspondence between two dialects is signal enhancement or noise disturbance. Specific weights are assigned to the correspondence according to signal or noise. The data for this study were derived from the *Hanyu Fangyin Zihui,* which contains over 2,700 words in these 17 dialects: Beijing, Jinan, Xi'an, Taiyuan, Hankou, Chengdu, Yangzhou, Suzhou, Wenzhou, Changsha, Shuangfeng, Nanchang, Meixian, Guangzhou, Xiamen, Chaozhou, and Fuzhou. A total of 272 pairs of these dialects were processed and their intelligibility degrees calculated. The intelligibility degrees are further used in cluster analysis to establish an affinity tree for dialect classification. The results of the classification are compared with those derived with the correlation method presented in the literature.

Dialect classification can be established on the basis of various criteria. One may wish to see how dialects are related genetically, in which case historical evolution is the focal point of investigation. One may wish to examine how dialects interact with each other through social contacts and cultural dominance. In that case the sharing of vocabulary and morpho-syntactic features should determine the subgrouping. Another criterion for classification is the age-old notion of "mutual intelligibility". If two languages are mutually intelligible, then they belong to a group. Otherwise they should be treated as two distinct languages. This paper attempts to deal with the classification of Chinese dialects in terms of mutual intelligibility.

While mutual intelligibility is the most obvious criterion for language classification,

its meaning has been elusive. In the ordinary sense of the word, intelligibility depends on the subject matter that is being discussed, of course. Moreover, it depends on the intelligence and background of the speaker and the hearer. Frequency and duration of mutual contact may also affect comprehension. Thus, if intelligibility is based on such personal ability and experience, then there is no objective way to figure out mutual intelligibility for language classification. In what follows I will present an approach that defines intelligibility as an objective, quantitative index to language similarity. Central to this approach are the requirement of quantification and the notion of "systemic intelligibility".

In my view, putting dialects in groups is only part of the work of classification. What is more interesting and more challenging to our intellectual endeavor is determination of degree of dialect affinity. That is, we need to know how closely or remotely the concerned dialects are related. Degrees of affinity cannot be stated in terms of the features that are used to make the subgrouping, since by doing so one would simply reiterate the classification criteria. The affinity has to be a numerical index that can be used for algebraic comparison. Quantification, therefore, is an essential part of dialectology. I started my attempts on Chinese dialect quantification with the lexicon provided in the *Hanyu Fangyan Cihui* (Beijing University 1964). The presence or absence of the lexical items in the 18 dialects covered in the *Cihui* was tabulated and the correlation coefficients between all pairs of the dialects were derived. The coefficients are interpreted as the degrees of closeness and are used in cluster analysis to establish subgrouping of the dialects (Cheng 1982, 1987). With the same correlation method, the phonological affinity and the subgrouping of the 17 dialects in the *Hanyu Fangyin Zihui* (Beijing University 1962) were established based on the initials, finals, tones, and the combination of all these elements (Cheng 1986, 1988, 1991). An initial attempt was also made to measure affinity in terms of morpho-syntax (Cheng 1989). In this paper I will present a slightly different method of measurement.

This measurement takes into account not only linguistic similarities and differences

but also the effect of correspondence patterns, which may constitute signal or noise in communication. The details of this quantification will be discussed later. First let me explain what I mean by systemic intelligibility.

The earliest attempts on measurement of degrees of mutual intelligibility were made by Voegelin and Harris (1951), Hickerson, Turner, and Hickerson (1952), and Pierce (1952). As Hockett (1958) points out, these studies of American Indian languages used recordings for speakers to listen to and to figure out the points of content. The percentage of the understood points was regarded as the degree of mutual intelligibility. Later studies of intelligibility all used tests with speakers, involving phonological perception, structural and contextual criteria, translation, or sociolinguistic factors. From Nelson's (1984) review of the literature, I come to the conclusion that mutual intelligibility discussed in previous studies was participant- and context-dependent. I will call this type of measurement "speaker-based intelligibility" or "participant intelligibility".

Speakers, however, vary in linguistic competence, experience in language contact, and general ability. The errors or scores made in tests are not necessarily constant across all speakers and therefore cannot be directly translated into the degree of intelligibility that reflects the systematic similarity or difference between two dialects. It is hence desirable to find a way to measure intelligibility that pertains to language or dialect as a systematic whole and not to speakers' personal differences. Such degree of intelligibility should measure signal and noise levels of two dialects for communication. I will call the intelligibility so derived "system-based intelligibility" or "systemic intelligibility". Once systemic intelligibility is established, participant intelligibility can be more meaningfully discussed.

Systemic intelligibility may be derived from phonological correspondence, cognate occurrence, syntactic structure, or some meaningful combination of all these elements. Here I will present measurements in terms of the phonological elements in syllables, which are coterminous with words, of the 17 dialects given in the first edition of the *Hanyu*

Fangyin Zihui (Beijing University 1962). The dialects covered in this edition are the following : Beijing, Jinan, Xi'an, Taiyuan, Hankou, Chengdu, Yangzhou, Suzhou, Wenzhou, Changsha, Shuangfeng, Nanchang, Meixian, Guangzhou, Xiamen, Chaozhou, and Fuzhou. Under the editorship of Wang Futang at Beijing University, the second edition of the *Zihui* was compiled and published in 1989 (Beijing University 1989). This new edition corrects errors existed in the first edition. Moreover, the following dialect localities have been added to the dialect set: Hefei, Yangjiang, and Jian'ou. The name Hankou has been changed to Wuhan. The number of words collected has increased from 2,700 to over 2,900. My data base for this study is the DOC computer file which was established in the late 1960s (Wang 1970, Streeter 1972, Cheng 1972, Yaruss 1990). Since its inception, the DOC file has undergone various changes, including our own corrections of obvious *Zihui* errors. The 1989 edition of the *Zihui* was used to change some transcription codes in DOC for the locality of Jinan. The other dialects were not modified. The reason for not changing the entirety of DOC to agree with the second edition is that the print of this new edition is not clear enough for us to see the *yin/yang* tone distinction. I hope that the wealth of data given in the second edition will be made more usable in some way in the near future.

Now we return to measurement of intelligibility. The unit that I assume to be the element of communication is the morpheme or word. The fact that the morpheme in Chinese is coterminous with the syllable allows us to use the syllable as the unit for measurement. In comparing two dialects, one fundamental question comes to mind is how many of the morphemes are the same or how many are different. If two localities share 100% of the words, then they belong to one dialect. If two localities have 70% of the words in common, we may say that their similarity is 70%. This is the general idea of similarity. In DOC there are about 2,700 words. Using this number as the population size, if we find two dialects to have 2,000 identical syllable-words, then we derive a 0.740 (2000/2700) similarity value.

Yet, two important factors emerge as we start to look at the phonological correspondence of dialects based on syllable–words. First, corresponding syllables between two dialects may be totally different, somewhat different, or entirely the same. It is necessary to segment the syllable for a more precise tabulation of correspondence. Secondly, correspondence patterns, not necessarily identical elements, enhance recognition and therefore improve intelligibility. For example, if the labial fricative of dialect A corresponds entirely to the labial stop in dialect B, then it is easy to follow this pattern for communication. Correspondence patterns, therefore, should be considered in deciding what constitute signal and what else constitute noise in communication.

To fine tune the comparison of these syllable–words, I have divided the syllable into the traditional categories of initial, medial, vocalic, ending, and tone. Each of these elements is given an equal weight of 0.2, allowing the five elements to make up 1 unit of weight for each syllable. One would hope to make a finer distinction among these categories and assign different weights to them. Unfortunately we know very little about the perceptual characteristics of these elements. Zhang, Qi, and Lü (1981), Lü, Zhang, and Qi (1981), and Zhang et al. (1981) have proposed some perceptual configuration, perceptual confusion, and intelligibility of Chinese consonants and tones. Their studies, however, deal with the perception of Beijing speech in various acoustical interferences and do not involve normal communication between different dialects. This equal weighting proposed in this paper may be disputed, but before we have independent justification for perceptual space and perceptual distance for these elements, this is the best that I can do.

The first step in calculating the intelligibility of the dialects was to consider the syllables of a cognate word in a pair of dialects from the DOC file. For each cognate word the corresponding initial, medial, vocalic, ending, and tone were extracted. The corresponding elements of each of these categories were put together as one item, thus making five items for each cognate word. If a cognate had variant readings, then all readings of the word were so treated. The items of all the words were then tabulated, giving a frequency

count of the correspondences. Then the two categories of each tabulated item were compared to determine whether the correspondence constitutes signal or noise. Signal or noise is determined in the following way. Let me use the Beijing–Jinan pair as an example for illustration. The column to the left of the ":" in (1) shows the Beijing zero initial and the column to the right of the ":" gives the corresponding Jinan initials.

(1)

	frequency	mean	weight	value	sum	example
:	290	160.0	0.20	58.00	58.00	五
: ŋ	30	160.0	–0.10	–3.00	55.00	哀

Of the total 320 zero-initial words in Beijing, 290 correspond to the zero initial and 30 to the velar nasal in Jinan. The mean is 160.0 ((290 + 30) / 2). The mean gives an impression of patterning, allowing us to talk about major and minor correspondences. Majority of occurrence registers a pattern that one can easily follow to make useful generalizations, while minority does not give such an effect and is often a source of confusion in inter-dialectal communication. It is therefore reasonable to make this distinction: if the frequency of occurrence of an element is equal or greater than the mean, the element is considered as signal; otherwise it is noise. In (1), the zero initial in Jinan with respect to Beijing is signal (290 being greater than the mean of 160.0) and the velar nasal is noise (30 being less than the mean of 160.0). The weight assignment is then based on whether the item is signal or noise. Since each item has a maximum value of 0.20, the weighting is assigned according the scale given in (2), which will be discussed in detail later.

(2)

For a pair of dialects A and B	Signal	Noise
(a) if corresponding items are identical	0.20	–0.05
(b) if different		
(i) dialect B item does not appear in dialect A	0.10	–0.10
(ii) dialect B item appears elsewhere in dialect A	0.05	–0.20

To continue with our calculation in (1), the zero initial in Jinan is identical with the zero initial in Beijing. The item therefore is given the unit weight of 0.20. The value for this item is the unit weight multiplied by the frequency (0.20 ×290), yielding 58.00. The sum column is the cumulative sum of the value derived so far. As the velar nasal initial is noise in this case and does not appear in other words in Beijing, the unit weight is given as –0.10. The value of this item is –3.00 (–0.10 ×30). Since it is noise to Beijing, it subtracts from the sum. The cumulative sum now shows 55.00. An example in Chinese character is given in the example column of each type of correspondence. At the end of the calculation of all syllables, the sum is divided by the total number of correspondence items to yield a decimal value between 0 and 1. This number is interpreted as the systemic intelligibility of Jinan to Beijing. Please note that we are talking about unidirectional intelligibility. What we have been analyzing are the patterns of occurrence of items in Jinan with respect to Beijing. We may say that Beijing is the subject dialect and Jinan the object dialect. When the subject–object relation is reversed, the intelligibility degree will be different. The calculation of mutual intelligibility will be dealt with later.

Now we return to the assignment of signal and noise values as given in (2). The weights of signal enhancement and noise disturbance are based on the precedence relations given in (3).

(3) Signal : $S > DN > DA$

   Noise : $S < DN < DA$

   where   S : elements are the same in both dialects

   DN : object dialect element is different and does not appear in subject dialect

   DA : object dialect element is different and appears in different words of subject dialect

Signal contributes to higher intelligibility and noise reduces it. When the item in an object dialect is identical with that in the subject dialect for a cognate word, the item should de-

serve its full share of the unit weight of 0.20 if it is signal (Signal S). If its frequency of occurrence is less than the mean, it is considered as noise because the majority of the corresponding items would have different phonological elements to establish a pattern of correspondence. But because it is identical with the element in the subject dialect, the noise level is the lowest (Noise S). On the other hand, if the corresponding elements are different, the level of signal enhancement or noise disturbance depends on whether the element in the object dialect also appears in the subject dialect. If it does, then there is a likelihood of confusion with another element that belongs to a different word in the subject dialect. In such a case the signal level should be the least (Signal DA) and the noise level the highest (Noise DA). If the element does not appear in the subject dialect, then there is no such possibility of confusion for the subject dialect (Signal DN and noise DN). The highest level is given the full unit weight of 0.20, the middle level 0.10, and the lowest 0.05. This reasoning has produced the weight assignment in (2).

We now continue to examine the initials in Beijing as subject and Jinan as object dialects. The list in (4) shows two different initials in Jinan corresponding to the Beijing palatal fricative.

(4)

| ɕ | : | | 2 | 83.5 | −0.20 | −0.40 | 54.60 | 淆 |
| ɕ | : ɕ | | 165 | 83.5 | 0.20 | 33.00 | 87.60 | 先 |

Since the zero initial of Jinan is also an initial occurring in different words in Beijing, and it is noise because of its low frequency of occurrence, the noise weight is the maximum −0.20. The value of this item is −0.40 (−0.20 × 2). The reduced cumulative sum is now 54.60 (55.00 −0.40). The other initial is the same as the palatal fricative of Beijing and is given a full unit weight of 0.20. Its value of 33.00 (0.20 × 165) is now added to the sum, deriving 87.60. The calculation for the remaining initials is given in (5).

(5)

f	: f	95	48.5	0.20	19.00	106.60	夫
f	: ph	2	48.5	−0.20	−0.40	106.20	埠
k	: k	126	64.0	0.20	25.20	131.40	鬼
k	: tɕ	2	64.0	−0.20	−0.40	131.00	更
kh	: kh	73	73.0	0.20	14.60	145.60	快
l	: l	171	171.0	0.20	34.20	179.80	拉
m	: m	97	97.0	0.20	19.40	199.20	麻
n	:	3	10.6	−0.20	−0.60	198.60	癉
n	: l	1	10.6	−0.20	−0.20	198.40	嫩
n	: n	27	10.6	0.20	5.40	203.80	納
n	: ŋ	21	10.6	0.10	2.10	205.90	泥
n	: s	1	10.6	−0.20	−0.20	205.70	尿
p	: p	131	66.5	0.20	26.20	231.90	比
p	: ph	2	66.5	−0.20	−0.40	231.50	堡
ph	: p	1	44.0	−0.20	−0.20	231.30	堡
ph	: ph	87	44.0	0.20	17.40	248.70	皮
s	: ɕ	5	19.5	−0.20	−1.00	247.70	俗
s	: ŋ	1	19.5	−0.10	−0.10	247.60	尿
s	: s	65	19.5	0.20	13.00	260.60	素
s	: ʂ	7	19.5	−0.20	−1.40	259.20	瑟
ʂ	: ʂ	146	73.5	0.20	29.20	288.40	社
ʂ	: tʂh	1	73.5	−0.20	−0.20	288.20	殊
t	: t	139	139.0	0.20	27.80	316.00	大
th	: th	118	118.0	0.20	23.60	339.60	他
tɕ	: tɕ	225	113.5	0.20	45.00	384.60	己
tɕ	: tɕh	2	113.5	−0.20	−0.40	384.20	殲
tɕh	: kh	2	55.0	−0.20	−0.40	383.80	殼
tɕh	: tɕh	108	55.0	0.20	21.60	405.40	七
ts	: tɕ	1	25.0	−0.20	−0.20	405.20	足
ts	: ts	70	25.0	0.20	14.00	419.20	組
ts	: tʂ	4	25.0	−0.20	−0.80	418.40	擇
tsh	: s	1	15.7	−0.20	−0.20	418.20	賜
tsh	: tsh	58	15.7	0.20	11.60	429.80	粗
tsh	: tʂ	1	15.7	−0.20	−0.20	429.60	側
tsh	: tʂh	3	15.7	−0.20	−0.60	429.00	冊
tʂ	: tɕ	1	92.0	−0.20	−0.20	428.80	鑄

tʂ	: tʂ	183	92.0	0.20	36.60	465.40	主
tʂh	: tʂ	1	63.0	−0.20	−0.20	465.20	觸
tʂh	: tʂh	125	63.0	0.20	25.00	490.20	出
x	: kh	1	62.0	−0.20	−0.20	490.00	潰
x	: x	123	62.0	0.20	24.60	514.60	胡
ʐ	:	2	15.0	−0.20	−0.40	514.20	潤
ʐ	: l	18	15.0	0.05	0.90	515.10	如
ʐ	: ʐ	25	15.0	0.20	5.00	520.10	人

In (5) the voiced retroflex initial of Beijing has a corresponding lateral in Jinan occurring in 18 words. Since the frequency is higher than the mean of 15, the signal unit weight is given as 0.05 because the lateral also occurs in Beijing. The other weight assignments have already been discussed.

The correspondence patterns of the medials in both dialects and their values are given in (6). Notice that the sum is cumulative, continuing from that of the initials.

(6)

	:	1775	469.0	0.20	355.00	875.10	他
	: i	62	469.0	−0.20	−12.40	862.70	因
	: u	13	469.0	−0.20	−2.60	860.10	嫩
	: y	26	469.0	−0.20	−5.20	854.90	韵
i	:	2	117.5	−0.20	−0.40	854.50	殼
i	: i	461	117.5	0.20	92.20	946.70	限
i	: u	1	117.5	−0.20	−0.20	946.50	尿
i	: y	6	117.5	−0.20	−1.20	945.30	腳
u	:	2	89.5	−0.20	−0.40	944.90	它
u	: i	1	89.5	−0.20	−0.20	944.70	尿
u	: u	351	89.5	0.20	70.20	1014.90	回
u	: y	4	89.5	−0.20	−0.80	1014.10	損
y	: i	1	19.6	−0.20	−0.20	1013.90	緣
y	: u	1	19.6	−0.20	−0.20	1013.70	略
y	: y	57	19.6	0.20	11.40	1025.10	全

The vocalic elements are give in (7).

(7)

a	: a	326	360.5	−0.05	−16.30	1008.80	打
a	: a	395	360.5	0.10	39.50	1048.30	站
ai	: ei	14	52.5	−0.20	−2.80	1045.50	百
ai	: ɛ	91	52.5	0.10	9.10	1054.60	拜
au	: e	6	47.6	−0.20	−1.20	1053.40	腳
au	: ei	1	47.6	−0.20	−0.20	1053.20	尿
au	: ə	7	47.6	−0.20	−1.40	1051.80	殼
au	: ɔ	223	47.6	0.10	22.30	1074.10	要
au	: u	1	47.6	−0.20	−0.20	1073.90	堡
e	: æ	12	28.0	−0.10	−1.20	1072.70	介
e	: e	71	28.0	0.20	14.20	1086.90	借
e	: ə	1	28.0	−0.20	−0.20	1086.70	略
ei	: ei	139	70.0	0.20	27.80	1114.50	非
ei	: ɔ	1	70.0	−0.10	−0.10	1114.40	尿
ə	: e	118	73.3	0.10	11.80	1126.20	神
ə	: ə	100	73.3	0.20	20.00	1146.20	省
ə	: i	2	73.3	−0.20	−0.40	1145.80	更
ɚ	: ɚ	4	4.0	0.20	0.80	1146.60	二
i	: e	60	92.5	−0.10	−6.00	1140.60	心
i	: ei	5	92.5	−0.20	−1.00	1139.60	披
i	: i	304	92.5	0.20	60.80	1200.40	立
i	: y	1	92.5	−0.20	−0.20	1200.20	傾
ɿ	: ɿ	35	35.0	0.20	7.00	1207.20	字
ʅ	: ʅ	81	81.0	0.20	16.20	1223.40	知
o	: a	1	34.3	−0.20	−0.20	1223.20	它
o	: ei	6	34.3	−0.20	−1.20	1222.00	伯
o	: ə	96	34.3	0.05	4.80	1226.80	博
ou	: ou	136	47.0	0.20	27.20	1254.00	豆
ou	: ɔ	1	47.0	−0.10	−0.10	1253.90	否
ou	: u	4	47.0	−0.20	−0.80	1253.10	某
ɣ	: a	1	25.6	−0.20	−0.20	1252.90	蛇
ɣ	: ei	19	25.6	−0.20	−3.80	1249.10	責
ɣ	: ə	57	25.6	0.05	2.85	1251.95	舌
u	: ɔ	1	109.3	−0.10	−0.10	1251.85	堡
u	: u	322	109.3	0.20	64.40	1316.25	夫
u	: y	5	109.3	−0.20	−1.00	1315.25	俗
y	: e	26	58.0	−0.10	−2.60	1312.65	韵
y	: y	90	58.0	0.20	18.00	1330.65	女

The endings are given in (8) and the tones in (9).

(8)

	:	1638	1638.0	0.20	327.60	1658.25	苦
n	:	597	597.0	0.05	29.85	1688.10	年
ŋ	: ŋ	528	528.0	0.20	105.60	1793.70	方

(9)

55	: 213	668	171.5	0.10	66.80	1860.50	家
55	: 42	9	171.5	−0.10	−0.90	1859.60	敷
55	: 55	5	171.5	−0.05	−0.25	1859.35	估
55	: 21	4	171.5	−0.10	−0.40	1858.95	醫
35	: 213	44	169.5	−0.10	−4.40	1854.55	伯
35	: 42	610	169.5	0.10	61.00	1915.55	河
35	: 55	13	169.5	−0.20	−2.60	1912.95	國
35	: 21	11	169.5	−0.10	−1.10	1911.85	如
214	: 213	34	118.2	−0.10	−3.40	1908.45	且
214	: 42	6	118.2	−0.10	−0.60	1907.85	努
214	: 55	422	118.2	0.05	21.10	1928.95	土
214	: 21	11	118.2	−0.10	−1.10	1927.85	左
51	: 213	58	231.5	−0.10	−5.80	1922.05	踏
51	: 42	5	231.5	−0.10	−0.50	1921.55	或
51	: 55	12	231.5	−0.20	−2.40	1919.15	各
51	: 21	851	231.5	0.10	85.10	2004.25	布

Finally, the calculation of the intelligibility degree is give in (10).

(10)   value sum: 2004.25
total number of syllable-words: 2763
intelligibility: 2004.25 / 2763 =   .725

This is the entire calculation process. The intelligibility of 0.725 or 72.5% is for Beijing as the subject dialect and Jinan as the object dialect. In the same fashion, we can take Jinan as the subject dialect to tabulate the correspondences in Beijing to obtain intelligibility of the other direction. Indeed, this was done. The intelligibility of Jinan as the subject dialect is 0.713. These intelligibility figures indicate that Jinan is slightly more intelligible to

Beijing than Beijing is to Jinan. But the difference is small. In fact, I have calculated the intelligibility degrees for all the pairs of the 17 dialects in the first edition of the *Zihui*. Each dialect was taken once as the subject and once as the object dialect in the calculation. A total of 272 (17 × 16) combinations of dialect pairs were processed. Their intelligibility degrees are given in Figure 1.

In Figure 1, each dialect cell has three numbers. The first one is the intelligibility of the pair of the column dialect as the subject and the row dialect as the object. The second number is the intelligibility of the pair of the row dialect as the subject and the column dialect as the object. The third number is the average of these two numbers and is the degree of mutual intelligibility. Generally speaking, the two numbers for the unidirectional intelligibility are not very different. It is therefore reasonable to take the average as the mutual intelligibility. I have thus derived the degrees of intelligibility for all these Chinese dialects.

We now have a means to talk about dialect similarity in terms of the obtained intelligibility. The degrees can have potential uses in evaluating dialect contact, language planning, genetic relations, etc. For now it may be useful to compare the degrees of intelligibility and rank the similarity among the dialects. In (11) I list Beijing as the object dialect and rank-order the subject dialects under it to show relatively how intelligible Beijing is to these dialects.

(11) Subject dialects rank-ordered with respect to object dialect Beijing

   Beijing

      Chengdu, Hankou, Jinan, Xi'an, Taiyuan, Changsha, Nanchang, Meixian, Fuzhou,

      Yangzhou, Xiamen, Suzhou, Shuangfeng, Chaozhou, Guangzhou, Wenzhou

We see that Beijing is most intelligible to Chengdu and Hankou and least intelligible to Guangzhou and Wenzhou. The other localities each as the object dialect are given in (12).

(12) Subject dialects rank-ordered with respect to the header object dialects

   Jinan

      Xi'an, Beijing, Chengdu, Taiyuan, Hankou, Yangzhou, Changsha, Suzhou,

Nanchang, Meixian, Shuangfeng, Xiamen, Fuzhou, Guangzhou, Chaozhou, Wenzhou

Xi'an

Jinan, Beijing, Chengdu, Hankou, Yangzhou, Taiyuan, Changsha, Suzhou, Nanchang, Meixian, Xiamen, Fuzhou, Shuangfeng, Chaozhou, Guangzhou, Wenzhou

Taiyuan

Chengdu, Yangzhou, Xi'an, Beijing, Jinan, Hankou, Nanchang, Meixian, Suzhou, Fuzhou, Changsha, Chaozhou, Xiamen, Guangzhou, Shuangfeng, Wenzhou

Hankou

Chengdu, Beijing, Changsha, Xi'an, Nanchang, Jinan, Meixian, Taiyuan, Yangzhou, Shuangfeng, Xiamen, Suzhou, Chaozhou, Fuzhou, Guangzhou, Wenzhou

Chengdu

Hankou, Beijing, Xi'an, Jinan, Changsha, Nanchang, Yangzhou, Taiyuan, Meixian, Chaozhou, Fuzhou, Xiamen, Shuangfeng, Suzhou, Guangzhou, Wenzhou

Yangzhou

Xi'an, Taiyuan, Chengdu, Hankou, Suzhou, Jinan, Beijing, Nanchang, Changsha, Meixian, Chaozhou, Fuzhou, Xiamen, Shuangfeng, Guangzhou, Wenzhou

Suzhou

Yangzhou, Chengdu, Hankou, Meixian, Taiyuan, Nanchang, Xi'an, Xiamen, Shuangfeng, Jinan, Changsha, Fuzhou, Beijing, Chaozhou, Wenzhou, Guangzhou

Wenzhou

Suzhou, Changsha, Fuzhou, Chaozhou, Meixian, Taiyuan, Chengdu, Shuangfeng, Guangzhou, Nanchang, Hankou, Xi'an, Xiamen, Jinan, Yangzhou, Beijing

Changsha

Hankou, Chengdu, Beijing, Xi'an, Jinan, Nanchang, Suzhou, Meixian, Yangzhou, Taiyuan, Shuangfeng, Fuzhou, Chaozhou, Xiamen, Wenzhou, Guangzhou

Shuangfeng

Hankou, Nanchang, Xi'an, Chengdu, Jinan, Beijing, Changsha, Suzhou, Meixian, Yangzhou, Xiamen, Taiyuan, Fuzhou, Wenzhou, Chaozhou, Guangzhou

Nanchang

Meixian, Chengdu, Hankou, Beijing, Taiyuan, Fuzhou, Yangzhou, Xiamen, Xi'an, Changsha, Suzhou, Chaozhou, Jinan, Shuangfeng, Guangzhou, Wenzhou

Meixian

Nanchang, Chengdu, Hankou, Fuzhou, Xiamen, Taiyuan, Guangzhou, Changsha, Chaozhou, Beijing, Yangzhou, Suzhou, Xi'an, Jinan, Wenzhou, Shuangfeng

Guangzhou

Meixian, Nanchang, Xiamen, Fuzhou, Beijing, Suzhou, Yangzhou, Jinan, Xi'an Hankou, Chaozhou, Wenzhou, Chengdu, Taiyuan, Changsha, Shuangfeng

Xiamen

Meixian, Chaozhou, Fuzhou, Nanchang, Hankou, Taiyuan, Suzhou, Beijing, Xi'an, Yangzhou, Chengdu, Guangzhou, Jinan, Shuangfeng, Changsha, Wenzhou

Chaozhou

Fuzhou, Taiyuan, Xiamen, Meixian, Nanchang, Xi'an, Yangzhou, Chengdu, Hankou, Suzhou, Jinan, Beijing, Changsha, Wenzhou, Guangzhou, Shuangfeng

Fuzhou

Meixian, Chaozhou, Taiyuan, Nanchang, Xiamen, Yangzhou, Chengdu, Beijing, Xi'an, Hankou, Jinan, Suzhou, Changsha, Guangzhou, Wenzhou, Shuangfeng

We also want to know the ranking of the other localities with respect to Beijing as the subject dialect. From the point of view of Beijing, Hankou is the most intelligible speech and Wenzhou is the least intelligible locality. This ranking is given in (13). The other localities each as the subject dialect are also given in (13), following Beijing.

(13) Object dialects rank-ordered with respect to the header subject dialects

Beijing

Hankou, Jinan, Chengdu, Xi'an, Changsha, Taiyuan, Nanchang, Yangzhou, Suzhou, Meixian, Shuangfeng, Fuzhou, Guangzhou, Xiamen, Chaozhou, Wenzhou

Jinan

      Xi'an, Beijing, Chengdu, Taiyuan, Hankou, Changsha, Yangzhou, Suzhou, Shuangfeng, Nanchang, Guangzhou, Fuzhou, Wenzhou, Meixian, Xiamen, Chaozhou

Xi'an

  Jinan, Chengdu, Beijing, Yangzhou, Hankou, Taiyuan, Changsha, Suzhou, Nanchang, Shuangfeng, Fuzhou, Guangzhou, Chaozhou, Meixian, Wenzhou, Xiamen

Taiyuan

  Yangzhou, Xi'an, Jinan, Beijing, Chengdu, Hankou, Nanchang, Suzhou, Fuzhou, Meixian, Changsha, Chaozhou, Wenzhou, Xiamen, Guangzhou, Shuangfeng

Hankou

  Chengdu, Beijing, Changsha, Xi'an, Yangzhou, Jinan, Taiyuan, Suzhou, Nanchang, Meixian, Shuangfeng, Xiamen, Fuzhou, Guangzhou, Wenzhou, Chaozhou

Chengdu

  Hankou, Beijing, Xi'an, Changsha, Jinan, Taiyuan, Yangzhou, Nanchang, Suzhou, Meixian, Shuangfeng, Fuzhou, Wenzhou, Chaozhou, Guangzhou, Xiamen

Yangzhou

  Xi'an, Taiyuan, Suzhou, Chengdu, Jinan, Hankou, Nanchang, Changsha, Beijing, Fuzhou, Meixian, Guangzhou, Chaozhou, Shuangfeng, Xiamen, Wenzhou

Suzhou

  Yangzhou, Xi'an, Taiyuan, Changsha, Wenzhou, Nanchang, Hankou, Jinan, Chengdu, Beijing, Guangzhou, Meixian, Shuangfeng, Xiamen, Fuzhou, Chaozhou

Wenzhou

  Suzhou, Guangzhou, Changsha, Meixian, Xi'an, Shuangfeng, Fuzhou, Jinan, Chaozhou, Taiyuan, Chengdu, Beijing, Yangzhou, Hankou, Nanchang, Xiamen

Changsha

  Hankou, Chengdu, Beijing, Xi'an, Jinan, Yangzhou, Taiyuan, Nanchang, Suzhou, Meixian, Wenzhou, Shuangfeng, Guangzhou, Fuzhou, Chaozhou, Xiamen

Shuangfeng

    Hankou, Suzhou, Chengdu, Changsha, Nanchang, Wenzhou, Beijing, Xi'an, Yangzhou, Jinan, Taiyuan, Meixian, Xiamen, Guangzhou, Fuzhou, Chaozhou

Nanchang

    Meixian, Chengdu, Hankou, Beijing, Changsha, Suzhou, Taiyuan, Yangzhou, Fuzhou, Xi'an, Guangzhou, Shuangfeng, Jinan, Xiamen, Chaozhou, Wenzhou

Meixian

    Nanchang, Chengdu, Hankou, Suzhou, Guangzhou, Fuzhou, Taiyuan, Beijing, Changsha, Yangzhou, Xi'an, Xiamen, Jinan, Chaozhou, Wenzhou, Shuangfeng

Guangzhou

    Meixian, Suzhou, Wenzhou, Nanchang, Beijing, Hankou, Yangzhou, Chengdu, Taiyuan, Fuzhou, Xiamen, Xi'an, Jinan, Changsha, Chaozhou, Shuangfeng

Xiamen

    Nanchang, Meixian, Fuzhou, Hankou, Suzhou, Guangzhou, Chengdu, Beijing, Chaozhou, Xi'an, Taiyuan, Yangzhou, Jinan, Wenzhou, Changsha, Shuangfen

Chaozhou

    Fuzhou, Chengdu, Taiyuan, Nanchang, Xiamen, Meixian, Suzhou, Hankou, Wenzhou, Yangzhou, Changsha, Guangzhou, Beijing, Xi'an, Jinan, Shuangfeng

Fuzhou

    Nanchang, Chaozhou, Meixian, Taiyuan, Beijing, Chengdu, Suzhou, Guangzhou, Wenzhou, Xiamen, Changsha, Yangzhou, Hankou, Xi'an, Jinan, Shuangfeng

To highlight the mutual intelligibility among these dialects, I have separated the numbers from Figure 1 and give them in Figure 2 in a triangle matrix. These degrees can be further processed and arranged to characterize various relations. For example, the intelligibility between Beijing and the other dialects can be plotted as Figure 3 to give a graphic presentation of intelligibility. Hankou and Chengdu appear at the top, and Guangzhou, Chaozhou, and Wenzhou come at the end of the scale. If we assume that low intelligibility contributes to difficulty in language learning, then Guangzhou, Chaozhou,

and Wenzhou speakers will not be able to learn to speak Beijing dialect as easily as speakers of the other localities. This ranking reminds us of the saying that the most fearful thing one encounters is to listen to Guangdong speakers talk in Mandarin. The calculated degrees match this impression of intelligibility quite well, and now we can express general impressions in terms of tangible quantity.

These numbers can be ranked, and the order of intelligibility of the dialect pairs is ginin (14).

(14)

1	.795	Hankou–Chengdu	28	.578	Hankou–Yangzhou
2	.768	Jinan–Xi'an	29	.572	Chengdu–Meixian
3	.727	Beijing–Hankou	30	.568	Jinan–Yangzhou
4	.726	Beijing–Chengdu	31	.564	Taiyuan–Nanchang
5	.719	Beijing–Jinan	32	.562	Hankou–Meixian
6	.693	Xi'an–Chengdu	33	.558	Taiyuan–Suzhou
7	.685	Beijing–Xi'an	34	.556	Jinan–Changsha
8	.676	Hankou–Changsha	35	.550	Chaozhou–Fuzhou
9	.660	Chengdu–Changsha	36	.549	Hankou–Suzhou
10	.657	Jinan–Chengdu	37	.548	Meixian–Fuzhou
11	.656	Nanchang–Meixian	38	.548	Xi'an–Suzhou
12	.641	Xi'an–Yangzhou	39	.547	Meixian–Guangzhou
13	.635	Xi'an–Hankou	40	.546	Taiyuan–Meixian
14	.631	Taiyuan–Yangzhou	41	.545	Chengdu–Suzhou
15	.618	Chengdu–Nanchang	42	.543	Changsha–Nanchang
16	.616	Taiyuan–Chengdu	43	.543	Yangzhou–Nanchang
17	.614	Xi'an–Taiyuan	44	.542	Nanchang–Fuzhou
18	.610	Chengdu–Yangzhou	45	.541	Beijing–Yangzhou
19	.609	Beijing–Changsha	46	.541	Taiyuan–Fuzhou
20	.608	Beijing–Taiyuan	47	.540	Suzhou–Nanchang
21	.608	Yangzhou–Suzhou	48	.533	Xi'an–Nanchang
22	.607	Jinan–Taiyuan	49	.530	Hankou–Shuangfeng
23	.602	Hankou–Nanchang	50	.529	Yangzhou–Changsha
24	.593	Xi'an–Changsha	51	.528	Beijing–Meixian
25	.588	Jinan–Hankou	52	.526	Suzhou–Meixian
26	.582	Beijing–Nanchang	53	.525	Suzhou–Changsha
27	.582	Taiyuan–Hankou	54	.524	Changsha–Meixian

55	.524	Taiyuan-Changsha	92	.474	Guangzhou-Xiamen
56	.523	Meixian-Xiamen	93	.472	Taiyuan-Xiamen
57	.516	Taiyuan-Chaozhou	94	.471	Wenzhou-Guangzhou
58	.516	Xiamen-Fuzhou	95	.471	Xi'an-Xiamen
59	.514	Chengdu-Fuzhou	96	.470	Hankou-Guangzhou
60	.513	Beijing-Fuzhou	97	.469	Guangzhou-Fuzhou
61	.513	Nanchang-Xiamen	98	.469	Suzhou-Chaozhou
62	.512	Suzhou-Wenzhou	99	.468	Hankou-Chaozhou
63	.511	Jinan-Suzhou	100	.467	Changsha-Fuzhou
64	.507	Hankou-Xiamen	101	.467	Yangzhou-Guangzhou
65	.506	Chengdu-Shuangfeng	102	.465	Jinan-Meixian
66	.504	Xiamen-Chaozhou	103	.465	Xi'an-Chaozhou
67	.502	Yangzhou-Meixian	104	.462	Jinan-Fuzhou
68	.501	Suzhou-Shuangfeng	105	.459	Yangzhou-Shuangfeng
69	.501	Shuangfeng-Nanchang	106	.459	Yangzhou-Xiamen
70	.499	Beijing-Suzhou	107	.455	Xi'an-Guangzhou
71	.499	Chengdu-Chaozhou	108	.454	Chengdu-Guangzhou
72	.499	Changsha-Shuangfeng	109	.454	Jinan-Guangzhou
73	.498	Jinan-Nanchang	110	.452	Wenzhou-Fuzhou
74	.497	Meixian-Chaozhou	111	.451	Wenzhou-Meixian
75	.496	Yangzhou-Fuzhou	112	.448	Wenzhou-Shuangfeng
76	.495	Nanchang-Chaozhou	113	.446	Taiyuan-Guangzhou
77	.495	Nanchang-Guangzhou	114	.445	Changsha-Chaozhou
78	.493	Suzhou-Xiamen	115	.445	Wenzhou-Chaozhou
79	.490	Beijing-Shuangfeng	116	.443	Beijing-Chaozhou
80	.490	Xi'an-Meixian	117	.442	Taiyuan-Wenzhou
81	.488	Xi'an-Shuangfeng	118	.441	Chengdu-Wenzhou
82	.484	Suzhou-Fuzhou	119	.441	Xi'an-Wenzhou
83	.483	Suzhou-Guangzhou	120	.439	Jinan-Xiamen
84	.482	Hankou-Fuzhou	121	.436	Shuangfeng-Meixian
85	.481	Jinan-Shuangfeng	122	.435	Guangzhou-Chaozhou
86	.481	Xi'an-Fuzhou	123	.433	Changsha-Guangzhou
87	.480	Beijing-Xiamen	124	.428	Jinan-Wenzhou
88	.477	Chengdu-Xiamen	125	.427	Taiyuan-Shuangfeng
89	.476	Wenzhou-Changsha	126	.424	Shuangfeng-Xiamen
90	.475	Beijing-Guangzhou	127	.422	Hankou-Wenzhou
91	.475	Yangzhou-Chaozhou	128	.422	Wenzhou-Nanchang

129	.418	Changsha-Xiamen		133	.398	Wenzhou-Xiamen
130	.415	Jinan-Chaozhou		134	.394	Beijing-Wenzhou
131	.407	Yangzhou-Wenzhou		135	.371	Shuangfeng-Guangzhou
132	.402	Shuangfeng-Fuzhou		136	.353	Shuangfeng-Chaozhou

We see in (14) that Hankou and Chengdu are the most intelligible to each other while Shuangfeng and Chaozhou are the least.

One may want to know which of these 17 dialects has the highest mutual intelligibility with respect to all the other dialects. We can add all the intelligibility degrees for each dialect and divide the total by 16 to obtain the mean. The ranking of the means is given in (15).

(15)

Chengdu (.586), Hankou (.573), Beijing (.563), Xi'an (.562), Taiyuan (.543), Nanchang (.540), Jinan (.538), Yangzhou (.532), Changsha (.529), Meixian (.523), Suzhou (.521), Fuzhou (.494), Xiamen (.473), Chaozhou (.467), Guangzhou (.462), Shuangfeng (.457), Wenzhou (.440)

Chengdu, Hankou, and Beijing have higher mutual intelligibility with respect to other dialects. This ranking can be used to support the decision made long ago on choosing Beijing as the standard language. On the other hand, we notice that the range of the means is small, from 0.440 to 0.586.

We can also use the mutual intelligibility as give in (14) to build clusters with average linking. The cluster analysis is one of a few statistical procedures for establishing classification. To link, we first find the most similar group. The intelligibility calculated here is of course a type of similarity index. Hankou and Chengdu, the top-ranked pair, are now in a group. They are linked at 0.795. Jinan and Xi'an, the next highest ranked pair, are put in another group, linked at 0.768. Going down the rank, we find the Beijing-Hankou pair with intelligibility of 0.727. Therefore, Beijing and the group of Hankou and Chengdu are to be linked. The average linking method calculates the average of the sum

of the similarity numbers between the variables of the groups and links them at the average point. So the calculation of this linking is given in (16).

(16) Beijing-Hankou   .727
      Beijing-Chengdu   .726
         sum   1.453 / 2 = .726

This number 0.726 is the link point between Beijing and the group of Hankou and Chengdu.

Next on the ranking of (14) we see the Beijing-Jinan pair. Since Beijing has already been grouped with Hankou and Chengdu on the one hand and Jinan with Xi'an on the other, we need to calculate the link point for these two groups. The calculation is given in (17).

(17) Jinan-Beijing   .719
      Jinan-Hankou   .588
      Jinan-Chengdu   .657
      Xi'an-Beijing   .685
      Xi'an-Hankou   .635
      Xi'an-Chengdu   .693
         sum   3.977 / 6 = .662

These two groups are linked at 0.662. Eventually when we complete the calculation the dialects are linked as given in (18).

(18)
      Link 1   .795   Hankou with Chengdu
      Link 2   .768   Jinan with Xi'an
      Link 3   .726   Beijing with Hankou etc.
      Link 4   .662   Beijing etc. with Jinan etc.
      Link 5   .656   Nanchang with Meixian
      Link 6   .631   Taiyuan with Yangzhou
      Link 7   .618   Changsha with Beijing etc.
      Link 8   .584   Beijing etc. with Taiyuan etc.
      Link 9   .550   Chaozhou with Fuzhou

Link 10	.542	Beijing etc. with Suzhou
Link 11	.541	Beijing etc. with Nanchang etc.
Link 12	.510	Xiamen with Chaozhou etc.
Link 13	.483	Beijing etc. with Xiamen etc.
Link 14	.471	Wenzhou with Guangzhou
Link 15	.464	Beijing etc. with Shuangfeng
Link 16	.450	Beijing etc. with Wenzhou etc.

The linkage is used to establish a subgrouping tree as given in Figure 4. Generally speaking, Figure 4 shows a north-south distinction. The northern localities above Suzhou, (i.e. Hankou, Chengdu, Beijing, Jinan, Xi'an, Changsha, Taiyuan, and Yangzhou) are linked at higher levels of intelligibility as a fairly coherent group. The southern localities, on the other hand, are more divergent with lower levels of intelligibilty. The results of this cluster analysis agree with our intuitive impression of the dialect differences. However, in terms of what we know about genetic relations, the grouping of Wenzhou and Guangzhou does not seem appropriate. In defense of this methodology, I should reiterate that the focus of this quantification is intelligibility and not genetic affinity. If the grouping of the other dialects is reasonable on the basis of other types of evidence or impression, then one must accept the Wenzhou-Guangzhou linking as a correct grouping in the context of these 17 localities.

The systemic intelligibility as a measurement of dialect similarity is closely related to the correlation coefficients that I calculated in my earlier studies. The subgrouping trees for these dialects using the correlation method are given in Figure 5 (dialect affinity based on the lexicon, Cheng 1982, 1987), Figure 6 (dialect affinity based on initials, finals, and tones, Cheng 1986, 1988, 1991), and Figure 7 (dialect affinity based on morpho-syntax, Cheng 1989). To a large extent, these groupings are similar and therefore give much credibility to the methods. The differences among these classifications are expected, since the focal points of the investigations are different.

Besides my own studies, a similar correlation method has been used for language clas-

sification for Indo–European (Kroeber and Chretien 1937, 1939), American English (Reed and Spicer 1952), and Middle English (Ogura 1990). It seems that the correlation method has been well established. Moreover, there have been several other serious proposals for language classification, including Hsieh (1973), Krishnamurti, Moses, and Danforth (1983), Cavalli–Sforza and Wang (1986), and Wang (1987). In this paper, however, I have proposed a different measurement that takes into consideration the weights of signal and noise in inter–dialectal communication. The calculated intelligibility is called systemic intelligibility since it is based on dialects as linguistic systems and not on speakers' experience. It is hoped that systemic intelligibility will provide a basis for exploring the question as how individuals as language users understand the speech of other dialects. But questions such as those concerning how "participant intelligibility" is to be calculated are yet to be answered.

	Beijing A	JN B	XA C	TY D	HK E	CD F	YZ G	SZ H	WZ I	CS J	SF K	NC L	MX M	GZ N	XM O	CZ P
Jinan B	.725 .713 .719															
Xi'an C	.715 .656 .685	.771 .765 .768														
Taiyuan D	.609 .608 .608	.603 .612 .607	.612 .617 .614													
Hankou E	.727 .728 .727	.582 .594 .588	.627 .643 .635	.574 .590 .582												
Chengdu F	.722 .730 .726	.669 .646 .657	.697 .690 .693	.599 .633 .616	.791 .799 .795											
Yangzhou G	.558 .525 .541	.570 .567 .568	.650 .632 .641	.640 .622 .631	.609 .547 .578	.615 .605 .610										
Suzhou H	.510 .489 .499	.523 .500 .511	.546 .551 .548	.568 .549 .558	.587 .512 .549	.592 .498 .545	.612 .604 .608									
Wenzhou I	.407 .382 .394	.452 .404 .428	.464 .418 .441	.485 .400 .442	.467 .378 .422	.483 .399 .441	.436 .379 .407	.534 .492 .512								
Changsha J	.610 .608 .609	.572 .541 .556	.608 .579 .593	.520 .529 .524	.689 .663 .676	.688 .632 .660	.529 .530 .529	.534 .517 .525	.439 .514 .476							
Shuangfeng K	.499 .481 .490	.504 .458 .481	.506 .470 .488	.433 .421 .427	.522 .538 .530	.506 .506 .506	.453 .466 .459	.480 .523 .501	.414 .482 .448	.496 .503 .499						
Nanchang L	.577 .587 .582	.499 .497 .498	.536 .530 .533	.568 .560 .564	.583 .622 .602	.614 .622 .618	.546 .541 .543	.519 .561 .540	.376 .468 .422	.524 .563 .543	.494 .508 .501					
Meixian M	.504 .553 .528	.438 .492 .465	.465 .516 .490	.535 .557 .546	.549 .576 .562	.565 .580 .572	.483 .522 .502	.480 .572 .526	.418 .485 .451	.516 .532 .524	.411 .461 .436	.658 .655 .656				
Guangzhou N	.487 .464 .475	.480 .429 .454	.479 .431 .455	.455 .437 .446	.477 .463 .470	.458 .450 .454	.481 .454 .467	.484 .483 .483	.469 .473 .471	.454 .412 .433	.401 .341 .371	.522 .469 .495	.567 .528 .547			
Xiamen O	.457 .503 .480	.421 .458 .439	.453 .490 .471	.468 .476 .472	.486 .529 .507	.449 .506 .477	.452 .466 .459	.461 .525 .493	.341 .455 .398	.388 .448 .418	.406 .442 .424	.489 .537 .513	.511 .535 .523	.434 .515 .474		
Chaozhou P	.413 .443 .428	.417 .414 .415	.465 .465 .465	.517 .516 .516	.444 .492 .468	.463 .536 .499	.463 .487 .475	.439 .499 .469	.402 .489 .445	.412 .479 .445	.350 .356 .353	.477 .514 .495	.491 .504 .497	.396 .474 .435	.498 .510 .504	
Fuzhou Q	.490 .536 .513	.473 .451 .462	.487 .476 .481	.544 .539 .541	.483 .481 .482	.505 .524 .514	.506 .486 .496	.457 .511 .484	.405 .499 .452	.443 .492 .467	.386 .419 .402	.538 .547 .542	.557 .540 .548	.435 .503 .469	.534 .498 .516	.555 .545 .550

Figure 1. Dialect Intelligibility

	Beijing A	JN B	XA C	TY D	HK E	CD F	YZ G	SZ H	WZ I	CS J	SF K	NC L	MX M	GZ N	XM O	CZ P
Jinan B	.719															
Xi'an C	.685	.768														
Taiyuan D	.608	.607	.614													
Hankou E	.727	.588	.635	.582												
Chengdu F	.726	.657	.693	.616	.795											
Yangzhou G	.541	.568	.641	.631	.578	.610										
Suzhou H	.499	.511	.548	.558	.549	.545	.608									
Wenzhou I	.394	.428	.441	.442	.422	.441	.407	.512								
Changsha J	.609	.556	.593	.524	.676	.660	.529	.525	.476							
Shuangfeng K	.490	.481	.488	.427	.530	.506	.459	.501	.448	.499						
Nanchang L	.582	.498	.533	.564	.602	.618	.543	.540	.422	.543	.501					
Meixian M	.528	.465	.490	.546	.562	.572	.502	.526	.451	.524	.436	.656				
Guangzhou N	.475	.454	.455	.446	.470	.454	.467	.483	.471	.433	.371	.495	.547			
Xiamen O	.480	.439	.471	.472	.507	.477	.459	.493	.398	.418	.424	.513	.523	.474		
Chaozhou P	.443	.415	.465	.516	.468	.499	.475	.469	.445	.445	.353	.495	.497	.435	.504	
Fuzhou Q	.513	.462	.481	.541	.482	.514	.496	.484	.452	.467	.402	.542	.548	.469	.516	.550

Figure 2. Mutual Intelligibility

	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00

Hankou .727

Chengdu .726

Jinan .719

Xi'an .685

Changsha .609

Taiyuan .608

Nanchang .582

Yangzhou .541

Meixian .528

Fuzhou .513

Suzhou .499

Shuangfeng .490

Xiamen .480

Guangzhou .475

Chaozhou .443

Wenzhou .394

0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
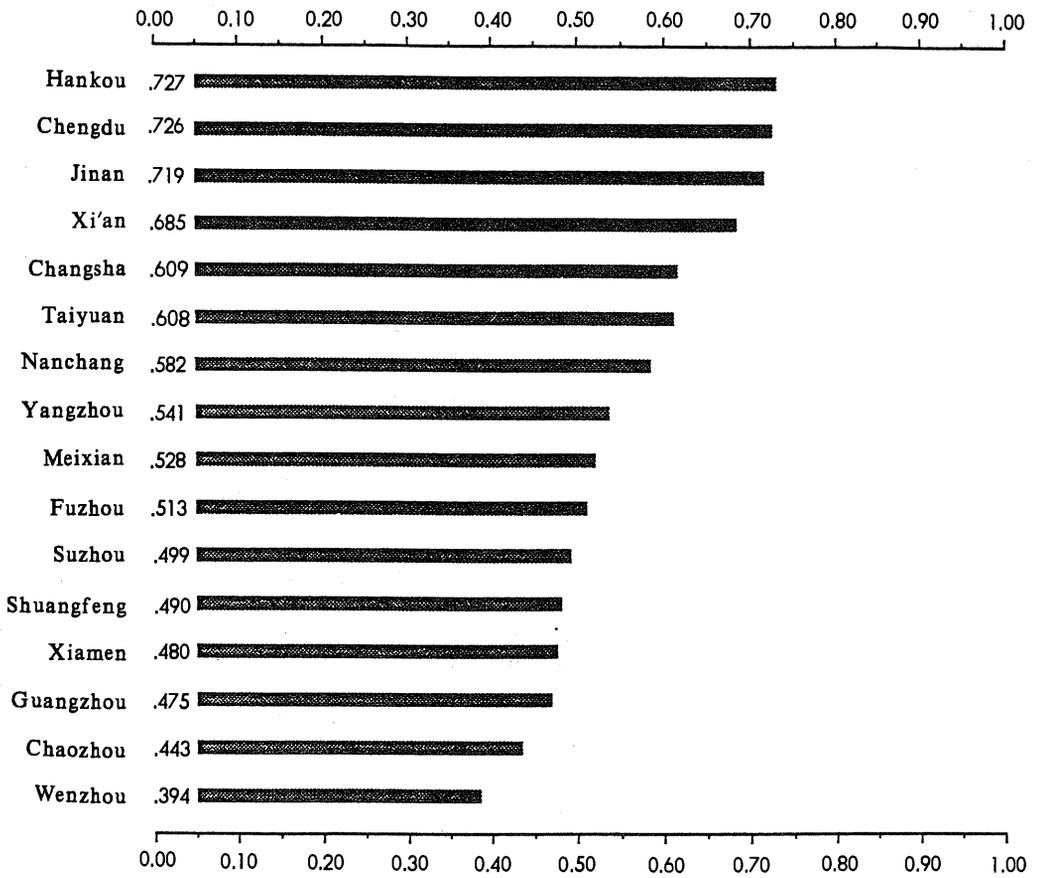
Figure 3. Mutual Intelligibility with Respect to Beijing
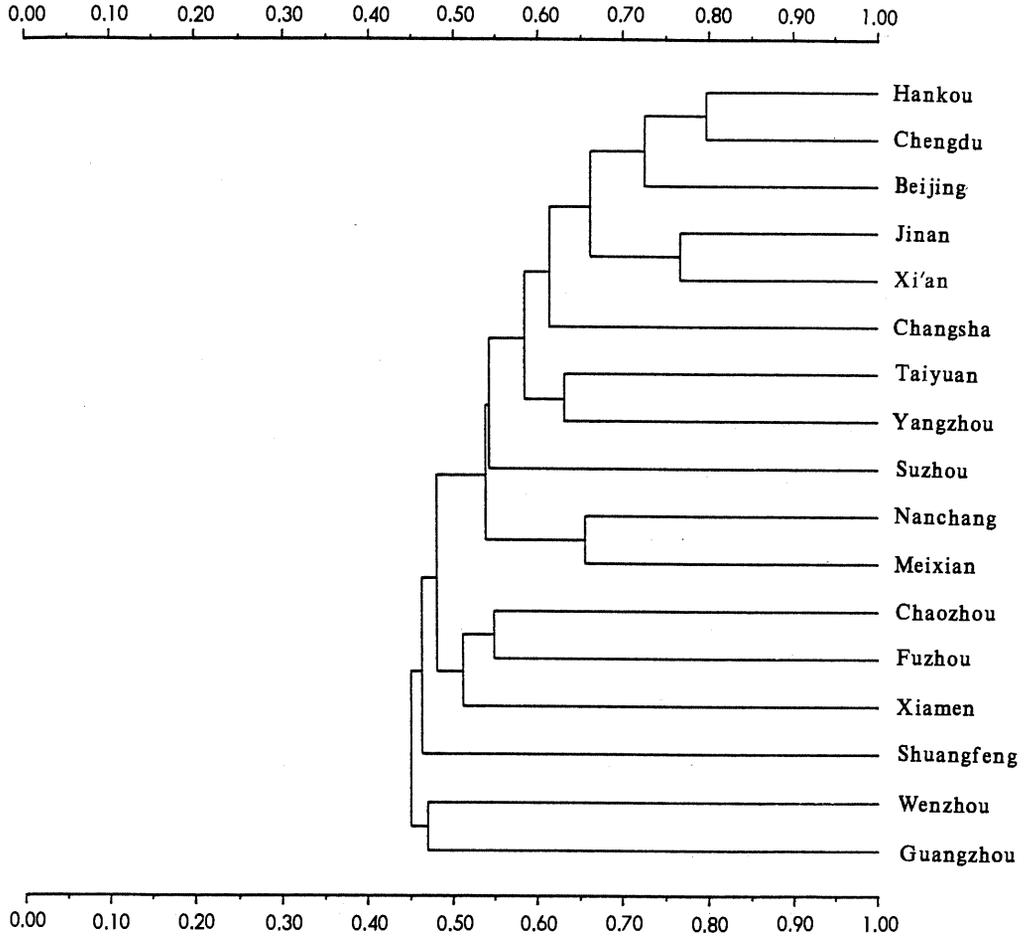
Figure 4. Dialect Affinity Based on Mutual Intelligibility
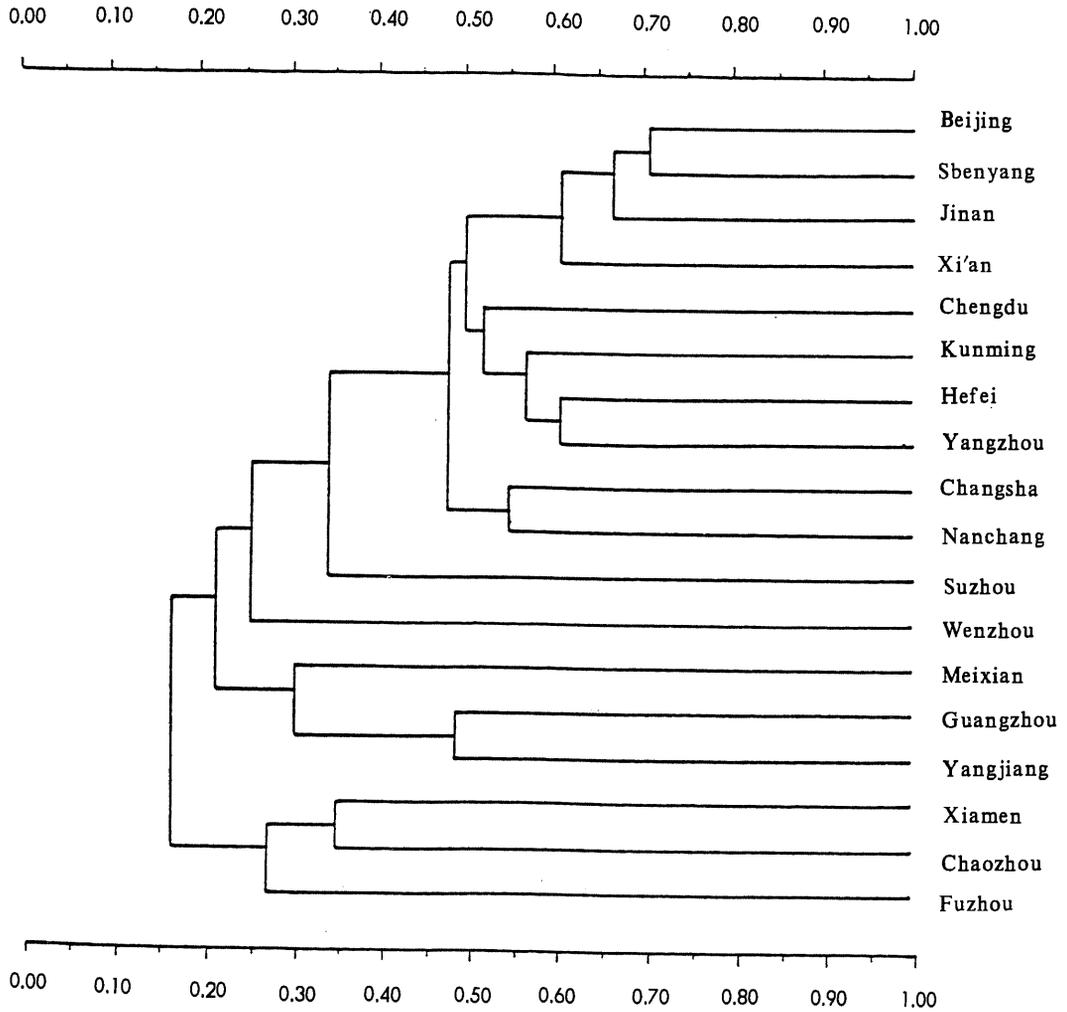
0.00   0.10   0.20   0.30   0.40   0.50   0.60   0.70   0.80   0.90   1.00

Beijing

Sbenyang

Jinan

Xi'an

Chengdu

Kunming

Hefei

Yangzhou

Changsha

Nanchang

Suzhou

Wenzhou

Meixian

Guangzhou

Yangjiang

Xiamen

Chaozhou

Fuzhou

0.00   0.10   0.20   0.30   0.40   0.50   0.60   0.70   0.80   0.90   1.00

Figure 5. Dialect Affinity Based on the Lexicon

0.00   0.10   0.20   0.30   0.40   0.50   0.60   0.70   0.80   0.90   1.00

Beijing
Jinan
Xi'an
Hankou
Chengdu
Yangzhou
Meixian
Suzhou
Xiamen
Fuzhou
Changsha
Shuangfeng
Nanchang
Wenzbou
Chaozhou
Guangzhou
Taiyuan

0.00   0.10   0.20   0.30   0.40   0.50   0.60   0.70   0.80   0.90   1.00
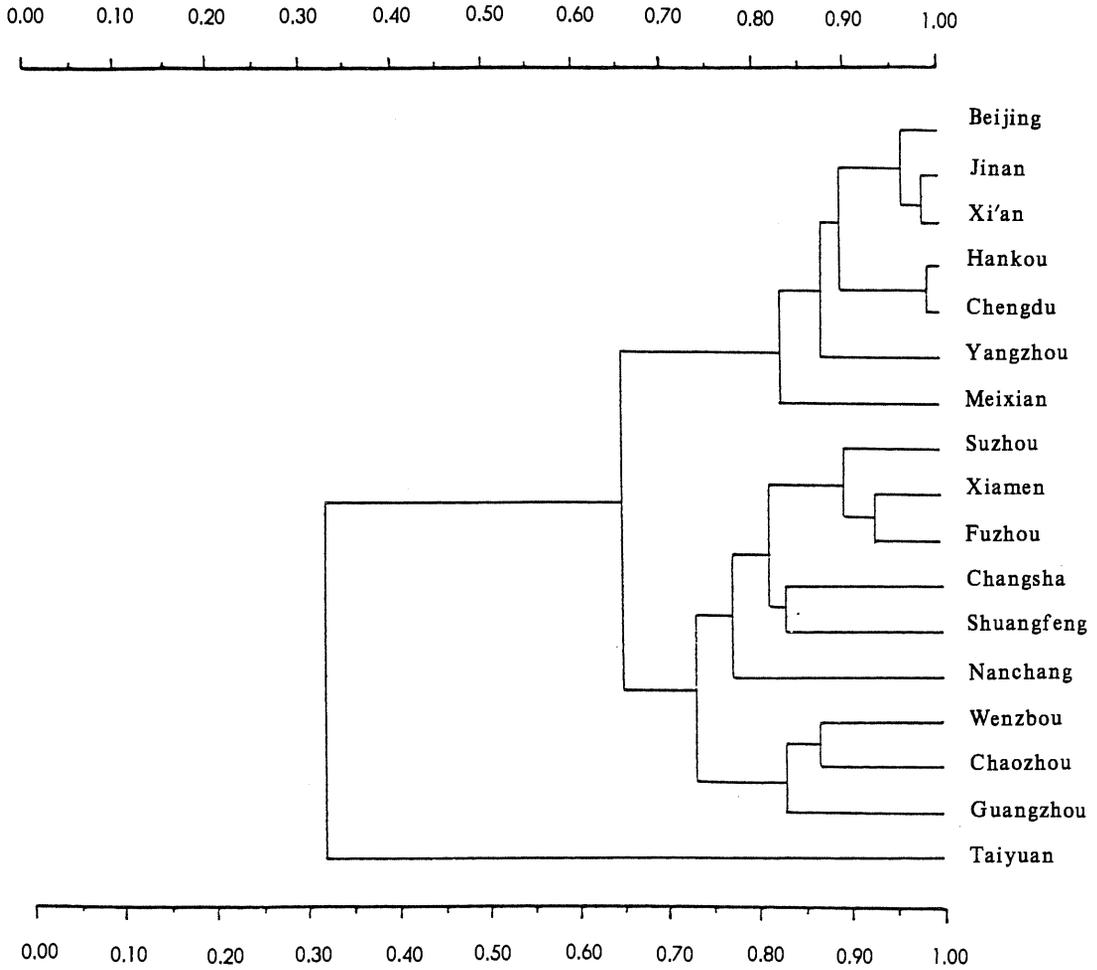
Figure 6. Dialect Affinity Based on Initials, Finals, and Tones
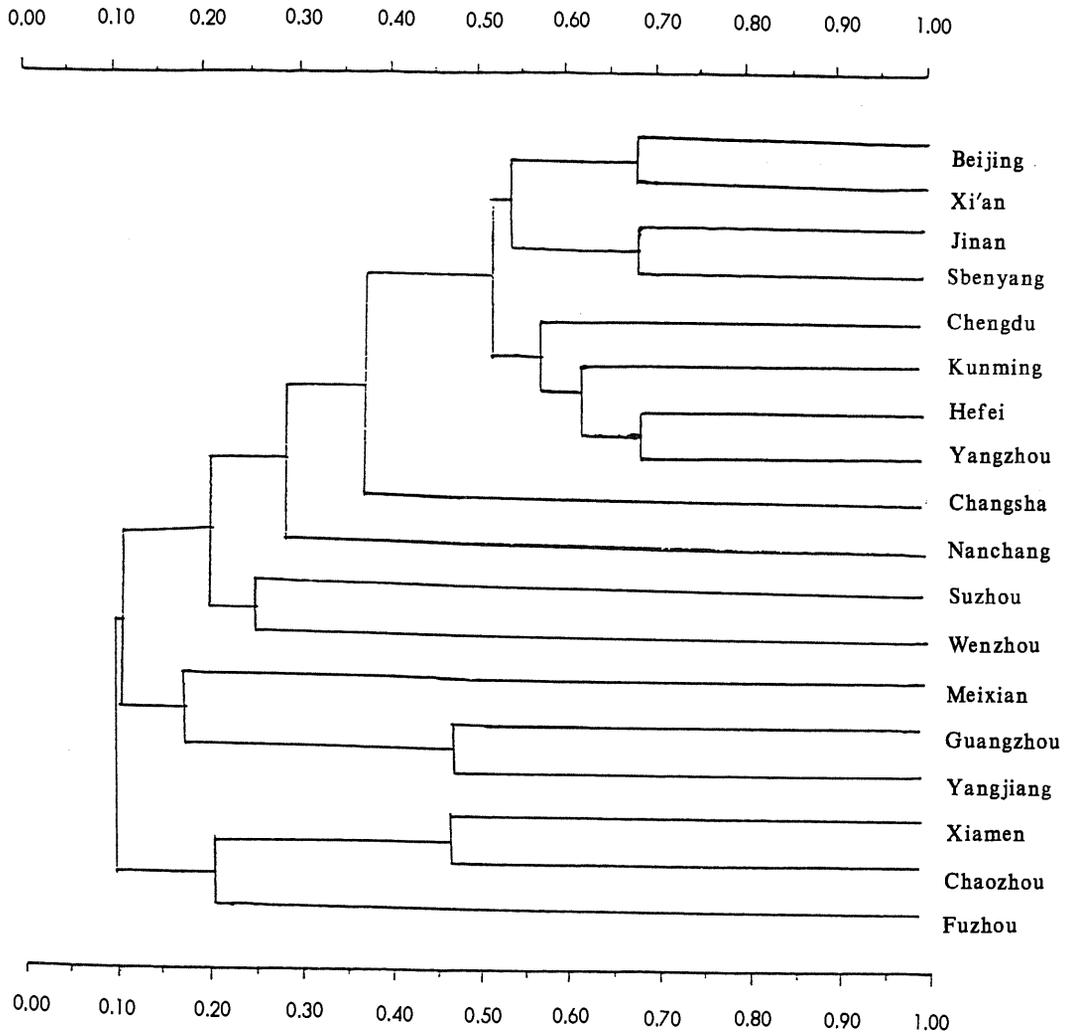
Figure 7. Dialect Affinity Based on Morpho-syntax

REFERENCES

Beijing University.

   1962   *Hanyu Fangyin Zihui.* Beijing : Wenzi Gaige Chubanshe.

   1964   *Hanyu Fangyan Cihui.* Beijing : Wenzi Gaige Chubanshe.

   1989   *Hanyu Fangyin Zihui.* Second Edition. Beijing: Wenzi Gaige Chubanshe.

Cavalli-Sforza, Lucus, and William S-Y. Wang .

   1986   Spatial distance and lexical replacement. *Language* 62.38–55.

Cheng, Chin-Chuan.

   1972   Diannao zai Hanyu yinyun yanjiu shang de yingyong (Computer and the study

          of Chinese phonology). *Si Yu Yan (Thought and Word)* 9.344–348.

   1982   A quantification of Chinese dialect affinity. *Studies in the Linguistic Sciences*

          12.29–47.

   1986   *Quantifying affinity among Chinese dialects.* Language Learning Laboratory

          LLL–T–10–86, University of Illinois, Urbana–Champaign.

   1987   A quantification of Chinese dialect affinity. In Chinese Language Society of

          Hong Kong ed. *Wang Li Memorial Volumes English Volume* 73–100. Hong

          Kong: Joint Publishing Co.

   1988   Hanyu fangyan qinshu guanxi de jiliang yanjiu. *Zhongguo Yuwen* 203.87–102.

   1989   Syntactic features in quantification of Chinese dialect affinity. Paper presented

          at the First Northeast Conference on Chinese Linguistics, Ohio State University.

   1991   Quantifying affinity among Chinese dialects. In William Wang ed. *Language*

          and Dialects of China. Journal of Chinese Linguistics Monograph Series No. 3

          Berkeley: Journal of Chinese Linguistics.

Hickerson, Harold, Glen D. Turner, and Nancy P. Hickerson.

   1952   Testing procedures for estimating transfer of information among Iroquois dia-

lects and languages. *IJAL* 18.1–8.

Hoenigswald, Henry M. and Linda F. Wiener. eds.

1987 *Biological Metaphor and Cladistic Classification*Philadelphia: University of Pennsylvania Press.

Hockett, Charles F.

1958 *A Course in Modern Linguistics.*New York: Macmillan.

Hsieh, Hsin-I.

1973 A new method of dialect subgrouping. *Journal of Chinese Linguistics* 1.64–92.

Krishnamurti, Bh., Lincoln Moses, and Douglas G. Danforth.

1983 Unchanged cognates as a criterior in linguistic subgrouping. *Language* 59.541–568.

Kroeber, A. L. and C. D. Chretien.

1937 Quantitative classification of Indo–European languages. *Language* 13.83–103.

1939 The statistical technique and Hittite. *Language* 15.69–71.

Lü, Shinan, Jialu Zhang, and Shiqian Qi,

1981 Hanyu fuyin zhijue hunyao yanjiu zhong de duowei biaodu fangfa (Multidimensional analysis of perceptional confusion of Chinese consonants). *Shengxue Xuebao (Acta Acustica)* 6.363–370.

Lu, Zhiji and Chin–Chuan Cheng.

1985 Chinese dialect affinity based on syllable initials. *Studies in the Linguistic Sciences* 15:2.127–148.

Nelson, Cecil L.

1984 *Intelligibility: The Case of Non-Native Varieties of English*University of Illinois Ph.D. Dissertation.

Ogura, Mieko.

1990 *Dynamic Dialectology: A Study of Language in Time and Space*. Tokyo: Kenkyusha.

Pierce, Joe E.

    1952   Dialect distance testing in Algonquian. *IJAL* 18.208–218.

Reed, David W. and John L. Spicer.

    1952   Correlation methods of comparing idiolects in a transition area. *Language* 28.348–359.

Streeter, Mary L.

    1972   DOC 1971 *Computers and the Humanities* 6:5.259–270.

Voegelin, Carl F. and Zellig S. Harris.

    1951   Methods for determining intelligibility among dialects of natural languages. *Proceedings of the American Philosophical Society* 95.322–329.

Wang, William S-Y.

    1970   Project DOC: its methodological basis. *Journal of the American Oriental Society* 90:1.57–66.

    1987   Representing language relationships. In Hoenigswald and Wiener eds. *Biological Metaphor and Cladistic Classification* 243–256.

Yaruss, Jonathan Scott.

    1990   DOC 1988: the modernization of a Chinese dialect dictionary on computer. *Computers and the Humanities* 24:3.207–219.

Zhang, Jialu, Shiqian Qi and Shinan Lü.

    1981   Hanyu fuyin zhijue jiegou chutan (A preliminary study of the perceptual configurations of Chinese consonants). *Xinli Xuebao (Acta Psychologica Sinica)* 1.76–85.

Zhang, Jialu, Shiqian Qi, Meizhen Song, and Quanxiang Liu.

    1981   Hanyu shengdiao zai yanyu kedongdu zhong de zhongyao zuoyong (On the important role of Chinese tones in speech intelligibility). *Shengxue Xuebao (Acta Acustica)* 4.237–241.

台灣話和普通話的時段－時態系統

鄭 良 偉

美國夏威夷大學

　　本文介紹台灣閩南話裡各種時段語 (phase markers) 和回顧既往，觀察現況，前瞻未然等三種時態語 (aspect markers)。然後討論已否改變時態的語意和語法特點，以及一些漢語有關時間關係分析上有趣的問題。

　　台灣話普通話裡時段和時態語兩個語法範疇之間的劃分，跨類，和排序原則；

　　普通話三種"了"的語意、語法分析和台語裡的對應語；

　　不同的語境因跟表示變化的預期的"已經／猶未"結合而改變語意變爲有一個變化點的現象；

　　兩種有關時間關係的語言類型（實現－非實現類型和過去－非過去類型）特點；

　　普通話動詞詞尾"了"做爲過去標誌 (past marker) 的適合與不適合的範圍；以及

　　時段語時態語的VO 和OV 語言類型特點在普通話、台灣話裡的共存和調整。

內容大綱

鄭良偉

0. 前　言

　　本文介紹台灣閩南話裡各種時段語 (phase markers) 以及回顧既往，觀察現況，前
瞻未然等三種時態語 (aspect markers) 。並討論已否改變時態的語意和語法特點，以及
一些漢語有關時間關係分析上有趣的問題。

關於普通話的時態已經有不少學者描述過。[1]但是互相之間有很多出入。例如到底有幾種"了"，一種，兩種，三種？就有各種不同的說法。主要原因有四：第一，說普通話的群體一直有大規模的不同語言和不同方言的雙語現象和融合過程，語言也就經歷過很大的變化。這個變化現在還在進行。[2]各地普通話的變化速度和方向各不相同。第二，書面語雖說是白話文，現代中文並不完全跟某地區特定語言的句法和詞彙系統一致。它並不忠實地代表北京話，更不代表任何其他地區的口語系統。第三，句法的變化除了上述社會文化因素以外，還有各種語意和句法互相矛盾的力量競爭。相同語意或句法範疇的一組詞彙，受到外部或內部的影響而引起變化的過程並非全組詞彙突然同時受到新句法規律的影響，而是一個詞一個詞逐漸地受到影響。由於引起句法變化的不同因素同時在互相競爭，導致表時態和時段的詞彙都各有複雜的不同演變，並且還在變化中。從描述現況的角度看，這些詞的句法特點特別複雜，使研究者難于分析。[3]第四，學者們很少為他們所用的語言學專用語，有系統地下過定義。學者之間所用的 perfect, aspect, past 等名稱含義互不相同。[4]

筆者曾在三篇論文 (1975, 1978, 1986)，及實用參考語法 (A Reference Grammar of Mandarin Chinese for Students and Teachers) 第一冊 (1984) 3.7裡大約地討論了普通話的時態和時段的觀念。其中第二篇 (1978) 則參考了Bull (1968), Leech (1970), Quirk and Greenbaum (1973), Comrie (1976) 等人的理論，運用一個可以通用於人類自然語言（至少可以通用於同類型的）的語意架構 (universal semantic framework)，描寫、

1　請比較Chao 1944, 1968; Wang 1964; Chen 1979, Spanos 1979; Li & Thompson 1981; Teng 1973, 1985 各人看法。
2　筆者曾描述過台灣話，北京話，跟現代中文對台灣國語的影響 (1985, 1989b)。
3　關於語音變化的詞彙擴散理論請看 Cheng & Wang 1975, Wang 1967。至於詞彙擴散理論應用在語法的變化請看梅祖麟 1987, 鄭良偉 1990。
4　筆者所知範圍內，惟一的例外是陳平的 1988 論文，該文提出一套時間關係的語意構架以後，根據它有系統地進行描述。並且該文的論點和方法，和筆者 1978 論文有極類似的地方。兩人分別研究能有這樣的類似點，希望是掌握到語言事實的好證明。陳文對時相（phase 相當於本文的時段）結構的分析相當詳細，比較接近於筆者 1975 論文的作法，而有異於筆者在 1986 論文。主要不同在於：1986 論文將事件（即event 動作是其中的一種）跟語境 (situation) 分開，事件或動作是可觀實體的存在，語境是說話者在參照時間點觀察該事件或動作時的情況。時間點和觀察方式的選擇都有說話者的主觀因素。另外筆者的分析一直將語境的內部結構的語意和句法特點，跟語境跟時態發生關係時的外部語意和句法特點分開。陳文將兩者合在一起，或許使讀者難瞭解他的五種時相的內部結構和分類用意。

比較台灣話和普通話的時間關係系統。這幾篇論文的主要重點是：1) 說話時間 (speech time)，參照時間 (reference time) 和語境時間 (event time 或 situation) 是決定時間關係的基本要素。2) 時制 (tense) 是說話時間和參照時間的關係，沒有系統地表達在漢語裡的句法或詞法裡。3) 時態 (aspect) 是參照時間和語境時間的關係，也就是說話者從參照時間點觀察語境的方式。時態很有系統地表達於漢語的句法裡。由副詞，助動詞，動詞詞尾，句尾詞表達。4) 時段 (phase) 是動作的時間段落。漢語一般用動詞詞尾的時段語，不像英語只能用動詞 "begin, finish" 等。時段語在台語和普通話裡形成一種語法範疇，跟動詞後的賓語，動量，和補語等結合而構成語境。是語境的內部成分。有別於表達從參照時點觀察語境的時態。

普通話句法的不穩固和內部差異，最顯著的可能是時態這個語法範疇。由於句法規律和所用虛詞複雜多變，引起很多分析上的問題。筆者一方面廣泛地參考語言類型特點較明顯，又較有人研究的VO類型的英語與OV類型的日語語法，一方面將它密切地跟漢語中較特殊的台灣話進行比較，得到一些較能使用於不同語言的分析法。

語境是被觀察的情況，語法上通常是謂語除去時態語之後所剩餘的部分，由動詞及其賓語，內狀語，數量，程度，結果和時段補語組成。其中時間語和表示動作段落的時段語（ phase markers 如：起來，完，煞，掉，去：）跟時態語有特別密切的語意和句法關係。謂語裡如果沒有其他補語，時段語是表達語境與參照時間之間的各種時態關係的關鍵(1)。

時態語表說話人對語境的觀察方式。按照語意有回顧既往，觀察現況，前瞻未來三類時態語。本文有關時態語的語例的排列注重肯定和否定的對立，藉以顯示整個時段與時態的語意和語法系統(2)。在個別時態語的描述上，本文只對" 已經／猶未"〔已經／還沒〕進行較詳細的討論，至於其他的時態語將發表於另文裡 (1991 MS)。

一般學者認爲普通話的" 了"在時間關係上有兩種，動詞詞尾的" 了"和句尾的" 了"，前者相當於台語的觀察現況的" 有"，後者相當於台語回顧既往預期業已實現的" 啊"（來自" 矣"，東南亞福建話用" 了"），在沒有賓語或補語的情形下普通話有歧義，台灣話沒有歧義。在普通話的" Ｖ了Ｏ"形式裡的" 了"有兩種：一種相當於台灣話的時態語" 有"，另一種相當於台灣話的時段語" 了，掉，煞"。本文

也討論如要圓滿地描述普通話的語意和語法現象需要分兩種動詞詞尾"了"的理由(1.5和2.3)。

漢語的謂語裡諸成分之間的語序，頗能反映說話人觀察方式跟被觀察語境之間的語意關係。

表進行的"teh"，表即將發生的"tih-beh"，以及表過去經驗的"bat…過"，可以跟時段語同時出現而具有表達觀察語境的功能，也可跟"有，已經，會"等時態語出現，構成被觀察的語境的一部分。又可跟時態語和時段語兩者同時出現（已經tih-beh行三小時啊【已經快要走三小時了。】）謂語之內各成分間的排序原則是：語詞越是表客觀上被觀察的情況的部分，越接近動詞，愈是表說話人主觀觀察語境的方式，愈是遠離動詞。這個原則台語比普通話更爲明顯，少有例外(2)。

台語的時態語跟各種語境(situation)有不同的搭配關係。不同的語境（按照語意可分只有一個時間點的動態語境，無始無終的靜態語境，和有始有終的起止語境）也因不同的時態語而有語意上的調整。例如時間補語跟"有－無，會－膾"結合時所指的語境是時間的全過程，跟回顧既往預期變化的"已經－猶未，預期變化的tih-beh【快要】"結合時所指的語境是全過程的終點，而時間語的起點可能跟動作的起點吻合（如："做三小時啊"），也可能跟動作的終點（也是變動語境的變化點）吻合（如："做煞三小時啊"）。表繼續的"猶閣"和表進行的"teh"不能帶時間補語。本文詳細地討論各種語境因結合"已經／猶未"後所引起的改變(4)。

筆者曾說普通話有關特定動作的語法範疇是過去－非過去二分法，而台語卻屬於未來－非未來二分法 (Cheng, Robert L. A Comparison of Taiwanese, Taiwan Mandarin, and Peking Mandarin, 61:2, 1985)。同文又說台語的時間關係，屬於分實現－非實現(realis-irrealis)的類型。究竟是根據時制(tense)或時態的分類，缺少系統性的交代。本文全盤探討台語裡這三種時態語和三種參照時點（reference time 指根據說話時間 speech time 而分的過去，現在，未來等不同的時間）的搭配關係，並闡明台語的時間語法範疇是根據時態而分的實現－非實現二分法，而非根據時制。前瞻未然時態一定要有"會，beh，愛"等標誌，（如：明年會去。）斷然有別於非前瞻性的回顧既往，或觀察現況。另外凡是回顧既往或觀察現況都可用"有"強調情況的存在（如："

有bat 去過 ”【 曾經去過 】“ 有teh認眞 ”【 正在認眞 】）。這種分別是時態上而非時制上的分別(5)。

各種時態和說話時間的過去，現在和將來有不同的搭配限制：台語表觀察現況的 “ 有－無 ”只能用於參照時點的過去和現在，不能用於說話時點的未來。這是時態和說話時間之間的搭配關係跟時制有部分吻合的現象：未來時點的情況只可前瞻預測，而不能當做實況強調。其他的時態語基本上都可以跟三種不同的參照時點搭配，没有語法上的限制，只有語用上的優先意義取捨。

透過比較，本文認爲普通話基本上屬於實現－非實現類型，但也有一些過去－非過去語言的特點。北京話以動詞詞尾“ 了 ”的出現與不出現表示過去和非過去的分別，在某種情況下動詞詞尾“ 了 ”幾乎是一種過去的標誌(past marker)。本文討論普通話裡的動詞詞尾“ 了 ”做爲過去標誌之適合與不適合的範圍 (5.2)。

在VO 類型的英語裡時態語傾向於出現在動詞之前的副詞和助動詞，在OV 語言類型的日語裡傾向於出現在動詞後的助動詞（ 日話是主要成分在後 (head-final) 的語言。做爲謂語的主要成分的助動詞都出現在動詞之後 ）。本文也討論這兩種時態語的類型特點在普通話，台灣話裡的共存和調整種種現象(6)。

1. 時段語 (Phase Markers) 與語境 (Situation)

時段指整個事件（ 包括動作 ）裡的某時間段落，是一個事件被觀察時那段落的情景 (situation)，也就是構成語境中決定語境與參照時點之間的時間關係的關鍵部分。

1.1 動詞後的時段語

根據上面的定義，有三個動詞前的時間語可算爲時段語又可算爲時態語，將留在下節討論。本節爲描述的方便先討論台灣話和普通話動詞後的時段語。

	臺灣話 句尾（ 賓語一定前移 ）	普通話 動詞詞尾
反覆時段	V來V去	V來V去
時做時停時段	V咧V咧	V V停停

開始時段	起來	起來
繼續時段	落去	下去
完了時段	煞	完，了
完成時段	成	成
持續時段	咧（也可視爲時態）	著
	句尾／動詞詞尾	動詞詞尾
	（賓語可能留在動詞之後）	
無法追回時段	去	掉
窮盡時段	了，完	完
經驗時段	過（也可視爲時態）	過

　　時段語在普通話裡基本上是動詞詞尾，在台灣話裡基本上卻是句尾詞。其中“起來，落去，煞，成”雖然也都跟著動詞，但如有賓語，賓語一定要前移。沒有不前移的例子。所以這些台語時段語既是動詞詞尾又是句尾詞。

1　　彼件代誌愛閣做落去。　　　　　【那件事要再做下去】

2　　伊忽然間笑起來。　　　　　　　【他忽然笑了起來】

3a　　代誌猶未做煞。　　　　　　　【事情還沒有做完】

4a　　親情一定會做成。　　　　　　【婚事一定能談成】

老年人之間上面各句中的賓語如沒有向前面移動就不合語法。

3b　＊猶未做煞代誌。　　　　　　　【還沒有做完事情】

4b　＊一定會當做成親情。　　　　　【一定能談成婚事】

但在年輕人之間，由於普通話的影響，賓語不前移的句型（V+phase+O）也漸漸開始使用（如下句5,6）。不過能夠前移賓語的情形，只限於少數時段語，很明顯是跟普通話的同形語“完，好，掉”比台語特有的時段語較容易使用新句型。這種時段語才是眞正的動詞詞尾，不能分析爲句尾詞。如：

5　　猶未做完代誌。　　　　　　　　【還沒有做完事】

6　　已經看完三本冊啊。　　　　　　【已經看完三本書了】

1.2 時段語與客體事件(event) 的相對位置與語意關係

　　如果不考慮這種新生代新起的，還不很穩固的句法現象，台灣話時段標誌一般都出現在整個客觀事體(event) 詞語的後面。動詞後的賓語，補語（包括場所，結果，程度和動量補語）算是語境的一部分詞語，也就出現在時段標誌的前面。（如下面句7-10）普通話的時段標誌則一般放在動詞之後，賓語或補語之前。表事體的詞語不聯結在一起(discontinuous)，其整體性因而被外部成分－－－時段語－－－切斷，分成兩部分。這是普通話和台灣話之間全盤性的不同。台語確實有受普通話影響的現象，但目前仍屬局部性的變化中的現象。

7	已經食三碗去啊。	【 已經吃掉三碗了 】
8	這個理論予人講眞久去啊。	【 這個理論被人講過很久了 】
9	已經看三本了啊。	【 已經看了三本了 】
10	猶閣teh 看冊咧。	【 還在看著書呢 】

　　就一般老年人而言，台灣話的 " 過 " 可以出現在賓語，補語的前面(11a-14a) 也可以出現在後面。在台北地區，除了 " 過 " 以外 " 去 " 也可以出現在賓語，補語之前(11b-14b)。在台灣南部 " 去 " 一般要出現在賓語補語之後，如句7。

11a	捌食過日本料理。	【 吃過日本菜。 】
11b	捌食日本料理過。	【 吃過日本菜。 】
12a	來美國食過頭路。	【 來美國做過事。 】
12b	來美國食頭路過。	【 來美國作過事。 】
13a	攏唔捌讀冊過。	【 都沒有唸過書。 】
13b	攏唔捌讀過冊。	【 都沒有唸過書。 】
14a	猶唔捌一日食四頓飯過。	【 從來沒有一天吃過四頓飯。 】
14b	猶唔捌一日食過四頓飯。	【 從來沒有一天吃過四頓飯。 】

　　總的來說，台灣話的時段標誌一般出現在表達客觀事體詞語的後面。

　　從語意的觀點看，客觀事體跟它被觀察那時候的時間段落 (phase)，是兩個個別姐妹結構單位(sister constituent)。可示意如下：

<pre>
                    語　境
                  (Situation)
           ┌──────────┴──────────┐
        客觀事體   事體的段落
        (Event)   (Phase)

        食日本料理   過
        看三本書   了／完
        一日食四頓飯   過
</pre>
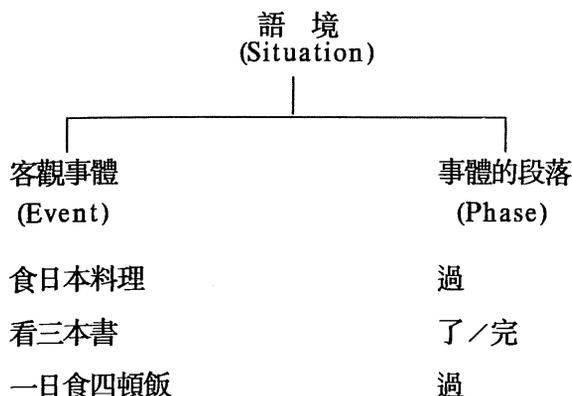
1.3　時段語與一般結果補語的異同

　　台語的時段語出現在動賓語結構的後面，這一點很類似一些結果補語的位置(15)。

15a　食飯飽

　b　送食物出來

　c　洗制服予清氣

　　但是台語的結果補語跟時段語相似，較常出現的位置是動詞之後。因爲謂語內如有賓語，賓語經常前移(如句16)。

16a　飯你愛食 hou7 飽。

　　　【飯你要吃飽】

　b　食物緊送來。

　　　【食物快送來】

　c　制服我會洗清氣。

　　　【制服我會洗干淨的】

　　並且無論在普通話或台語裡時段語和結果補語都有互相排斥(mutually exclusive)的關係，兩者不能同時出現。瞬間性時段語跟結果補語一樣可以出現在普通話的“Ｖ得Ｒ”“Ｖ不Ｒ”結構裡Ｒ的位置。台語能用爲這種形式的“中插成分”(infix)的有時態語“有，無，會，獪，tih-beh，猶未”和表致使的“hou7”（註：在語法上我

們認為動補結構是一個語法單位(constituent)，插在其中的暫稱為 infix）。這些語詞移動到時段或補語的前面表示語意重點的所在在於事件(event)的時段或結果部分而不在整個謂語事件上。（可以被顯示為語意重點的也只限於瞬間性的也就是變動性的時段語。跨類於時段與時態之間的"過"與"咧"【著】，非瞬間性的，表持續的時段語"咧"【著】，"V來V去，V咧V咧"不能被選來顯示為語意重點。）因此從句法的觀點看動詞後的時段語當然也是一種補語。

17a　食會飽。送燴來。洗有清氣

　　　　【吃得飽。送不來。洗得很干淨】

　b　做會完。看燴落去。笑燴起來

　　　　【做得完。看不下去。笑不起來】

從整個句子的語意看，兩者也有類似的地方。一個動詞加上結果補語或動態時段語，都表達事件的變換點，所以結果補語也不妨看成時段的一種。

但是時段語與一般結果補語是有分別的。結果補語描述謂語裡的施事者(如17c)或受動者(如d,e)。

17c　伊食飯食飽。伊飽。　　*飯飽。

　d　你送食物來。食物來啊。

　e　你制服 ka7 洗予清氣。制服清氣。

時段語指整個動作（如食飯，送食物）；動作開始，結束，曾經發生過，無法追回等的階段。

1.4　持續性時段語與瞬間性時段語

1.1 節所列的動詞後時段語中，頭兩個是持續性的，可以帶進行時態語"teh"【在】，如帶上時間語表動作持續的時長(句18a)。表中其他的動詞後時段語都屬瞬間性，不能帶"teh"，如帶上時間語表從時段瞬間開始的經歷時長(句c)。

18a　伊teh 看來看去，看真久。

　　　　【他在看來看去，看了很久】

　b　病人猶閣 ti7 hia (teh) 看咧看咧。

　　　　【病人還在那裡看看停停】

c　這本小說看完三小時啊。

【這本小說看完三小時了】

1.5　時段語與時態語之間的劃分

上面所列的普通話時段語一般學者都分析爲時態語。只有趙元任 (1968) 將其中的"掉，完，成"等分析爲時段補語 (phase complement)。他的理由是其他的動詞詞尾都念成輕聲，只有這些不念爲輕聲。但是其他很多官話區的輕聲情形很不一樣，在台灣話裡只有"去，咧，起來，落去"念成輕聲，不能靠輕聲來決定語意歸類很爲明顯。我們所以把這些詞語歸類爲時段最主要原因是因爲它們語意上表被觀察的時間段落，不同於表觀察方式的時態語。在語法上也多少反映兩者的不同。

1)　時段語可以再加上時態語"有－無，已經－猶未，會－艙"，前者表被觀察的語境的一部分，後者表觀察語境的方式 (Robert L. Cheng 1986)。

2)　時段語不能直接否定，也不能形成正反問句，台語裡的純否定詞是"m7好"【不好】的"m7"。時段語如"完"不能用"m7"來否定 (句19a)，也不能直接形成正反問句(b)，都需要靠較高的"動詞"（嚴格地說，是句法上的助動詞或副詞，語意上的情態語或時態語）。本文所討論的時態語本身都有正反相配合的詞語，不必靠更高"動詞"否定或形成正反問句（如 c, d, e 的"有，啊，會"等）。

19a　＊做m7完。【作不完】

b　＊kam2 做完？【做完嗎？】

c　有做完無？kam2 有做完？

【有沒有做完？做完了沒有？】

d　已經做完未？kam2 做完啊？

【已經做完了沒有？做完了嗎？】

e　會做完艙？kam2 會做完？

【會不會做完？會作完嗎？】

3)　時段語可以用時態語的位置來顯示爲語意重點 (如20a)。時態語是表觀察的，不能被顯示爲語意重點。"過"與"咧"【著】這兩個動詞後的非持續性時段語不能被

顯示爲語意重點 (20b)，也是因爲這種語意理由：本身跨類於時段與時態之間的。句c裡的咧是語氣詞不是時段語。20d 裡可以被顯示爲語意重點的 " 過 " 不是表經驗的跨類於時段與時態的時間語，而是趨向動詞。同道理，20e 裡的 " 著 " 是瞬間性時段語，等於普通話的【 zhao2 】，按照一般規律可以被顯示爲語意重點。並不是表進行的時段語【 著 】念【 zhe0 】。

20a　做有完。看繪落去。笑繪起來。哭繪煞。

　　　　【 做完了。看不下去。笑不起來。哭不停 】

　　b　＊看繪咧。＊去日本有過。

　　c　做有咧。太好咧！

　　　　【 做得了的。太好了！ 】

　　d　行繪過。講繪過。

　　　　【 走不過去。講不過去 】

　　e　chhoe7 繪著

　　　　【 找不著 】

　　　另外，有不少學者將動詞的雙疊（ 如：看看 ）分析爲時態 (Aspect) 的一種。但是我們認爲動詞的重疊無論在台語或普通話裡都跟動量關係很密切，是語境的一部分，但既不屬於時段也不屬於時態（ 鄭良偉，1980 a, b ）。

1.6 跨類於時段與時態的時間語

　　　按照上面時段和時態之間的劃分，我們決定有三個動詞前的時間語跨類於時段與時態之間：tih-beh 【 快要 】teh 【 在 】bat 【 曾經 】（ 這三個時間語將在2.2節裡討論 ）。至於跟動詞前 " 在 " 搭配的動詞詞尾 " 著 " 以及跟 " 曾經 " 配搭的 " 過 " 我們一律只歸類爲時段語。

　　　台語有兩種表時間關係的 " 咧 "。雖然都出現在動詞後，仍需分辨。一種是緊跟著動詞而表持續於某姿勢的動詞詞尾時段語的 " 咧 "(21a, b, c) 這種 " 咧 " 相等於普通話的 " 著 "，但是使用範圍窄得多。能夠跟時段語 " 咧 " 搭配的只限於可持續某姿勢於一個場所的動作動詞，其他的動詞普通話可以用 " 著 " 的，台語卻不能用對等語

"咧"(d)。

21a　請坐咧。請坐toa3 hia。【請坐著。請坐在那裡】

　b　護照愛不時chah咧。chah toa3身軀邊

　　　【護照要經常帶著。帶在身邊】

　c　M7通倒咧看冊。倒toa3椅仔頂看冊。

　　　【不要躺著看書。躺在椅子上看書】

　d　＊做咧。＊讀咧。＊讀書咧。＊食咧。

　　　【做著。讀著。讀著書。吃著】

　　第二種"咧"是表達語境和參照時段之間的關係的時態語(如句22)。這種"咧"跟動詞前的"猶未，猶閣"互相呼應，它的出現取決於"猶未，猶閣"的出現與否，而不直接取決於動詞的種類。時態語的"咧"和時段語的"咧"可同時出現在同一個謂語裡，各有不同的功能(c)。

22a　猶未食過日本料理咧。

　　　【還沒有吃過日本料理呢。】

　b　猶閣有電咧。【還有電呢】

　c　伊猶閣倒咧咧。【他還躺著呢】

1.7　從參照時點觀察的語境(Situation Viewed from the Reference Time)

a)　語境的內部結構

　　語境指從參照時點所觀察的事物的情況，如是動作的話指觀察時點被觀察的動作段落。謂語裡表達語境的部分通常是該句子除去表達時態跟描述說話者語氣的部分所留下來的部分。語境的語意分類可以根據他跟各時態的配搭關係和語意特點來分類，將在第4節裡討論。本節只先根據他的內部結構來舉例。下面的語例中凡是動詞跟動詞後面的時段(Ph)，賓語(O，沒有介詞的處所也當做是賓語。)，補語(形動以R代表，動量詞以Q代表)都表達語境。"已經…啊"(了)或"猶未…咧"(呢)是時態標誌，不是語境的一部分。

鄭良偉

台灣話語境結構	普通話語境結構
V	V
1a 死啊。	死了。
1b 猶未死咧。	還沒有死（呢）
V＋O	V＋O
2a 已經有電啊。	已經有電了。
2b 猶未有電咧。	還沒有電呢。
V＋Q＋Ph	V＋Ph＋Q
3a 食一半卡加去啊。	吃掉一半以上了。
3b 猶未食一半去咧。	還沒有吃掉一半呢。
V＋R	V＋R
4a 食飽啊。	吃飽了。
4b 猶未洗清氣咧。	還沒有洗干淨呢。
V＋R＋O	V＋R＋O
5a 已經送入去內面啊。	已經送進裡頭去了。
5b 猶未送入去內面咧。	還沒有送進去裡頭呢。
V＋R＋O＋Q	V＋R＋O＋Q
6a 已經送入去內面眞久啊。	已經送進裡頭很久了。
6b 猶未送入去內面偌久咧。	還沒送進裡頭很久呢。

b) 語境和時間關係

　　上面3a的語境由動詞，動量，和時段組成（請注意台灣話的時段“去”和普通話的時段“掉”不同的位置）。時態語（台灣話“啊”，普通話“了”）表示這個語境（吃一半以上，無法追回的時段）和參照時點（是“現在”，沒有表達出來）的關係－－－即“業已實現”。3b是3a的否定句，表示該語境（吃掉一半）還沒有實現，而非動作“吃”還沒有實現。

　　表達語境的成分越多，（從句法的角度看，也就等於修飾的成分越多）語境和時態的解釋越明確，歧義也就越少。(Huang and Davis 1989, Cheng 1978)。例如5b和

6b的語意相差很多；5b裡當事者根本沒有進去，6b裡已經進去，只是"沒有很久"。

又如下面7a有歧義，因爲動詞"睡三個小時"所表達的語境可能是睡眠經歷三個小時的語境，也可能是睡覺醒過來後經歷三個小時的語境。7b和7c沒有歧義，因爲各有補語"著"和"醒"言明"三小時"從什麼時點算起。可見"睡"這個動詞本身可能有幾個不同的時段解釋（開始，進行，結束），時段語不出現也可從上下語決定時段的解釋。（註：有些人7a沒有睡醒三個小時的意思）

7a　他已經睡三個小時了。

7b　他睡著三個小時了，可以喊醒他了。

7c　他睡醒三個小時了，需要再睡了。

表達語境的成分本應該包括當事者，施事者，受事者，但是這些語詞都經過主語化，或主題化，而不出現在時態語之後。例如句4a, b 的施事者，受事者如果出現，一般都是主語化或主題化(8a, 8b)。

8a　飯我食飽啊。【飯我吃飽了】

b　衫我猶未洗清氣咧。【衣服我還沒有洗干淨呢】

動詞前面的介詞詞組也是語境的一部分，往往出現在時態語之後。

9a　彼時我還猶未hou7 人發現。

　　【那時我還沒有被人發現】

b　公司已經將版權ka7 買起來啊。

　　【他們已經把版權買下來了】

做爲語境一部分的動詞前面的處所或時間副詞（句10的每頓，句11的逐日，句12的到處），有些情形改變位置並不影響語意，在台灣話裡往往出現在時態語之後，但是在普通話裡卻往往出現在時態語之前(句10, 11)。語境在台灣話裡形成一個整體，在普通話裡可能被時態語分開，就這些動詞前的處所或時間副詞的情形也是如此。

10　伊現在已經每頓攏洗手了才食飯啊／…已經每頓攏…。

　　【？他現在已經每次都洗了手才吃飯／…每次已經都…。】

11　我現在有teh逐日念經／我現在有逐日 teh 念經。

　　【我現在每天都在念經／＊我現在在在每天念經】

12　我現時有不時teh 到處訪問顧客。

【？我現在到處在訪問顧客／我現在正在到處訪問顧客】

有些情形改變位置就有不同的意義，台語和普通話的時態語的語序都反映一定的邏輯關係，

13　伊猶未逐位攏訪問過咧

【他還沒有每位都訪問過呢】

14　伊逐位攏猶未訪問過咧

【他每個人都還沒有訪問過呢】

c)　謂語的語法功能結構

一個句子將主語化和主題化以後所剩餘的部分就是謂語。謂語內部各成分的相互關係可示意如下：

	事體 (event)	時段 (phase)	
	…食一半	去	已經…啊／猶未…咧(3)
	…每頓攏洗手 了才食飯		已經…啊／猶未…咧(10)
	…逐位攏訪問	過	已經…啊／猶未…咧(13)
	…逐日念經	teh	有／無(11)
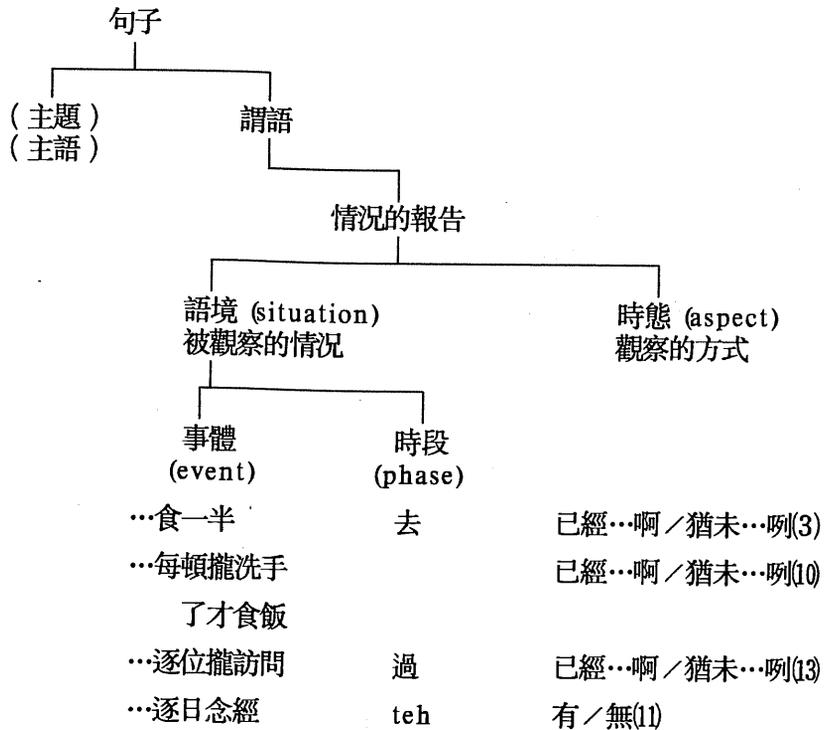
上圖主要從語意的觀點表達時段語和時態語在句子裡的關係。雖然並不等於句法的深層結構(deep structure) 或功能關係(functional relation)，但應該跟它有一定的關係。

2. 時態(Aspect)──觀察時境的方式(Way of Viewing the Situation)

時態是參照時點和語境的時間關係，也就是從參照時點觀察語境的方式。

表達時態的語詞如按照句法特徵可分三類：出現在動詞前面的副詞或助動詞（台灣話的＂已經，猶未，猶閣，捌，呣捌，有，無，teh，tih-beh＂，普通話的＂已經，還沒有，還，曾經，沒有，在，快要＂）和出現在動詞後面的動詞詞尾（普通話的著，了），以及出現在賓語補語後面的句尾詞（台灣話的＂啊，咧＂，普通話的＂了，呢＂）。當中將表達語境的謂語分開的是動詞詞尾的＂著，了＂。

2.1 時態語語意三分法

如按照語意可分下面三類：

a) 既往的回顧(Retro-spective)

1a	已經會啊	【已經會了】
1b	猶未來咧	【還沒有來呢】
2a	猶閣 ti7 遐咧	【還在那兒呢】
2b	已經無 ti7 遐啊	【已經不在那兒了】
3a	捌來過	【（曾經）來過】
3b	呣捌試驗過	【從來沒有試驗過】

b) 現況的觀察(Synchro-spective)

4a	有食小可。	【吃了一點兒】
	（普通話只限於參照時點是過去時）	
4b	無食偌濟。	【沒有吃多少】
5a	有 teh 看冊。	【在看書呢】
5b	無 teh 看冊。	【沒在看書】
6b	ti7 遐倒咧。	【在那兒躺著】
7	teh 戴帽仔。	【在帶帽子】

c) 未來的前瞻(Pro-spective)

8a	tih-beh 來學校啊。	【快要來學校了。】

8b 　　　猶未beh 來學校咧。

9 　　　beh 明仔載去一choa7。 　　　　　　　【 要明天去一趟。 】

10a 　　卡停仔會落雨。 　　　　　　　　　　【 等一會兒會下雨。 】

10b 　　下晡燴落雨。 　　　　　　　　　　　【 下午不會下雨。 】

　　漢語的時態語表達語境跟參照時間的各種關係。它們跟時制（ tense 即根據說話時點所分的過去，現在，和未來 ）的關係表示在表1。這些時態語的句法特點很複雜，有的是助動詞可以單獨出現，構成A 非A 問句；有的是副詞，動詞詞尾，句尾詞，不能單獨出現。就出現在句子裡的相對位置（ 參看表2 ）而言，雖然有出現於比時段較外面的傾向，但它們有時可以共現，沒有一致的句法特點。下面討論時態語與時段語之間的相對位置，劃分與跨類問題。

表 1 台灣話和普通話的時態語與說話時間的關係

時制 / 時態	$\frac{S}{R}$ 過去 台灣話 普通話		$\frac{S}{R}$ 現在 台 普		$\frac{S}{R}$ 未來 台 普	
回顧既往　retro-spection						
R之前已否變化？	已經啊　　已經了 (had already)		如左 (has already)		如左 (will have already)	
	猶未咧　　還沒呢 (had not yet)		(has not yet)		(will have not yet)	
R時還在繼續嗎？	猶閣咧　　還在呢 (was still)		如左 (is still)		如左 (will still be)	
	已經無啊　已經不了 (was no longer)		(is no longer)		(will be no longer)	
R之前有否經驗？	捌　　　曾經 (had ever)		如左 (has ever)		如左 (will have ever)	
	唔捌　　從來沒有 (had never)		如左 (has never)		如左 (will have never)	
觀察現況　synchro-spection						
R內發生嗎？	有,0　　…le (did)		有,0　　　0 (does)		*　　　　* (will)	
	無　　　沒有 (did not)		如左 (does not)		如左 (will not)	
R時進行嗎？	teh　　在…著 (be…ing)		如左		如左	
	無teh　沒／不在 (be not…ing)		如左		如左	
前瞻未來　pro-spection						
R後即將發生嗎？	tih-beh　快要 (was about to)		如左 (is about to)		如左 (will be about to)	
R後將會發生嗎？	會　　　會,0 (would)		如左 (will, shall)		如左 (will, shall)	
	獪　　　不會 (would not)		如左 (will not)		如左 (will not)	

S＝說話時點　R＝參照時點　0＝零標誌，即不用詞語表達。

2.2 觀察方式和被觀察的語境

漢語界的學者有不少人提過漢語的語序反映語意結構的時間或空間關係 (Tai 1989, Hsieh 1989, Cheng 1989)。本文所討論的表達時間關係的謂語諸成分之間的語序，頗能反映說話人觀察方式跟被觀察語境之間的語意關係。時態語表說話人對語境的觀察方式。語境是被觀察的情況，語法上通常是謂語除去時態語之後所剩餘的部分，由動詞及其賓語，內狀語，數量，程度，結果和時段補語組成。表被觀察的語境部分經常結合在一起，不被切斷，表觀察方式的時態部分，出現在整個語境的前面或後面。在語意上等於一種較高動詞(higher verb)，表達從參照時點觀察語境的各種方式。

a) 三個跨類於時段語與時態語的動詞前時間語

這裡值得注意的問題是漢語裡時態和時段是否已經形成兩個界線分明的語法範疇。筆者已經在另文討論時態和時段的關係和界線 (1985-6)。本文也在第2第3各節裡分別討論時段語和時態語的語法特點和語意特點。各類都有一定的語意，並且在同位置出現的同類時間語有互相排斥的所謂 paradigmatic relation。較有問題的是下面三個在句法上語意上又像時態語和又像時段語的時間語。本文將他們處理為跨類於時段和時態兩類的時間語。這樣不但能照顧這三個時間語的語意與句法特點，也能將其他的時間語就時態和時段的語意和句法特點，歸類得十分清楚。

觀察現況中表進行的 "teh"【在】，前瞻未來中表即將發生的 "tih-beh"【快要】，以及回顧既往中表過去經驗的 "bat…過"【曾經／從來没】，可以跟時段語同時出現而具有時態語表達觀察語境的功能，

1a	小妹 teh 看來看去。	【小妹妹在看來看去】
b	我所有的學校攏 m7-bat 讀完過。	【我所有的學校都沒有讀完過】
c	我大學 tih-beh 讀完啊	【我快要讀完大學了】

也可跟 "有，已經，會" 等時態語同時出現，構成被觀察的語境的一部分。

2a	已經 teh 上課啊	【已經在上課了】
b	已經 tih-beh 行三小時啊	【已經走了快三小時了。】
c	已經教三節課過啊	【已經教過三節課了】

又可跟時態語和時段語兩者同時出現

3a   已經 teh 跳來跳去啊   【已經在跳來跳去了】

 b   已經 tih-beh 看完啊   【已經快要看完了】

 c   已經 bat 讀完一間學校過啊   【？已經讀完過一個學校了】

　　跟動詞前的"bat"【曾經】，"m7-bat"【從沒】對應的動詞後的"過"可以單獨表經驗，我們分析爲時段語。普通話跟動詞前"在"表呼應的"著"可以單獨表進行，並且在某種情況下又有語意劃分的現象（"在帶帽子"有別於"帶著帽子"）。我們也只分析爲時段語。但正如已經提過，"過"和"著"不能出現於"V了R" "V不R"可能動補結構裡，也有別於其他的時段語。這兩個動詞後時段語的特點跟所呼應的動詞前的時間語跨類特點不能說沒有關聯(1.3節)。

b) 謂語中各成分的排序

　　謂語之內各成分間的排序原則是：語詞越是表客觀上被觀察的情況的部分，越接近動詞，愈是表說話人主觀觀察語境的方式，愈是遠離動詞。這個原則台語比普通話更爲明顯，少有例外。

　　我們看表2a各位置的詞語就是根據這個語意排序原則：（表2a在201頁）

5:    情態(modality)的位置，表達說話者對命題的態度。

4:    時態的位置，表達說話者觀察語境的方式。

3:    時態／時段的位置，跨類於時態和時段的三個時間語的位置。

1:    能願助動詞的位置，表達被描述客體的能力意願。

0:    動詞的位置。

-1a: 華語時段的位置，也是台語部分時段語的新位置。

　　　表達客體情況被觀察時的時間階段。

-1b: 賓語或動量的位置，表達受事者或動作的數量情況。

-2:   台語時段的舊位置。

-4:   時態的位置，表達說話者觀察語境的方式。

　　這些位置以動詞爲中心(0)絕對值越高，越離開動詞。動詞和動詞週圍的位置(0,1,-1,-2)表達被觀察情況（語境）的語詞。愈是離開動詞，絕對值愈高，愈是描述

說話者的情況：說話者觀察語境的方式（即表參照時點跟語境之間的時間關係）的時態語在較外面的位置(4,-4)，表說話者對事件的推測，命令，意願的情態語在最外面(5)，大部分是助動詞，有少數（如：必定）是副詞。又可表示時段又可表示時態的三個時間語就在位置3。

　　有幾個台語時態語與情態語可以出現在動詞之後，時段語或補語之前。這種排序現象沒有表現在表2a上。

c) 普通話排序的一般原則和特殊情形

　　如表2b所示，普通話的時態語除了表觀察過去情況的動詞詞尾"了"以外，都出現在表語境的謂語的開頭(4)或收尾(-4)。觀察過去情況的"了"是動詞詞尾，有別於業已發生的句尾詞的"了"。前者經常出現在位置-1a，如果-1a已經有時段語就在時段語之後（如：洗干淨了衣服。看完了兩次）。但如有趨向動詞補語，就出現在兩者的中間（如：他突然跑了進來）。這可能是因爲趨向動詞仍有場所趨向補語的語意作用（跑進屋裡來。跑到學校來）。

　　綜合時段語和時態語的出現在句子裡的位置，台語和普通話之間主要的不同在於台灣話的時段語傾向於出現在數量或動作詞語(1, 0, -1b)的外面(-2, 3)。惟有些時段語趨向於從舊位置-2，移到新位置-1a。時態語一定在語境的外面(4, -4)。普通話雖然大約遵循這個原則，但是時段語"了，著，過，完，掉"等出現在-1a的位置，而不在古漢語或台語的位置2。[5]表過去情況觀察的時態語"了"出現爲動詞詞尾，後面可能還有賓語或動量語。時段語，時態語"了"出現在-1a都是動詞詞尾的情形。

　　普通話的情態語和時段語除了"呢"以外，原來都是動詞（太田 1958），出現爲動詞詞尾，在結構成分上等於動詞加動詞的複合詞。從句尾的位置前移而跟動詞結合可能跟普通話動詞動補複合詞的增加和句法局部整齊化的趨勢有關。普通話的音節少（1千1百多），複合詞多，詞法和詞法有關的句法演變也比較快。台灣話的音節數目多（2千2百多），比普通話多出一倍，VV動補複合詞增加速度不如普通話快，VOV變成VVO的句法整齊化的壓力也就不如普通話。

5　王力(1958)，梅祖麟(1987)，太田(1958)，都根據古代資料，證明"過，了"等原先的位置在賓語之後。

表2a　台灣話時態語和時段語的相對位置

				語境					
				客觀事體					
5	4a(-4)	4b	3 (-2)	1	0	{-1a}	-1b*	-2	-4
情態	時態	時態／ 情態	時態／ 時段	能願	動詞	{時段}	動量 賓語	時段	時態
是	已經(啊)	有	bat(過)	嗵		{過}	十擺	過	啊
嗯是	猶未(咧)	無	tih-beh	會曉		{去，掉}	一點鐘	去，掉	咧
會	猶閣(咧)			可能		{完}	三頁	完	
艙	已經無(啊)		teh	愛beh		{了}		了，煞	
應當				會當				起來	
應該				會				落去	
著愛								好	

括號（　）內的詞不出現在本欄內，而出現在該欄括號內所指定的位置。

* 動量和賓語如果同時出現，即賓語移動到動詞的前面，或是以 "動量（的）賓語" 的形式出現。

{　}內的詞只出現於部分年輕人的語言中。

表2b　普通話時態語和時段語的相對位置

5	4a(-4)	4b	3 (-1a)	1	0	-1a	-1b*	-2	-4
情態	時態	時態／ 時段	時態／ 時段	能願	動詞	時段／ 時態	動量 賓語		時態
是	已經(了)	(了)**	曾(過)	可以		過	十次		了
不是	還沒有(呢)	沒有	快要	會		下去	一小時		呢
會	還(呢)		將	能		起來	三頁		來著
不會	已經不(了)		正在／	要		著			
應該			在(著)	能夠		完，了，掉			
必定						好			

括號（　）內的詞不出現在本欄內，而出現在該欄括號內所指定的位置。

* 動量和賓語如果同時出現，即賓語移動到動詞的前面，或是以 "動量（的）賓語" 的形式出現。

** "了" 出現在動詞之後時段之前（位置-1a）

　　值得一提的是台語的謂語，如果沒有名詞插在裡頭，位置5到位置-2的謂語形成一個連音變調組：-2和-4之間經常有語音停頓，時段與時態的語意分別反映在語音停頓上。-1b是名詞性詞語的位置，如出現，其最後音節不變調，前面都有連音變調。動詞和賓語或動詞和動量語的密切關係由此可知。

　　表2給我們的另一個啟示是謂語內部結構混合 head-initial 和 head-final 的特點，語意主要成分位在兩端，非主要成分在中間 (non-head-centered) 的特徵。這跟漢語的句子裡較大單元的SVO head-centered 的語序恰好相反，主語－謂語是 head final，動詞賓語是 head-initial，整個SVO的語序，應屬於主要成分在中間的類型。

2.3　普通話表完了的時段語"了"與觀察全貌現況的時態語"了"

　　從表2b可看到普通話的"了"出現在三個地方：表完了的時段語"了"（在位置-1a），全貌現況的觀察 (perfective) 的時態語"了"（其否定語"没有"出現在位置4b，肯定語"了"出現在位置-1a或-1a之後-1b之前），以及表變化業已發生的"了"（在位置-4）。這三種不同的"了"在台語裡各用不同的詞，分別為"了，煞，掉"，"有"和"啊"。前面兩種"了"因為可能出現在"V了O"相同的形式裡，許多有關"了"的著作多半不加以分別。我們認為從語意的觀點看，兩者需要分別，不然無法瞭解兩者在英語或台語裡的對等語。也無法解釋許多普通話的句法現象。下面舉出兩者在普通話句法特點上的不同。

　1)　觀察全貌現況的"了"可出現在時段語的後面，或是趨向動詞的前面，完了時段的"了"不能。下面各句的"了"是觀察全貌現況的"了"。

　1a　【他作完了功課。】

　　　　伊有作完功課。

　b　【鮮紅的血液從傷口流了出來。】

　　　　紅紅的血有對從傷口流出來。

　c　【樹上掉下來了一個蘋果。】

　　　　對樹頂有一粒蘋果lak落來。

　d　【他掉下了眼淚。】

伊目屎 lin3 落來。

2) 觀察現況全貌的"了"不能用於表習慣動作的副詞"每天""經常"(2a)，表完了的"了"可以 (b)。

2a　　【我每天都看（ ＊了）書。】

　　　　我逐日攏有看冊。

　b　　【我每天都看了書才睡覺。】

　　　　我逐日攏冊看了才睏。

3) 觀察現況全貌的時態語"了"不能用於祈使句(d)。與"掉"同意義的時段語"了"可以。下面各句裡的"了"都是後者的"了"。翻譯爲台語都不用觀察全貌的"有"。

3a　　【忘了他吧。】

　　　　Ka7 艙記得啦。

　b　　【別扔了那張紙。】

　　　　紙媛 tan3 掉。

　c　　【你可以關了收音機。】

　　　　收音機你會使關掉。

　d　　〔 ＊請做事了吧〕

　　　　＊請有做代誌。

4) 表完了的時段語"了"可以用在過去現在或未來各種參照時間環境裡(4a)。表現況全貌的"了"只能用於過去參照時間裡(b)。

4a　　【你明年畢了業以後，就可以出國。】

　　　　你明年畢業了，就會使出國。

　b　　【 ＊你明年畢了業。】

　　　　＊你明年有畢業。

5) 表完了的時段語"了"可以用時態語"會，不會，沒有，還沒有"(5a, b, c)。表觀察全貌現況的"了"不能(d, e)。

5a　　【我沒有洗了手才去。】

　　　　　　我無洗手了才去。

　　b　【我會洗了手才再去。】

　　　　　　我會洗手了才去。

　　c　【我還沒有忘了你。】

　　　　　　我猶未ka7 你𣍐記得去。

　　d　【＊我會洗了手。】

　　　　　　我會洗手有洗了。

　　e　【＊我沒有洗了手。】

　　　　　　＊我無洗有手。

　6）跟"掉"同意義的時段語"了"可以出現在[V 得／不R]結構裡，發音爲【liao3 】，觀察現況全貌的"了"沒有這種用法。

　　6　【忘得了。關不了。】

　　　　𣍐當𣍐記得去。關𣍐去。

　7）表完了的時段語"了"不能刪去而不改變句子的意義。表觀察現況全貌的"了"在一些情況下（因地而異，也應結構而異）可以刪去而不改變句子的意義。台語需翻譯爲"有"，不能翻譯爲"了"。

　　1a　【他作完（了）功課。】

　　　　　　伊有作完功課。

　　b　【鮮紅的血液從傷口流（了）出來。】

　　　　　　紅紅的血有對從傷口流出來。

　　c　【樹上掉下來（了）一個蘋果。】

　　　　　　對樹頂有 lak 落來一粒蘋果。

3. 回顧既往的時態語

3.1 表示回顧既往時態語

a) 四種回顧既往的時態和時態語形式變化

業已發生時態：既往所預期的變化，在參照時點是否業已發生。

　　1a　已經：　　　　　我已經退休。　　　　已經退休的人才有資格。

b	已經…啊：	我已經退休啊。	?已經退休啊的人才有資格。
			【＊已經退休了的人才有資格。】
c	啊：	我退休啊。	＊退休啊的人才有資格。
		【我已經退休了】	【已經退休的人才有資格】
2a	猶未：我猶未退休。		猶未退休的人才有資格。
b	猶未…咧：	我猶未退休咧。	＊猶未退休咧的人才有資格。
			【＊還沒有退休呢的人才有資格】
c	咧：	＊我退休咧。	＊退休咧的人才有資格。
	【我還沒有退休】		【還沒有退休的人才有資格】

　　動詞前的時態語和句尾的時態語兩者之間有意義大約相同的情形（如："已經"和"啊"【已經】和【了】），和意義不同的情形（如："猶閣"和"咧"【還】和【呢】，"猶未"和"咧"【還沒有】和【呢】）。肯定句在句尾的謂語裡，只用"啊【了】"的情形（如句1b）多於只用"已經"的情形（如句1a）。在否定句裡，要表達意義需要靠動詞前的否定時態語。句尾的"咧【呢】"不能單獨表達仍然尚未實現（句2）或繼續的意義（句3c）。謂語前和謂語後的時態語主要的同現作用在於加強語意（句b）。

　　句尾時態語的出現通常不在關係子句等非句尾子句裡出現。句尾時態語，"啊"和"咧"，也兼有語氣的功能。這可能是因為只出現於句子末尾的其他句尾詞（如：lah, neh, koh, noh）最常見的功能是表達語氣。經驗時態語"過"的情形很不一樣。可以在關係子句裡出現。只有時態意義，沒有語氣意義。

　　繼續既往情況時態：既往的情況在參照時點是否仍然繼續不變。

3a	猶閣：	猶閣有電	猶閣有電的所在。
b	猶閣…咧：	猶閣有電咧	＊猶閣有電咧的所在。
		【還有電】	【還有電的地方】
c	…咧：	＊有電咧。	＊有電咧的所在。
		【＊有電呢】	【＊有電呢的地方】
4a	無閣：	無閣有電	

b	無閣再：	無閣再有電	
		【 ？不再有電 】	
c	已經無：	已經無電。	已經無電的所在。
d	已經無…啊：	已經無電啊。	？已經無電啊的所在。
e	無…啊：	無電啊。	？無電啊的所在。
		【 已經沒有電了 】	【 已經沒有電的地方 】

不斷延續既往情況時態：既往情況是否一直不斷地延續到參照時點。" 一向 "用於較長期習慣的延續。" 一直 "用於短暫動作的持續。

5a   一向攏是按呢。

【 一向都是這樣 】

b   一直攏teh 做作業。

【 一直都在做作業 】

c   一向攏m7：一向攏m7 是按呢。

【 一向都不是這樣 】

d   一直攏無：一直攏無teh 做作業。

【 一直都不在做作業 】

e   無一向攏：無一向攏是按呢。

【 不是一直都是這樣 】

f   無一直攏：無一直攏teh做作業。

【 不是一直都在做作業 】

經驗時態：一直到參照時點爲止事件有否發生過。

6a	bat：	bat去日本。	bat 去日本的人。
b	bat…過：	bat去日本過。	bat 去日本過的人。
c	過：	去過日本。	去過日本的人。
		【 去過日本 】	【 去過日本的人 】
6a	m33－bat：	m7－bat 去日本。	
b	m33－bat…過：	m7－bat 去過日本。	
		【 没去過日本 】	

　　這四種回顧既往的時態都有肯定和否定形式，都有動詞前的副詞或助動詞 (a 句)，以及動詞後詞尾詞或句尾詞 (c 句)。有時動詞前和動詞後的時態語還可同時出現 (b 句)。

　b) 回顧既往的參照時點

　　回顧既往的觀察語境可以在說話時間的過去，現在，或未來三種不同的參照時點進行。

1a　　一禮拜前，我已經離開啊。

　b　　現在，我已經離開啊。

　c　　一禮拜後，我就已經離開啊，彼陣你就看我𣍐著啊。

1a　　【一禮拜前，我已經離開了】

　b　　【現在，我已經離開了】

　c　　【一禮拜後的這個時候，我已經就離開了；那時候，你就看不到我了】

1a　　I had left a week ago.

　b　　I have left.

　c　　I shall have left by a week from now and you won't be able to see me then.

2a　　一禮拜前，我猶未離開咧。

　b　　現在，我猶未離開咧。

　c　　後個月，我猶未離開咧，你猶閣看我會著。

2a　　【一禮拜前，我還沒有離開呢】

　b　　【現在，我還沒有離開呢】

　c　　【下個月，我還不會離開呢，你還可以看到我的】

3a　　十年前，阮老師就 bat 出國過。

　b　　阮老師 bat 出國過。

　c　　三年後阮老師就 bat 出國過啊，一定會當教你按怎申請。

3a　　【十年前，我們老師就出過國】

　b　　【我們老師出過國】

　c　　【三年後我們老師就出過國了，一定能夠教你怎樣申請】

4a　十年前，阮老師猶 m7-bat 出國過。

 b　目前，阮老師攏猶 m7-bat 出國過。

 c　三年後阮老師嘛猶 m7-bat 出國過，無可能教你按怎申請。

4a　【十年前，我們老師還沒有出過國】

 b　【目前，我們老師都還沒有出過國】

 c　【三年後我們老師仍然還沒有出過國，不可能教你怎樣申請】

　　從上面的例句可以看出台灣話回顧既住的標誌，跟普通話一樣，可以跟說話時間點的過去，現在，未來搭配，也不因為這些不同的說話時間前後的參照時間來改變回顧既往的標誌。這一點跟英文等表達時制(tense) 很不相同（請看句1a, b, c 的英語翻譯）

　　至於"一向攏""一直攏 teh "雖然跟未來時間搭配時，句子變化多端，但也不需要改變這些時態語的形式。

5a　到明年(ma7)（猶）（會）一向攏是按呢。

　　【一向都是這樣】

 b　到一小時後，《(ma7)（猶）》一直攏 teh 做作業。

　　【一直都在做作業】

 c　一向攏m7：到明年 (ma7)（猶）一向攏 m7 是按呢。

　　【一向都不是這樣】

 d　一直攏無：到一小時後 ma7 一直攏無 teh 做作業。

　　【一直都沒在做作業】

 e　獪一向攏：獪一向攏是按呢。

　　【不是一直都是這樣】

 f　無一直攏：無一直攏 teh 做作業。

　　【不是一直都在做作業】

4.　四種語境(Situation) 和已否發生時態的意義

　　是否業已發生時態語的主要語意是：到參照時段為止先前所預期的變化是否業已發生。包括兩個共同點：1) 在參照時點回顧先前曾有情況將要變化的預期。2) 在參照時

點回顧所預期的改變是否業已發生。這個主要時態語意，因爲不同的語境而各有不同的附加意義，主要牽涉被觀察的語境因爲跟"已經""猶未"結合而改變原來的語意。

變化已否發生既然是"已經／猶未"的前提，那麼表達不改變，或表達兩個時間點的語境能否跟"已經"或"猶未"結合？答案是肯定的。那麼這類語境跟時態語"已經""猶未"結合時有什麼意義上的改變？答案是：表達不變動狀態的謂語跟"已經""猶未"結合時變成表達進入該狀態的變化，表達兩個時間點的謂語，變成只有一個變化時間點，就是結束的時間點，整個謂語所表達的時間關係就是這個結束時間點和參照時間點之間的前後關係。

爲了要解釋這種語境因爲結合"已經"或"猶未"而引起的意義上的改變，我們把語境分成四類：經過改變的動態語境，不經過改變的靜態語境，表達兩個時間點的起止語境，和時間經歷語境。前兩種語境各簡稱爲變動語境和不變動語境。

變動語境 (dynamic)：有一個時間點，就是發生變化那瞬間。因爲現況觀察是可以觀察到整個變化的全貌，也可成爲單點全貌語境。下面的示意圖，以"C"(Change) 表示變化。以"@"表在特定的範圍內沒有變化 (absence of change)。

C	離開（從【在這裡】改變爲【不在這裡】）。死。
C__	笑起來。 對三點做起。【從三點做起】
___C	做完。做到三點。
___C+++	食飽【吃飽】。 洗清氣【洗干淨】
@	無離開【沒有離開】。無死【沒有死】

不變動語境 (stative)：沒有變化點；也就沒有時間點，既沒有開始點也沒有結束點。以一條橫線表示。因無法觀察到全部面貌，也可稱爲非全貌。

_____　　　有電。teh 讀書。眞緊張。

起止語境：有兩個時間點；一個開始點，一個結束點。各以豎線"｜"表示。

再分兩種情形：一種是謂語語境所指的是動作的開始點和結束點。

｜_____｜　　讀三擺。 讀三本書。讀這本書。

另一種是謂語語境所指的是時間的開始點和結束點。

｜_____｜　　讀三小時。 讀眞久。

鄭良偉

　　這三種語境中在觀察現況的方式下，變動和起止語境可看到全貌，不變動語境不能看到其全貌。在普通話裡只有變動和起止語境才能用表觀察現況的動詞詞尾時態語 (perfective) "了"（如【笑了起來。讀了三本書。】）。不變動語境不能用這種"了"【＊在了學校裡。】台語裡三種語境都可用"有"強調語境的存在。

4.1　變動語境

　　表動態語境的謂語所表達的就是改變，加上時態語"已經"之後仍然表改變，在參照時點裡動詞的動作已經不在進行，但是動作的結果，也就是改變後的狀態在參照時點仍然繼續存在。

　　否定時態語"猶未"表所預期改變尚未發生(下面句1a)，"猶未"有別於筆者另文(1991 ms)所討論的"沒有發生"的"無"(下面句1b)。從客觀情況看，兩者所表的情況都沒有發生，但從說話人主觀觀察方式看，"猶未"牽涉到先前有過情況將要改變的預期，因為有這種先前的預期所以屬於一種過去的回顧。這個預期在參照時點還存在（請比較下面1a和1b的示意圖）。"無"沒有這種預期，是純粹對參照時間內的現況觀察，沒有曾經預期過的回顧，也不暗示參照時點裡仍有這種預期。

　　本文所指的變動語境，由下面各種成分組成。都不能加進行時態"teh"，如果加時間語所指的時間是從變化到參照時點的時長。（可加 teh 的動詞，如加 teh 就變，不變動語境，請看下節4.3）

  a)　單純變化

　　下面的例子謂語由瞬間動詞(momentary verb)形成。

　　" ＞ $ "　表變化的預期。

　　" $ "　　表所關注的業已或尚未發生的變化。

　　RT　　　表參照時間(reference time)

1a　伊已經離開啊。　　　　伊猶未離開咧。

　　【他離開了。　　　　　他還沒有離開。】

> $　　　　　　RT　　　 > $　　　RT

　　　　$　　　|　　　　　　　|　　$

英：He has left.　　　He has not left.

日：Kare wa hanare ta.　Kare wa mada hanare te inai.
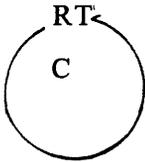
b（　伊有離開。　　　　伊無離開。）

　　【他離開了。　　　　他没有離開。】

　　　　RT　　　　　　　RT

　　　　　C　　　　　　　@

英：He left.　　　　　He did not leave.

日：Kare wa hanareta.　　Kare wa hanarenakatta.

c　病人已經死啊。　　　　　　病人猶未死咧。

　　【病人以經死了】　　　　　【病人還沒有死呢】

d　文件已經開始寫啊。　　　　文件猶未開始寫咧。
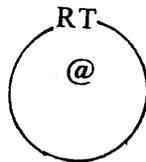
　　【文件已經開始寫了】　　　【文件還沒有開始寫】

　　需要一提的是1a 1b的肯定句在普通話用同形式表達。但是1a的"了"是句尾詞，1b的"了"是動詞詞尾的"了"。普通話的肯定句用同一個形式表達，否定句卻用不同的形式，這一點很類似日語。台語兩句各用不同的形式表達，這一點類似英語。如果，動詞後有賓語，句尾詞的了的出現形式是【VO了】(句1a)，動詞詞尾了的出現形式是【V了O】。兩者因不同的位置而有所分別(句f)。

e　【寫兩件了。抽煙了。】

f　【寫了兩件。抽了煙。】

　　變動語境帶"已經／猶未"以英語的 perfect aspect (have/had…en)，日語的ta/te inai 表達。

b) 完成動作某階段的變化

下面例子都含有動態時段 (non-stative phase) 語。這些動態時態語同時也都是非重複時段 (non-iterative) 語，表達某事體(event) 不同的階段。

2a　文件已經寫好啊。　　　　　　　　文件猶未寫好咧。

　　【文件已經寫好了】　　　　　　　【文件還沒有寫好呢】

　b　代誌已經做煞啊。　　　　　　　　代誌猶未做煞咧。

　　【事情已經作完了】　　　　　　　【事情還沒有作完呢】

　c　彼句話已經hou7 伊講去啊。　　　…猶未hou7 伊講去咧。

　　【那句話已經讓他給說過了】　　　【還沒有讓他給說過】

　d　這個理論已經有人討論過啊。　　　…猶未有人討論過咧。

　e　天氣已經冷起來啊。　　　　　　　天氣猶未冷起來咧。

　　【天氣已經冷起來了】　　　　　　【天氣還沒冷起來呢】

c) 完成或進入動作結果的變動

下面的例子都有一個表達動作的動詞，和表達結果的補語，形成一個動補結構 (resultative constructoin)，補語部分可能動詞 (verb) 或形容詞 (adjective)。(a-c) 變化點既是動作的結束點又是補語狀態的開始點。

3a　伊已經睏醒啊。　　　　　　　　　伊猶未睏醒咧。

　　【他已經睡醒了】　　　　　　　　【他還沒有睡醒呢】

　b　文件已經發出去啊。　　　　　　　文件猶未發出去咧。

　　【文件已經發出去了】　　　　　　【文件還沒發出去呢】

　c　我已經食飽啊。　　　　　　　　　我猶未食飽咧。

　　【我已經食飽了】　　　　　　　　【我還沒有食飽呢】

也可能是一個介詞結構（K＋NP）（d－e）或是連接詞加子句的結構(f, g)

　d　讀到第三頁啊。

　　【讀到第三頁了】

　e　吊 ti7 壁頂啊。

　　【吊在墙壁上了】

　f　做了逐人攏滿意啊。

【做得每個人都滿意了】

g　寫著手攏繪振動啊。

【寫得手都不能動了】

變動和不變動語境是語意上的分類，但是多少反映在語法結構上。動補結構不管補語是動態(-stative)或靜態(+stative)一律歸類於變動，助動詞謂語和 teh 謂語一律歸類於不變動語境。動詞和時段語分類情形如下：

d)　變動語境的內部結構

動補結構：食飽，看清楚，解決甲眞好勢【解決得很順利】。寫ti7書內【寫在書裡】。寫甲眞好【寫得很好】。

瞬間(momentary)動詞：都歸在這一類，分隨意(active)和非隨意(non-active)：

隨意：到，來，去，停，入，離開

非隨意：死，煞【完】，lian【枯】，破，裂，脆，醒，閃

變動時段語：寫完，檢查了【檢查完】，寫煞【寫完】，看著，看見，交代好，笑起來，寫落去，去過。

介詞結構：表動作的開始點或結束點。

讀到第三頁。

對第三頁讀起。【從第三頁念起】

4.2　不變動語境

表狀態，進行，重複，習慣等等靜態語境的謂語加上時態語"已經"所附加的意義是發生變化，進入新情況，也就是從沒有該靜態謂語所表達的情況進入該靜態謂語所表達的新情況(inchoative)，而這新情況到參照時點爲止仍然在繼續。變化的發生實際上可能是一個緩慢的過程，但是在語法範疇上一律被看成爲一個變化點，跟瞬間上的改變同等看待。構成被觀察的語境部分是不變動的狀態。構成觀察方式的時態部分的"已經"所表達的意義是將不變動的狀態看成新出現的狀態。同義語"啊"【了】"已經…啊"【已經了】都有這個語意功能。

否定時態"猶未"表達尚未進入所預期的新情況。

鄭良偉

　　從英文的 aspectual system 看，這類語境跟肯定式 " 已經 " 搭配時，不能用 perfect aspect，否定式也不用他。英語的 perfect aspect，主要的語意在於過去的情況是否繼續到參照時點，而漢語的 " 已經 " 的意義在於變化是否業已發生。英語如將 perfect aspect 用於不變動語境，漢語的對譯語不用 " 已經／猶未 " 形式 (4a)。

4a　人一直攏 ti7 醫院裡。　　　　　　人到 taN 攏無 ti7 醫院裡。

　　【人一直都在醫院裡。】　　　　　　【人一直都不在醫院裡。】

　　He has been at the hospital.　　　　He has not been at the hospital.

　　漢語的不變動語境加上 " 已經 " 翻譯成日語為 mou...ite iru/ita；加上 " 猶未 " 為 mada-ite inai/inakatta.

a) 進入新狀態

　　由某狀態不存在進入存在的狀態上的改變。

　　　　　進入新狀態　　　　　　　尚未進入新狀態

4b　人已經 ti7 醫院啊。　　　　　　人猶未 ti7 醫院咧。

　　【人已經在醫院了。】　　　　　　【人還不在醫院裡呢。】

　　He is at the hospital now.　　　　He is not at the hospital yet.

c　五分鐘前無電，

　　現在已經有電啊。　　　　　　　　現在嘛猶未有電咧。

　　【五分鐘前沒有電，

　　現在已經有電了。　　　　　　　　現在還是還沒有電呢】

　　　　　RT

　　　－－－－－　　　　五分鐘前無電

　　　　　RT

　　　－－－－－　　　　五分鐘前無電，

　　＞＄　　　　　　　RT　現在已經有電啊。(4c)
　　　　　　＄＋＋＋＋｜

```
        RT
     ──────
> $            RT        五分鐘前無電，現在 ma7 猶未有電咧。(4c)
  ────── | ── $ + + +
```

d   以前對你有誤會，現在

已經眞尊敬你啊。   嘛是猶未眞尊敬你咧。

【 已經很尊敬你了。   還是還不很尊敬你 】

e   老師已經燴不時罵我啊。   老師猶未燴不時罵我咧。

                                  （ ＝猶閣會不時罵我 ）

【 老師已經不常常罵我了。   * 老師還沒有不會常常罵我呢 】

                                  （【 ＝還會常常罵我 】）

b) 進入新習慣

在漢語裡習慣動作的語法行爲，屬於不變動的語境，它的語意特點是表達非特定動作，常常帶 " 不時【 常常 】，逐日【 每天 】，三不五時仔【 偶爾 】" 等時間副詞，甚至時態語 " teh "。

表習慣的動詞一般是行動動詞 (action verb in the habitual state)

5a   伊已經有 teh 食牛肉啊。   伊猶未有 teh 食牛肉咧。

【 他已經吃牛肉了 】   【 他還不吃牛肉呢 】

b   我已經 teh 讀大學啊。   我猶未 teh 讀大學咧。

【 我已經在念大學了 】   【 我還沒有讀大學呢 】

c   我已經逐日 teh 啉酒啊。   我猶未逐日 teh 啉酒咧。

【 我已經每天在喝酒了 】   【 我還沒有每天喝酒呢 】

d   我已經逐日做甲艱苦啊。

【 我每天已經做得很辛苦了 】

c) 進入新的重複狀態

表達重複 (iterative) 的動詞如果加上次數動量語（ 如：ka7我拍三下【 打我三下 】

鄭良偉

），就屬於起止語境。如果不加任何動量語就可能屬於不變動語境，通常帶"teh"，跟正在進行，和習慣動作，沒有形式上的分別。另外有一種時段語表達重複的動作的時段也屬於這一類，也可以帶"teh"。

6a　小弟已經 teh 跳啊。　　　　　　【小弟弟已經在跳了】

 b　伊已經 teh 拍佝小弟啊。　　　　　【他已經在打他弟弟了】

 c　伊已經 ti7 遐 teh 行來行去啊。　　【他在那裡走來走去了】

 d　神經病人猶閣 teh 笑咧笑咧。　　　【神經病人還在笑笑停停。】

d) 進入動作進行的狀況

表進行的謂語 (action verb in the progressive state) 在句法上語意上都屬於無始無終，沒有時間界線的語境。普通話裡"已經"和表進行"在"的結合情形相當複雜，有方言差。

7a　我 teh 寫作業啊。　　　　　　我猶未teh 寫額咧。

　　【？我已經在寫作業了】　　　【？我還沒有在寫作業呢。】

　　【我已經開始寫作業了】　　　【我還沒有開始寫作業呢。】

 b　你交代的代誌，

　　我已經 teh 做啊。　　　　　　我猶未teh 做咧。

　　【你交代的事情，

　　我已經在做了】　　　　　　　【？我還沒有在做呢】

　　我已經開始做了】　　　　　　【我還沒有開始在做呢】

e) 下面列舉一些構成非變動語境語法範疇

助動詞包括所有否定助動詞：愛，希望，應該，免【不用】，有，無，會，膾【不會】，beh【要】，m7【不要】。

重複性時段語：看咧看咧【看看停停】，走來走去。

表進行的時態／時段語：teh做，teh 寫【寫著】。

非瞬間動詞：也可分隨意和非隨意。但是加上了"teh"【著】之後，變成不變動語境時，都解釋為非隨意語境。

隨意：寫，做，看，講，拔，辦，搬，收，坐，趕

　　　非隨意：是，姓，像，愛，恨

　　　形容詞：寒【冷】，有錢，長，歡喜，大

　　帶有程度語的謂語：眞好【很好】，最高，比你有氣力，khah高你【比你高】。

　　不變動語境不能加上表有始有終的動量語。（如【＊再看三次】。）

4.3　起止語境

a)　起止語境的意義與種類

　　在語意上全貌語境指某事件的整個面貌，包括開始和終結。在語法上由不帶時段或補語，但是可能帶賓語或動量的行動動詞形成（這裡行動動詞指非瞬間隨意【-stative, +active】動詞）。行動動詞如帶特定賓語或動量語，所指的很清楚是有特定範圍的動作 (bounded event) 的全貌 (perfective view)。（如下面8各句）。現況觀察變動語境和起止語境都可觀察到全貌，普通話需用時態語"了"。台語可加"有"，也可不加"有"。

8a　　我有寫三日前的日記。　　　　　　【我寫了三天前的日記】

　b　　我有寫五頁的日記。　　　　　　【我寫了五頁的日記】

　c　　仝一項代誌做三擺。　　　　　　【同一件事情做了三次】

　d　　昨日的日記寫三小時。　　　　　【前天的日記寫了三小時】

　　有始有終的全貌語境加上"已經／猶未"時並沒有被觀察全貌的意義。有如不變動語境的本意爲不變動的無始無終狀態，但是加添"已經／猶未"卻指進入狀態 (inchoative) 的變化已否發生。不過全貌語境跟"已經／猶未"結合，語意上需分兩種情形，一)帶次數或名詞數量時，所指的語境是全面貌的終結點，也就是完成終結點的改變是否業已發生 (8a-c)；二)如帶時間語的全貌語境(如句8d)加上"已經"所指的也是全貌語境的始點，但關鍵在於動作全部過程是否業已到達時間語的時間長度。屬於不同的"已經"的意義，時間補語和其他兩類數量補語（次數和名詞數量）之間不同的"已經／猶未"的語意，將在時間經歷語境裡再詳細討論。

b)　變動語境與不變動語境之間

　　由特定賓語但是不帶動量語所構成的語境原義本就很模糊，跟"已經／猶未"結

合後的意義也不很固定，通常意義相當模糊，變動點的歸類很難。如下面句 9a 裡的"寫"，可能是動作的全貌，起點，終點，或某動量的完成。如果加上"teh"屬於不變動語境，就表示始點，加上"已經"所表達的意義是：進入新情況 (b)。如加上"了，完，煞"變成變動語境，就指動作的終點，"已經"所表達的意義是完成總結這個改變業已發生 (c)。

　　如果加上"一半""偌濟【多少】"等數量語，語境意義十分清楚，屬於全貌。表達動作的量的過程，"已經"表完成那動量的改變。可見"寫"本身可能指動作的起止全貌 (d)，但是跟"已經"結合，只能指變化發生的某時段。不能指"寫"的全貌 (perfective)。

9a	作業我已經寫啊。	作業我猶未寫咧。
	【作業我已經寫了】	【作業我還沒有寫呢】
b	作業我已經 teh 寫啊。	作業我猶未teh 寫咧。
	【作業我已經在寫了】	【？作業我還沒在寫呢】
c	作業我已經寫了啊。	作業我猶未寫了咧。
	【作業我已經寫完了】	【作業我還沒有寫完呢】
d	作業我已經寫一半啊。	作業我猶未寫偌濟咧。
	【作業我已經寫了一半了】	【作業我還沒有寫多少呢】

　　"已經"所觀察的語境還可用"有"表達該語境的確實現。在這個情形下的"有"固然可解釋爲觀察全貌 (perfective)，但跟已經結合後的時態語意仍然是變化，表示"有"所觀察的情況已經發生。

　　下面句 9e 裡的"做"加上"有"，因爲"有"謂語裡不帶補語或時段語，不指開始，結尾，成功結果等任何特定時段，時段意義模糊的情形跟9a相同。

9e	你交代的代誌，	
	我已經有做啊。	我猶未有做咧。
	【你交代的事情，	
	我已經做了，	我還沒有做呢】

c) 變化點的長短問題

　　業已改變的時態不管改變的過程的快慢，也不管所回顧的變化是變化的發生還是

進入新情況，在語法上都處理爲一個變化點，這變化點已否在參照時段之前發生，決定"已經"和"猶未"的選擇。下面"teh 變"是一個無始無終狀態 (state)，屬於不變動語境 (句10a)。雖然"變"這個動詞本身所表的情況可能是一個很長也可能是很短的過程。加上了teh 變爲"有 teh 變"之後，就跟"有 teh 感謝，有認眞，有 ti7 美國"等一樣，所關心的是語境（也就是進行狀態）有沒有在參照時間內發生。但是"已經 teh 變啊"(10b) 所指的是開始變化的那瞬間，和進入"變化"以後的新情況，在參照時間還在變化。(句c) 的"社會已經變 kah 無人愛工作啊"所指的是"無人愛工作"這個新情況已經發生，並且在參照時點裡"無人愛工作"的情況仍然存在，至於是否仍然在變化，跟這句毫不相干。

10a　社會有 teh 變。　　　　　　　社會無 teh 變。

　　　【社會在變】　　　　　　　【社會沒有在變】

　b　社會已經 teh 變啊。　　　　　社會猶未 teh 變咧。

　　　【社會已經在變了】　　　　　【社會還沒有在變呢】

　c　社會已經變 kah 無人愛工作啊。　社會猶未變 kah 無人愛工作咧。

　　　【社會已經變得沒有人要工作了】　【社會還沒有變化到沒有人要工作呢】

　d)　漢語的"已經"與英語的"has been…ing"

　　漢語的"已經"和英語的"has -en"幾乎是對等語，但是，有一個主要的語意差異：漢語的"已經"表達變化，英語的"has -en"表達情況（靜態，境時）或動作的結果（變動語境時）一直繼續到參照時點。這個差異如比較兩個語言的"已經"和"has -en"加上進行式時最爲清楚。

10a　The society is changing.

　b　The society has changed.

　c　The society has changed to the extent that nobody is willing to work.

　e　The society has been changing.

　　社會一直攏 teh 變化。【社會一直都在變化】

　　可見"有／無"所關心的是在參照時點內某語境有沒有發生，而"已經／猶未"所關心的是所預期的變化在參照時點是否業已發生，是變化的時間比參照時點早晚 (timing) 的問題。

e) 各種語境與時態語的搭配關係與語意

同樣的語境在不同的時態下有不同的語意，總結於後。

不帶時間語的各種語境與時態語的搭配關係與語意

	變動語境	不變動語境	起止全貌語境
語境	讀完	有電	讀三本書
	++++C	++++	|+++++|
已經	已經讀完啊	已經有電啊	已經讀三本書啊
	（變動已發生）	（已進入語境）	（完成點已發生）
	>$ RT	>$ RT	>$ RT
	++++ $ |	$+++++|	|+++++ $ |
	He has read it.	There is power now.	He has read 3 books.
猶閣	* * *	猶閣 teh 讀書	* * *
		（過去狀態仍在繼續）	
		He is still reading.	
有	有讀完	有 teh 讀	有讀三本書
	（結束點發生於 RT 之內）	（狀態存在於 RT）	（全語境發生於 RT 內）
	RT	RT	RT
	++++C	+++++++	|+++++|
	He did finished reading it.	He is reading.	He did read 3 books.
會	會讀完	會真好看	會讀三小時
	（結束點將發生）	（將進入語境）	（全貌語境將發生於 RT 之後）
	RT	RT	RT
	| ++++C	| ++++	| |+++++|
	He'll finish reading it.	It will be very beautiful.	He'll read for 3 hours.

RT：Reference Time（參照時間）

4.4 時間經歷語境

　　上面說到已否發生這個時態除了表示曾經有變化的預期以外，還表示變化時間跟參照時間的前後關係。也就是說：是否業已變化這個回顧既往時態一定牽涉兩個時間點：發生變化的那瞬間，和參照時間點。這個語意上的要求，如看有時間補語的謂語更加清楚。有時間補語的謂語所表達的是時間經歷的結束點跟參照時點的關係。"已經"表示從變化時點到參照時點恰好達到 (approach) 該時間補語的時長，跟漢語"有"做數量語的動詞時的特別語意，"足夠或達到該數量"同意義。後者是純粹指數量達到某標準，"已經＋動詞＋時間語"在加上時間前後的因素。"猶未"表示從變化點到參照時段還不到該時間補語的時長。

a) 動作的時間經歷和動作完結後的時間經歷

12a　文件已經（開始）寫三小時啊。（從開始點到RT）

　　　文件（開始）寫猶未三小時咧。

　　　【文件已經寫了三小時了】

　　　【文件還沒有寫到三小時呢】

　　　＋＋＋＋＋＋＋＋＋＋＋寫

　　　　｜＋＋＋＋＋＋＋＋｜　　　寫三小時

　　　＞$_____RT　　　已經／猶未

　　　＞$_____RT　　　已經寫三小時啊。
　　　　｜＋＋＋＋＋＋＋$

　　　＞$_____RT　　　猶未寫三小時咧。
　　　　｜＋＋＋＋＋｜－－$

b　　你交代的代誌，我做三點鐘啊。

　　　你交代的代誌，我猶未做 kah 三點鐘咧。

　　　【你交代的事情，我做了三個小時了】

　　　【你交代的事情，我還沒有做到三個小時呢】

c 文件已經寫好三小時啊。（從寫好這個變化點到RT）

　文件寫好猶未三小時咧。

　【文件已經寫好三小時了】。

　【文件寫好還不到三小時呢】

```
　＋＋＋＋＋＋＋＋＋C            寫好

　＋＋＋＋＋C          ＄          寫好三小時

　＞＄                  RT          已經／猶未

　＞＄                  RT          已經寫好三小時啊。
　＋＋＋＋C          ＄

　＞＄          RT                  猶未寫好三小時咧。
　＋＋＋＋C          ＄
```

d　你交代的代誌，我做煞三點鐘啊。

　你交代的代誌，我做煞猶未kah三點鐘咧。

　【你交代的事情，我做完三個小時了】

　【你交代的事情，我做完還不到三小時呢】

b)　“已經＋時間語”相當於“已經＋有＋時間語”的情形

　非瞬間性的行動動詞缺少時段語時可能產生歧義的情形，在4.3b節裡已經討論過。下面再舉一例，同時探討“已經”與“有”合用的特殊現象。句13a如果沒有上下文a1或a2，可能有句b或句c的解釋：

13a　病人已經睏啊。

　【病人已經睡了】

　a1　（m7-thang ka7伊講話啊！）（睡覺中。可能是優先意義）

　　【不要跟他說話了】

　a2　（chim2-ma2有精神啊！）（清醒中）

　　【現在有精神了】

b　病人已經teh睏啊。（＝開始睏啊）（睡覺中）

　　【病人已經在睡覺了】

c　病人已經睏醒啊。（清醒中）

　　【病人已經睡醒了】

加了時間語後也可能有兩個解釋，b或c。（注：普通話句14a有人沒有c的意義）

14a　病人已經睏四小時啊

　　【病人已經睡了四小時了】

b　到chim4-ma4病人已經睏四小時啊。

　　【到現在病人已經睡了四小時了】

c　病人已經睏醒四小時啊。

　　【病人已經睡醒了四小時了】

　　但如在時間語之前（也就是動詞之後）加上"有"就只許一種解釋。而這個"有"有別於台語特有的出現在動詞前的時態語"有"。

　　時間語前面的"有"在句法功能上應算是動詞，語意是"到達或足夠某數量"(approximation)。在台語裡跟"有夠""到"同意義。在普通話裡跟"夠""到"同意義。"有四小時"只有數量足夠某標準的意義，但如c句裡的"已經四小時"除了數量足夠某標準的意義之外還有時間上足夠時長標準的意義。下面d句裡"已經四小時"跟"已經有四小時"同意義。兩者同意義很顯然是因為數量語恰好是時間長度。

d　病人睏醒已經（有）四小時啊。

　　【病人睡醒已經（有）四小時了】

下面句14e裡的"有"是時態語。時間的前後關係的解釋有異於句b或句c。

14e　病人已經有睏四小時啊。

　　【病人已經睡了四小時了】

c) 名詞數量、次數數量和時間經歷

　　漢語的數量語除了時間語以外，還有名詞的數量詞和次數詞，都可出現為動詞後的補語，或動詞前的名詞定語。動詞前的數量語也有其本身時間上的起點和終點（如下面各a句），但時態與語境之間的時間關係只決定於動詞後的時段語，數量語和時態語（如下面各b句）。動詞後的數量語，包括時間長度，名詞數量，和次數，本文合稱為動量語。一個句子如果有動量語，動量語通常是語意重點(focus)。

15 a 三小時的電影已經演煞啊。

三小時的電影猶未演煞咧。

【 三小時的電影已經演完了。

三小時的電影還沒（有）演完呢 】

b 三小時的電影已經演兩小時啊。

三小時的電影猶未演到一小時咧。

【 三小時的電影已經演了兩小時了。

三小時的電影還沒（有）演到一小時呢 】

上面句15a裡沒有時間補語，電影演完的結束點並不等於參照時點。句15b的時間補語的結束點等於參照時點。

16a 三件文件已經發出去啊。

三件文件猶未發出去咧。

【 三件文件已經發出去了。

三件文件還沒（有）發出去呢 】

b 三件文件已經發出去兩件啊。 　（名詞數量）

三件文件猶未發出去半件咧。

上面各動量句15和16 (句b) 的句法結構雖然相同，可是所指的時間點並不一定相同。時間補語結束點一定和參照時段吻合 (15b, c)。名詞動量的結束點 (句16b, c) 發出去兩件的結束時點，並不就是參照時點。下面句17b次數動量校對兩次之後到參照時點仍然可以有一段時間。句17c名詞數量的完成的時間也是一樣，並不等於參照時點。並且也可以如d句裡以時間語表示這段時間的長度。

17a 彼三件文件已經寫好三小時啊。（時長的結束點等於參照時點）

猶未寫好三小時咧。

【 那三件文件已經寫好三小時了。

還沒有寫好三小時呢 】

b 三擺的文件校對我已經校對兩擺啊。（完成兩次的時點不等於參照時點）

文件我猶未校對到一擺咧。

【 三次的文件校對我已經校對了兩次了。

文件我還沒有校對到一次呢 】

c 彼三件文件我校對已經一件啊。（完成一件的時點不等於參照時點）

三件文件我校對猶未到一件咧。

【三件文件我校對還不到一件呢】

d 彼三件文件的第一件，

校對好已經三小時啊。　　　　　（時間長度的終點等於RT）

第一件校對好猶未三小時咧。

【第一件校對好還不到三小時呢】

時間經歷語境跟次數、名詞數量一樣都是全貌語境的一種，兩者在句法表層上似乎相同，但在語意上時間語的終點等於參照時點，次數和名詞數量的終點卻前於（也就是早於）參照時點。兩者在英語語法裡有明顯的分別。英語的17aa將時間語謂語化，使用不同的語法結構，(It has been three hours since…) 漢語雖然只改變了"已經"的語序，但是經過結構變化極為明顯，也就是將時間語謂語化，而把其餘的話題化 (topicalize)。

17a I have finished writing the three documents for three hours.

aa It has been three hours since I finished writing the three documents.

aa 三件文件寫好已經三小時啊。

b I have proofread the documents (*for) three times.

　* It has been three times since I proofread the documents once.

c Of the three documents I proofread (*for) one.

d) 帶時間語的各種語境與時態語的配搭關係與語意調整

	變動語境		不變動語境	全貌語境
已經	已經讀完三小時啊	（* teh）		已經讀三小時啊
	（從變動時點到RT）			（從始點到RT）
	It has been 3 hrs.			It has been 3 hrs. since….
猶閣	*猶閣讀完三小時	（* teh）		＊ ＊ ＊
有	*有讀著三小時	（* teh）		有讀三小時
				（全時長發生於RT內）
				He did read for three hours.
會	*會讀著三小時	（* teh）		會讀三小時
				（全時長將發生於RT之後）
				HeW read it for 3 hours.

（註：有些不變動語境可以加時間語，屬於全面貌語境。如：已經 ti7 學校三小時啊。）

台語的時態語跟各種語境 (situation) 有不同的搭配關係。不同的語境（可分動態，靜態，全貌，時間經歷）也因不同的時態語而有語意上的調整。例如時間補語所表達的時長有始點有終點。跟"有－無，會－膾"結合時所指的語境是時間的全過程，跟"已經－猶未，tih-beh【快要】"結合時所指的語境是時長的終點。至於時間語的時長起點，如是全面貌語境的補語就跟動作的起點吻合（如："做三小時啊" I have been doing it for three hours.），如是變動語境的補充語就跟動作的終點吻合（如："做煞三小時啊" It has been three hours since I finished reading it.）。表繼續的"猶閣"和表進行的"teh"不能帶時間補語。

4.5 "已經／猶未"的位置和台語兩種語言特點

台語的時態語"已經"或"猶未"和動量語配合時，可以出現在動詞之前（如上面15, 16各b句），也可以移動到動詞之後動量之前，加強顯示動量是語意重點的所在，其他的部分是已知 (known) 成分，屬於語意重點以外的部分。（如下面15, 16各c句）（有關顯示語意重點的句法手段，參看 Robert L. Cheng 1983）

15c　三小時的電影演已經兩小時啊。

　　三小時的電影演猶未（到）一小時咧。

　　【？三小時的電影演了已經兩小時了。

　　三小時的電影演還不到一小時呢】

16c　三件文件發出去已經兩件啊。（名詞數量）

　　三件文件發出去猶未到半件咧。

下面句18a和b裡都有兩個動詞。其中，時間語前面的"有"很明顯是語意重點，在台語裡可以把"已經"移動在這個語意重點之前。在普通話裡是否能這樣顯示語意重點所在部分，句法語感因人而異。但很顯然不如台語那麼普遍地被接受。

18a　病人已經睏有四小時啊

　　【？病人已經睡了有四小時了】

　b　病人睏已經有四小時啊

　　【？病人睡了已經有四小時了】

有些學者認爲漢語跟英語比有兩個特色：discourse orientation （曹逢甫 1990 ）和 iconicity （謝信一 1989 ）。前者指：句子內的語法特點取決於句外的 discourse 的情形比英語多，而取決於句子裡的因素的比英文少。在漢語裡台語可以移動 " 已經／猶未 " 的位置，來表達 discouse 中，新舊信息的分配，靈活地顯示需要強調的語意重點所在，應算比普通話較爲 discourse-oriented 。Iconicity principle 指：語法上的語序直接地反映語意上時間上空間上的排序。台語能將 " 已經 " 移動到所要強調的語意重點的前面。普通話就受到較嚴格抽象的句法規律，不能以位置來顯示語意重點，可說其擬像性比台語小。

5. 時間關係上的兩種類型 realis/irrealis 和 past/non-past

漢語各 " 方言 " 的時間語法範疇十分複雜。不只限於句法，詞法上有內部差異，連語意結構上也有差異。台灣話的時間關係語系統基本上是 realis/irrealis 類型。漢語較古，較南方的語言也屬於這個類型。普通話除了這個較基本的類型特點以外，還有較新的過去／非過去類型的特點。這個新特點，越近北方，越屬於口語，越多而明顯 ；越屬於古代漢語，顯出受古漢語或南方漢語的影響越多的現代書面語或普通話裡越少而不明顯。在北京話裡，這個新特點也不是一下子引進到所有的語境裡。目前，只在變動語境和全貌語境呈現，有限度的過去非過去語意對立。本節闡明實現與非實現類型的特點之後初步地探討這兩種時間語意類型在北京話裡共存和調整的現象。

5.1 實現與非實現類型

筆者曾說普通話有關特定動作的語法範疇是過去－非過去二分法，而台語卻屬於未來－非未來二分法 (Cheng, Robert L. A Comparison of Taiwanese, Taiwan Mandarin, and Peking Mandarin, 61:2, 1985) 。同文又說台語的時間關係，屬於分實現－非實現 (realis-irrealis) 的類型。究竟是根據時制 (tense) 或時態的分類，尚無系統性的交代。本文全盤探討台語裡這三種時態語和三種參照時點 （ reference time ，指根據說話時間 (speech time) 而分的過去，現在，未來等不同的時間 ）的搭配關係，闡明台語的時間語法範疇是根據時態而分的實現－非實現二分法，而非根據時制 （請參看表1 ）。前

鄭良偉

瞻未然時態一定要有"會，beh，愛"等標誌（如：明年會去。），斷然有別於非前瞻性的回顧既往，或觀察現況。另外凡是回顧既往或觀察現況都可用"有"強調情況或語境的存在（如："有 bat 去過"【曾經去過】"有 teh 認真"【正在認真】）。這種分別是時態上而非時制上的分別。

各種時態和說話時間的過去，現在和將來有不同的搭配限制：台語表觀察現況的"有－無"只能用於參照時點的過去和現在，不能用於說話時點的未來。這是時態和說話時間之間的搭配關係跟時制有部分吻合的現象：未來時點的情況只可前瞻預測，而不能當做實況強調。其他的時態語基本上都可以跟三種不同的參照時點搭配，沒有語法上的限制，只有語用上的優先意義取捨。

根據上述時間關係上的種種特點，台灣話的"有"宜稱爲某語境（或某情況 situation）的實現 (realis) 或存在 (existential) 時態，和非實現 (irrealis) 或非存在對立。它的否定詞是"無"，而"無"的肯定詞是"有"，兩個正反關係是完全對稱的。

前瞻未實現的語境可以從說話時間 (speech time) 的過去，現在，未來進行，形式不改變，都用"會""tih-beh"所以跟時制 (tense) 沒有關係。另一方面，因在參照時點的不同的觀察方式而用不同的時間關係語"已經"表既往預期的回顧，"有"強調所觀察的現況，"會"表未來語境的前瞻，所以應該算是一種時態語 (aspect marker)。

台語對實現於說話時間的過去或現在，完全使用相同的時態語。肯定時可以用"有"或零標誌。

1a　現在（有）不時 teh 問老師。

b　開始的時（有）不時 teh 問老師。

否定時用"無"。所以跟日語或英語使用截然不同的標誌分明過去和現在，屬於不同類型。

觀察實況台語不一定要標誌，也就是說，除非強調的情形，"有"經常被零標誌取代。過去和現在參照時點所觀察的情況都是如此。另一方面，前瞻尚未實現語境的"會"不能被零標誌所代替（值得注意的是普通話剛好相反，前瞻未來可以用零標誌 (2b)）。

2a	明年敢會入學？	【明年會入學嗎？】
b	*明年敢入學？	【明年入學嗎？】

所以在台語裡實現和非實現之間前瞻非實現的語境是較受注意，需要經常標誌 (marked) 的項目。觀察實現的語境較平常，屬於可以不必標誌的項目，下表中實現語境的觀察無論在過去或現在參照時點都可用零標誌 " 0 "。假想在未來參照時點裡觀察實況不能用 " 0 "（非實現語境的前瞻一律需用 " 會 " 不能用 " 0 "）。需注意下面的語境不但包括特定動作（則變動和起止語境）的全貌性觀察，也包括習慣，進行，或重複的動作，或靜態的情況（則不變動語境）的非全貌性觀察。

台語時態語和各種說話時間的搭配關係

＼ 根據參照時點	實現 (realis)	非實現 (irrealis)
根據說話時間 ＼	觀察實現語境	前瞻未實現語境
過去參照時點	有，0／無	會／欲
現在參照時點	有，0／無	會／欲
未來參照時點	＊有，＊0／＊無	會／欲

台灣的現代中文書面語和台灣華語的時態系統基本上跟台灣話大致相同。

5.2 過去與非過去類型

至於北京話有關特定動作 (specific action) 就差異相當大。台語不分過去和現在的動作發生（如：三年前（有）teh 讀大學），也不一定標誌過去特定動作（如：我（有）寫一本冊。），" 有 " 又可強調任何現在時點的語境。相反地，普通話表觀察現況的動詞詞尾 " 了 " 只能用於過去參照時點（如：【寫了一本書】【停了下來】）。就特定動作而言，幾乎是一種表過去時制的標誌 (past tense marker)。現在先按照上面的語意框架探討有關時態語的出現。需注意下面的語境只包括特定動作（則變動或起止語境）的全貌性觀察，而不包括習慣，進行，或重複的動作，或靜態的情況（則不變動語境）的非全貌性觀察。

鄭良偉

普通話時態語（實現與非實現）和各種說話時間的搭配關係

＼　根據參照時點	實現	非實現
— — — — — — —	(realis)	(irrealis)
根據說話時間　＼	觀察實現語境	前瞻未實現語境
過去參照時點	了／沒有	會／不會，0／不
現在參照時點	＊了／＊沒有	會／不會，0／不
未來參照時點	＊了／＊沒有	會／不會，0／不

在本文續篇 (1990) 裡筆者比較了台語的" 有 "和普通話動詞詞尾" 了 "。這裡討論普通話的前瞻未來，常常以零標誌表達（下表以" 0 "表示）。

3　　你煙抽不抽？

普通話的" 了 "只能表達過去參照時點所發生的特定動作，不能表達現在或未來參照時點的進行或尚未發生的動作。而後者又常以零標誌表達不加以分別。因此" 了 "除了表達觀察過去的全貌語境，或變動語境 (perfective aspect)，也有表達過去的功能，和非過去 (non-past) 對立。

4a　　他寫了一本書。　　　　　　　　　　He wrote a book.

　b　　寫了下來。　　　　　　　　　　　He wrote it down.

它的否定語是" 沒有 "，可是" 沒有 "的肯定語不一定是" 了 "。

普通話是表達 tense 這個說法究竟有何道理，有何限制？請看下表，過去非過去參照時點下，了／沒有的用法。

普通話時態語和各種說話時間（過去／非過去）的搭配關係

＼　根據說話時點	過去	非過去
— — — — — — —		
根據參照時點　＼		現在或未來
觀察過去特定動作	了／沒有	＊＊
觀察現在特定動作	＊＊	＊＊
觀察未實現特定動作	會／不會，0／不	會／不會，0／不

　　＊＊ " 了／沒有，會／不會，0／不 "等都不適合表達該欄意義。

－ 230 －

最近有幾個學者提出來普通話有些時制 (tense) 的語法特點（陳平 1988，鄭良偉 1985-86 ）。下面對這個說法的適合與不適合的範圍，提出一些初步的觀察。

1. Past/non-past tense 語法上的標誌，各種普通話之間差異很大。普通話區域以外的普通話，包括台灣的國語，比北京少而不明顯。

2. 各地的普通話都有或多或少的語言混合和語言層次現象。任何地方最少有書面語和口語之間很明顯的層次現象。兩者之中，書面語裡的標誌比口語少而不明顯。連北京市區的口語，也不是純粹標誌過去和非過去的語言。

3. 回顧既往與前瞻未來，都不因說話時間而有系統地改變標誌。
   只有觀察現況才有過去和非過去的對立。

4. Past 和 non-past 之間的對立，只限於變動語境和起止語境的全貌。不變動語境的過去一律不標誌，有異於日語或英文。過去（如日：Atira ni ita. 英：He was there. ）和非過去（如日：Atira ni iru. 英：He is there. ）之間分得很清楚。

5. 連變動和全貌語境也不一定都標誌。
   習慣，重複，進行的動作，屬於不變動語境，普通話一律不用 “ 了 ”，也就是不標誌過去與非過去的分別。
   帶動補語的複合動詞，似乎可加 “ 了 ” 也可不加。如： “ 突然跑（了）進來 ” “ 寫完（了）三本書 ”。這種 “ 了 ” 強調語境確實發生。

6. 有些情形的 “ 了 ” 是時段語（如：洗了手再說），或是需要處理為複合語動詞的第二個成分（如：忘了這件事吧。請趕快關了收音機）。

7. 如果沒有賓語，動詞詞尾的 “ 了 ” 和句尾的 “ 了 ” 形式相同，可能引起歧義。如： “ 那件是我做了 ” 台語需翻譯成語意截然不同的句子： “ 我有做 ” 和 “ 我做啊 ”。

8. 台灣的國語，最少有四分之三的使用人，不分別過去／非過去的對立。北京話的 “ 煙我抽了 ” (I did smoke the cig.) 和 “ 煙我抽 ” (I do smoke. I am going to smoke the cig.) 兩句間的不同，台灣的國語一般說成 “ 煙我有抽 ” “ 煙我會抽 ” ，傾向於台語標誌實現／非實現的對立。 “ 薰，我（有）吸 ” “ 薰會吸 ”。一般人說普通話時所用的詞法和詞彙是目標語普通話的，但是所用來組織生活經驗的語意結構卻是大多數人的母語，台語的特點。

6. 時態語的位置與VO/OV語言類型

時態語在漢語裡的句法特點很複雜，充分反映過去語言接觸的複雜的歷史。Hashimoto (1978) 和筆者(1985) 曾指出漢語曾經有過跟北方阿爾泰語和南方泰語接觸的歷史，前者有很明顯的OV或主要成分在後的句法特點。後者則有很明顯的VO也就是主要成分在前的句法特點。中古漢語留下來的文言文和現代語之間，如有不同也顯示著前者有 head-initial，後者有 head-final 的特點。

從語言演變的觀點看，語言接觸的社會文化種族的背景不斷在改變，而不同的方言層次的句法特點之間的共存與調整也同時決定於語言的結構因素與一些非語言因素。本節從 head-final（主要成分在後）和 head-initial（主要成分在前）的句法類型的觀點來看不同語言類型如何在台語裡共存，調整，同時也探討如何影響台灣國語的句法。

動詞前的時態語和動詞後的時態語在台語裡有三個情形，1) 兩者同時出現於同一個謂語，2) 只用謂語結尾的時態語，3) 只用謂語前頭的時態語。

臺灣話的時態語出現位置

謂語前後共現	時態語在謂語之後	時態語在謂語之前
同義語重複	OV 特點	VO 特點
1a 已經畢業啊	畢業啊	已經畢業
2a bat 讀過	讀過	bat 讀
3a ＊＊＊	＊＊＊	teh 讀
4a 猶閣有錢咧	＊有錢咧	猶閣有錢
5a ＊＊＊	＊＊＊	伊有畢業
1b 猶未畢業咧	＊畢業咧	猶未畢業
2b m-bat 讀過	＊＊＊	m-bat 讀
3b ＊＊＊	＊＊＊	無 teh 讀
4b ＊無閣有錢咧	＊有錢咧	無閣有錢
5b ＊＊＊	＊＊＊	伊無畢業

　　三者之間，第三種結構最全。進行時態没有動詞後的詞。只有動詞前的副詞teh。否定時態更是如此，都要靠動詞前的否定時態語。一般說來，動詞後的時態語表達語氣的效果多於表達時態的功能。來自"了"的"啊"是例外，經常單獨表達已然的語意。可是在關係子句等的非句尾謂語裡，動詞後的時態語通常不能出現。"咧"來自"裡"或"里"，也不出現於關係子句的句尾（如："＊畢業啊的人"。"＊猶未畢業咧的朋友"請看3-a節的例句）。可見句尾的時態語有演變成語氣語的趨勢。動詞後的時態語有兩個位置，賓語之前或句尾。在本第節已提過："過"從句尾轉移到賓語之前。這裡值得一提的是，"過"在台語裡是純粹的時態語，不像"啊"或"咧"兼具語氣功能。

北京話的時態語出現位置

動詞前後共現	時態語在動詞之後	時態語在謂語之前
同義語重複	OV 特點	VO 特點
1a 已經畢業了	畢業了	?已經畢業
2a 曾經讀過	讀過	＊曾經讀
3a 在讀著	讀著	?在讀
4a 還有錢財呢	有錢呢	?還有錢
5a ＊有畢了業	他畢了業	＊ 有畢業
1b 還没畢業呢	＊畢業呢	還没有畢業
2b 從來没有讀過	＊＊＊	?從來没有讀
3b 没在讀著	＊＊＊	没在讀
4b 不再有錢呢	＊有錢呢	?不再有錢
5b 没有畢了業	＊＊＊	他没有畢業

　　台灣話與普通話之間如有差異的話，台灣話傾向於使用動詞前的，北京話傾向於使用動詞後的時態語。這個趨勢在肯定式極為明顯。經驗時態在台語裡 bat 是助動詞，比動詞後的"過"用得多。北京話的"曾經"顯然多半用於書面語，在口語裡絕對少於同義語"過"。進行式台語只有副詞 teh，没有動詞後的時態或時段語。北京話

鄭良偉

有動詞前的副詞 " 在 " 和動詞詞尾 " 著 " ，後者比前者用得多。顯然是 head-final/
OV 的特點佔優勢。否定時態的情形因為漢語的否定詞在動詞之前，所以無法只用動
詞後的時態語表達否定意義。漢語不是純粹的 head-initial 或 head-final 的語言。但是
就時態語的使用而言台語全面地趨向於 head-initial，北京話卻兩種特點都相當顯著。
一個有趣的現象是局部的整齊化現象。肯定的時態語以 head-final 為優勢，否定時態
語以 head-initial 為優勢。這裡不能不肯定語言變化和運作的力量：整齊化或規律化
(regularity)，如不能實現整個局面 (global) 的整齊化，也要達到局部 (local) 的整齊化。

　　台灣國語雖然在時態語的詞彙都是普通話的，可是本文所討論的時態語的句法特
點跟台語很類似，無論是肯定或否定時態都是 head-initial 佔優勢。

台灣華語的時態語出現位置

動詞前後共現	時態語在動詞之後	時態語在謂語之前
同義語重複	OV 特點	VO 特點
1a 已經畢業了	畢業了	已經畢業
2a 曾經讀過	讀過	?曾經讀
3a 在讀著	讀著	在讀
4a 還有錢呢	有錢呢	還有錢
5a *有畢了業	他畢了業	有畢業
1b ?還没畢業呢	*畢業呢	還没有畢業
2b 從來没有讀過	* * *	從來没有讀
3b ?没在讀著	* * *	没在讀
4b ?不再有錢呢	*有錢呢	不再有錢
5b *没有畢了業	* * *	他没有畢業

　　上表没有表現出來的是同義語之間的使用頻率，如：" 在讀 " 比 " 讀著 " 常出現。
　　表持續某種姿勢於某場所的動詞，在動詞前加時段語 " 在 " 的語意有別於動詞後
帶時段語 " 著 "，如 " 在帶帽子，在掛衣服 " 表動作的進行。" 頭上帶著帽子，墙壁
上掛著衣服 " 表姿勢或狀態的持續。這種語意功能的劃分，所有使用普通話的人不一

定能使用。

從普通話動詞前和動詞後意義相同或類似的時態語時段語的混合使用，我們在本文已經看到不同語言層次 (language strata) 成分在同一個語言裡共存的種種方式。有全面的規律化或整齊化的現象（如台灣國語裡不用動詞後的進行時態語而用動詞前的時態語"在"，全面地向VO語言類型靠攏），也有局部規律化或整齊化現象（如普通話的否定時態語有規律地採用VO特點，但肯定時態語就傾向於OV類型，求得局部的規律化）。

有同意義的語詞只出現其中之一的現象（如【我是已經結婚的人。】【我結婚了。】），也有同時出現於同句的現象（如【我已經結婚了。】。又有共存於同一個語言之內，但產生語意或語法的變化，語意或語法功能因而重新劃分的現象（語意功能劃分如普通話裡動詞前的"在"表隨意動作的進行，動詞後的"著"表狀態的持續。語法功能劃分如：動詞後的時態語用於主要謂語裡，如：【我結婚了。】，動詞前的時態語用於關係子句裡，如：【我是一個已經結婚的人。】）。

7. 結　論

本文描述了台灣話和普通話的時段和時態系統。就中特別詳細地討論了表已否變化時態語"已經／猶未"的語意與語法特點。被觀察的語境，即使原來是表沒有任何變化點的不變動語境或是表有兩個時間點的起止語境，也因為跟"已經／猶未"結合而產生意義差異，都變成一個變化點的語境，跟參照時點產生前後關係。

本文從語意的觀點比較了台灣話和普通話的時段和時態系統。跟其他有關漢語時間關係語法範疇的論著主要的不同在於將時態定義為參照時點觀察語境的方式，把時段看成為語境的一部分。從各種句法和語意特點看，台灣話的時態語和時段語形成兩種不同的語法範疇。同一個謂語裡，如有兩個時間關係語同時出現在一個謂語裡排序原則是愈是表達客觀情況的語詞愈接近動詞，愈是表達說話人情況的（包括如何觀察語境的時態語）愈遠離動詞。表示進行的"teh"，經驗的"bat"，即將發生的"tih-beh"，跨於兩類之間。出現在純時段語和純時態語之間。

鄭良偉

　　台灣話的時態語和時段語，都是"高動詞"。有些出現爲動詞前的副詞或助動詞，否定時態語一律如此，類似英語，有些出現爲動詞後的動詞詞尾詞或句尾詞類似日語（日語的否定時態語都出現在動詞之後）。就主要成分在前或在後，台灣話具備前者的特點多於後者，北京普通話如跟台灣話不同時，都是台灣話類似英語，北京普通話類似日語。

　　普通話句法的不穩固和內部差異，最顯著的可能是時態這語法範疇。由於句法規律和詞彙複雜多變，引起很多分析上的問題。筆者一方面廣泛地參考較有人研究的英語，日語語法，一方面將它密切地跟漢語中較特殊的台灣話進行比較，提出兩種時間關係類型，以實現／非實現類型爲原來的層次，以過去／非過去對立類型爲新進的語言層次，混合，共存，調整的看法。

　　本文的分析比其他學者有關漢語時態系統的論著，看起來可能相當複雜，例如別的著作很少包括助動詞和副詞。這是由於本文根據語意來定範圍，進行描述和比較。諸如我們有關三種"了"的語法和語意描述，相信較能表示不同語言之間的時間語的對應關係。

參考書目

華文部分

陳平

　　1988　論現代漢語時間系統的三元結構，中國語文 1988, 6: 401-430。

黃正德

　　1988　漢語正反問句的模組語法，中國語文 1988, 4: 247-264。

梅祖麟

　　1987　三朝北盟會編裡的白話資料，中國書目季刊十四卷二期 27-52。

太田辰夫

　　1958　中國語歷史文法，朋友書店，東京。

王力

　1958　漢語史稿，科學出版社。

鄭良偉

　1988a　時態、動量和動詞重疊，語言教學與研究（北京）12: 440-447。

　1988b　台灣話動詞重疊的語意和語法特點，中國語文（北京）6: 439-444。

　1989a　台灣話與普通話的時段和時態句法變化中的各種抗爭因素，提交於國際漢藏語言學會，美國夏威夷，1989。

　1989b　從台灣當代小說看漢語語法演變（提交新加坡第一次世界華文教育研討會）。

　1990　詞彙擴散理論在語法變化裡的應用——兼談台灣官話"有"字句的句法變化，語言教學與研究（北京）1: 66-73。

　1991　MS 台灣話語法探索——接觸與互動。

英文部分

Bull, William.

　1968　Time, Tense, and the Verb--A Study in Theoretical and Applied Linguistics, with Particular Attention to Spanish. University of California Press, Berkeley, and Los Angeles.

Chao, Yuen Ren.

　1948　Mandarin Primer. Harvard University Press, Cambridge.

　1968　A Grammar of Spoken Chinese. University of California Press.

Chinfa, Lian.

　1989　"Competing Tone Change in Chaozhou." Presented at the International Linguistic Workshop, Berkeley, March, 1989.

Chen, Gwang-tsai.

　1979　"The Aspect Markers LE, GUO, and ZHE in Mandarin Chinese." Journal of

鄭良偉

      Chinese Language Teachers Association 14.2: 27–47.

Chen, Matthew and William S-Y. Wang.

    1975   "Sound Change: Actuation and Implementation." Language 51: 225–81.

Cheng, Robert.

    1975   "Time Relations." In Chinese Eighth International Conference on Sino-Tibetan Languages and Linguistics. Berkeley.

    1978   "Time Relation in Chinese 'Tense,' 'Aspect,' and phase in Mandarin and Taiwanese."(Ms. revised from 1975 paper.)

    1983   "Focus Devices in Mandarin Chinese." In Studies in Chinese Syntax and Semantics, Universe and Scope: Presupposition and Quantification in Chinese, ed. Ting-chi Tang, Robert Cheng, and Ying-che Li. (Taipei: Student Book Co., pp. 55–102)

    1985   "A Comparison of Taiwanese, Taiwan Mandarin and Peking Mandarin." Language 61.2: 352–77.

    1986   "Le as Aspect and Phrase Markers (1985-86)." Papers in East Asian Languages, vol. 3, pp. 64–83.

Comrie, Bernard.

    1976   Aspect: An Introduction to the Study of Verbal Aspect and Related Problems. Cambridge University Press.

Hsieh, Hsin-I.

    1989   "Time and Imagery in Chinese." (Ms.)

Leech, Geoffrey N.

    1970   Towards a Semantic Description of English. Bloomington, London.

Li, C., and Thompson, Sandra.

    1981   Mandarin Chinese, A Functional Reference Grammar. University of California Press.

Li, Y. C., Robert L. Cheng, Larry C. Foster, and Moira Yip.

1984　A Reference Grammar of Mandarin Chinese for Students and Teachers. Section
　　　　3.7.

Ma, Qingzhu.

1981　Shijian Binyu he Dongci de Lei [Temporal Quantitative Objects and Classifica-
　　　　tion of Verbs], Zhongguo Yuwen 161: 86–90.

Quirk, R. and Greenbaum, S.

1973　A Concise Grammar of Contemporary English. Harcourt Brace Jovanovich, Inc.

Spanos, G. A.

1979　"Contemporary Chinese Use of LE: A Survey and Pragmatic Proposal." Part I.
　　　　Journal of the Chinese Language Teachers Association 1: 36–70.

Tai, James H-Y.

1985　"Temporal Sequence and Chinese Word Order." Iconicity in Syntax, ed. by John
　　　　Haiman, 49–72. Amsterdam: John Benjamins Publishing Company.

1989　"Toward a Cognition-Based Functional Grammar of Chinese." In Function-
　　　　alism and Chinese Grammar, ed. by Frank Hsueh and James Tai, 187–226.

Teng, Shou-hsin.

1973　"Negation and Aspect in Chinese." Journal of Chinese Linguistics 1.1: 14–37.

1985　"Hanyu Dongci de Shijian Jiegou." Language Teaching and Studies 4: 7–17.

Vender, Zeno.

1967　Linguistics in Philosophy. Ithaca: Cornell University Press.

Wang, William S-Y.

1964　"Two Aspect Markers in Mandarin." Language 41.3: 457–70.

1969　"Competing Changes As a Cause of Residue." Language 45: 9–25.

The Pretransitive in Cantonese

Cheung, Samuel Hung-nin
University of California, Berkeley

I. Introduction

The pretransitive construction, or the *ba*-sentence as it is commonly referred to in Mandarin, is a language-specific but dialect-universal feature in Chinese grammar. Structurally speaking, the construction may be described as a process by means of which a regular *S-V-O* sequence is changed to that of *S-O-V*, with the preposed Object explicitly marked by a coverb such as *ba* in Mandarin. Although the permutation of sentential constituents is a phenomenon quite common in all languages, the syntactic, semantic, and pragmatic conditions involved in the Chinese pretransitive construction are so complex that linguists have readily claimed that "no similar construction has been found in any other language in the world." [1] In fact, the unique complexity of this construction constitutes one of the most discussed and debated topics in Chinese linguistics. During the last few decades, our understanding of the construction has undergone successive stages of revision and refinement as more data have been included for examination and newer theories have been adopted as referential frameworks. [2] Yet, in spite of the growing interest in the topic, the observations and discussions of the pretransitive have been primarily confined to its behavior in Mandarin. While most dialectal studies record and report sentences similar to those of *ba* in Mandarin, almost none makes a systematic attempt to examine the construction in any detail. In *Hanyu fangyan gaiyao* (1961), the first comprehensive survey of Chinese dialects, only sketchy notes and a handful of examples are given to describe the use of the pretransitive in each of its eight major dialect groupings.

1　Tsao (1987), p. 2.
2　For a critical review of the various studies conducted during the last few decades on the use of the pretransitive construction in Chinese, see Cheung (1973) and Sanders (1986).

Aside from noting the obvious fact that different dialects may employ different pretransitive markers, dialectologists in general seem to find little difference in behavior between the pretransitive in Mandarin and its counterparts in the dialects. Indeed, it appears that the conditions ascribed to the use of *ba* in Mandarin are universally applicable across all dialects.

In their respective grammatical treatises on standard Cantonese, Cheung (1971) and Gao (1980) essentially follow the same Mandarin rules in their characterizations of the pretransitive in the southern dialect,[3] where the marker is *jiang* 將, or *jeung* [4] in the Cantonese pronunciation, a morpheme that was historically used in free variation with *ba* in the early vernacular language.[5] However, as Rao accurately notes in his 1981 *Cantonese Dictionary*,[6] the preference for the pretransitive construction varies drastically between Mandarin and Cantonese. For example, while both dialects admit the regular and pretransitive arrangements as grammatical sentences as illustrated in the following diagram, the preferred choice in Cantonese is quite the contrary to that in Mandarin.[7]

(1)

	non-pretransitive	pretransitive
Mand	Xǐ gānjìng zhè xiē yīfu. 洗乾淨這些衣服 Wash–clean–these–clothes.	*Bǎ* zhè xiē yīfu xǐ gānjìng. (*Preferred*) 把這些衣服洗乾淨
Cant	Sái gònjehng dī sāam. (*Preferred*) 洗乾淨D衫 Wash–clean–the–clothes.	*Jēung* dī sāam sái gònjehng. 將D衫洗乾淨

"Wash the clothes!"

---

3 Both works devote very little attention to the construction in Cantonese. Cheung (1971), pp. 86–87, and Gao (1980), p. 226.
4 This paper follows the Yale system of Cantonese romanization.
5 For a general discussion on the early use of *bǎ* and *jiāng*, see Wang Li (1955), pp. 172–174.
6 Rao (1981), p. 260.
7 Wang Li (1955) claims that the disposal use of *jēung* is absent in both Cantonese and the Hakka dialect. See pp. 174–175.

As we shall see in the following pages, the dissimilarity in selection is but one of the many differences between the two dialects in their use of the pretransitive. To character-ize the construction as an active syntactic mechanism common to all Chinese dialects may not be an inaccurate representation of the role its plays in the language; yet to generalize its behavior across the vast topography of China simply on the basis of what we know about it in Mandarin is most certainly a gross oversimplification. Our understanding, to date, of the idiosyncractic behaviors of the pretransitive in dialects other than Mandarin remains regretably partial and vague, a limitation that is all the more severe with reference to the southern dialects whose distinctions from Mandarin, in both phonology and gram-mar, are generally much more prominent than what we find among the northern dialects. It is the purpose of this study to provide a comprehensive examination of the use of the pretransitive in standard Cantonese, to describe and account for the factors that condition the use and non-use of the pattern, and to offer examples, cross-referenced with those in Mandarin, highlighting the dialectal differences that may help us to better understand the operation of the construction in the language in general.

II. Data

The major sources of data for this study include the following:

(a) Four hours of recording from TV and radio programs made in Hong Kong during the last two years.

(b) Interviews and articles written in colloquial Cantonese as published in various recent issues in a Hong Kong weekly magazine. The texts examined are about 108,000 char-acters in length.

The data were submitted to two rounds of screening. In the first round I identified and collected all the sentences that involved the use of *jēung*. In the second round, I orally translated the texts into Mandarin, recording down the cases where the pretransitive was not used in Cantonese but would be required or preferred in Mandarin.

I have also occasionally drawn samples from newspapers and personal conversations with friends and relatives. Some of the examples are from my own speech. Regardless of sources, I have double checked the acceptability or unacceptability of all my examples with a native speaker, who was born in Canton and was educated in Hong Kong through college.

III. General Description of the Pretransitive Construction in Chinese

As afore-mentioned, the pretransitive construction may be structurally described as the placement of the object before the transitive verb in a sentence; hence, the term "pretransitive." In this regard, the construction may be characterized as follows:

(2)　　　　Subject　　+　Pretransitive　+　　Object　　+　Verb Phrase
　　　　　　Noun Phrase　　　Marker　　　　Noun Phrase

Much of the discussion on the topic in the last few decades has focused upon the relationship between the verb and the object and the kinds of nouns and verbs that can partake in this process. In summary, it is agreed that (1) the object, or the pretransitive noun phrase, has to be definite or generic in reference and (2) the verb phrase has to represent a disposal action that directly or indirectly affects the entity referred to in the pretransitive noun phrase. To represent the disposal nature of the action, the verb phrase generally contains an element such as a complement or an aspect suffix to highlight the resultative effect. The idea of disposal was first introduced by Wang Li (1955) who described the pretransitive as *chǔzhìshì*, an execution form.[8] This characterization was later rejected by grammarians such as Y. R. Chao (1968) who did not consider such a semantic labelling as appropriate or broad enough to encompass all kinds of pretransitive sentences including those of the following type in which the pretransitive object is evidently the agent rather than the patient of the verb.[9]

8　Wang Li (1955), pp. 164-171. He uses the label "execution form" to render the Chinese term
　　chǔzhìshì 處置式.
9　Chao (1968), p. 345.

(3)   *Bǎ* ge zéi pǎo le.

把個賊跑了.

"The thief ran away."

(4)   *Bǎ* wǒ máng de shǒu máng jiǎo luàn.

把我忙得手忙腳亂.

"It kept me so busy that my hands and feet were all confused."

However, beginning with Li and Thompson (1981), the concept of disposal has returned to the grammatical scene, this time in a slightly revised role. [10] Disposal is now viewed not as "how to dispose of the pretransitive object" but rather as "what happens to it." In this new guise, the construction becomes more of a pragmatic or discoursal device rather than a syntactic necessity. The pretransitive noun phrase represents the focus of information and is hence treated as the topic of the sentence in both Tsao (1987) and Hsueh (1989). [11] The verbal portion functions primarily as comment on the topic, a fluid discoursal relationship that does not have to be defined in terms of action and agent/patient. To borrow Hsueh's definition, we can sum up the pretransitive construction in the following manner: [12]

Syntactic structure: A *ba* B + C

Semantic implication: In connection to A, B turns out to be what C describes.

In our following investigation of the pretransitive in Cantonese, we will study the various linguistic conditions that necessitate the employment of the construction and we will examine its use as a means of topicalization. We will consider the *jeung*-construction as serving essentially two separate functions in the language: on the one hand it is a form of pragmatic device marking the focus in an utterance; on the other hand, the mechanism

---

10 Li & Thompson (1981) devote an entire chapter to the discussion of the *ba*-construction. On the notion of disposal, see pp. 466–480.
11 There is a difference between Tsao and Hsueh is their treatments of the *ba* NP as a topic. According to Tsao (1987), the initial NP in a sentence is a regular topic and the *ba* NP is a secondary topic. Hsueh (1989), however, considers the *ba* NP the main topic of the sentence; syntactically, it is the subject of the following predicate. For his arguments, see pp. 107–109.
12 Hsueh (1989), p. 111.

is also sometimes syntactically or lexically required in order to produce a grammatical sentence. This bipartite treatment may not be deemed satisfactory as there lacks a unifying force that would place all variations under the same interpretative mode. However, as our examples shall illustrate, the *jeung*-construction wears two different hats, the distinction between which may not be as readily discernable in other dialects as in Cantonese. Another characteristic feature of the Cantonese pretransitive is its restrictive nature in terms of the notion of disposal. To highlight the contrast in use between Cantonese and Mandarin, all pertinent examples will be given in both dialects.

IV. The Disposal Nature of the Pretransitive

In spite of the controversy it raises in terms of its application to the Mandarin language, the original definition of the pretransitive by Wang Li as a form of disposal is more than adequate to characterize the *jeung*-construction in Cantonese. In his words, "The disposal form states how a person is handled, manipulated, or dealt with; how something is disposed of; or how an affair is conducted." [13] Of all the Cantonese examples we have collected, the majority displays a disposal relationship among the three major sentential elements: the subject noun phrase, the action verb phrase, and the pretransitive noun phrase. The subject is always the agent or actor of the action, which generates a direct result on the entity as represented by the pretransitive object. As in the case of Mandarin, the resultative aspect of the action is generally indicated by some kind of a grammatical element such as the perfective marker, a complement of various types, a second object, or an adverbial. For example,

(5)   C.   Kéuih yíhgìng *jēung* daahp láu maaihjó ge laahk. (V–Aspect)

佢已經將沓樓賣咗嘅喇.

M.   Tā yǐjing *bǎ* fángzi mài le.

他已經把房子賣了.

---

13   Translation by Li(1974), pp. 200-201.

"He has already sold the flat."

(6) C. Kéuih saisailihk *jēung* douh mùhn sàanmàaih. (V–Directional)

佢細細力將度門閂埋.

M. Tā qīngqīngde *bǎ* mén guānshang.

他輕輕地把門關上.

"He closed the door lightly."

(7) C. M̀hgòi néih *jēung* dī yéh tòih yahplàih ā. (V–Directional)

唔該你將D嘢抬入嚟吖.

M. Máfán nǐ *bǎ* dōngxi tái jìnlai.

麻煩你把東西抬進來.

"Please carry the things in."

(8) C. Chéng néih *jēung* nī dī yéh gàau béi kéuih. (V–Indirect Obj)

請你將呢D嘢交俾佢.

M. Qǐng nǐ *bǎ* zhè xiē dōngxi jiāo gěi ta.

請你把這些東西交給他.

"Please give these things to him."

(9) C. Ngóh móuh *jēung* go táaipùhn heung jó nihng a. (Adverb-V)

我冇將個呔盤向左擰啊.

M. Wǒ méi *bǎ* lúnpán xiàng zuǒ kāi a.

我没把輪盤向左開啊.

"I didn't turn the steering wheel to the left."

(10) C. Kéuih a-bàh *jēung* kéuih dá dou m̀hhàahng dāk gam jaih. (V–Complement)

佢阿爸將佢打到唔行得咁滯.

M. Tā bàba *bǎ* tā dǎ de chà yìdiǎnr zǒu bu dòng lù.

他爸爸把他打得差一點兒走不動路.

"His dad hit him so hard that he almost couldn't walk."

(11) C. *Jēung* ga chē tan hauh dī. (V–Complement)

將架車退後D.

M. *Bǎ* chē wàng hòu tuì yìdiǎnr.

把車望后退一點兒.

"Back up the car a little bit."

(12) C. Māt néih juhng meih *jēung* dī faahn sihk saai àh? (V-Complement)

乜你重未將D飯食晒呀？

M. Zěnme nǐ hái méi *bǎ* fàn chī wán?

怎麼你還沒把飯吃完？

"How come that you still haven't finished eating your meal?"

The above sentences, by no means exhaustive of the kinds of verb phrases the pretransitive construction requires, invariably show a disposal reading of the relationship between the agent subjects and the patient objects. The actions direct their impacts onto the pretransitive noun phrases. Hence, in the last example, the resultative state of *sihk saai* "finish eating the entire quantity" clearly refers to the object *faahn* "rice" or "meal." However, if we compare (12) with the following pair, we detect a violation of this general principle of disposal since the resultative state of "being full" in (13) refers to the eater and not to the food. For this reason, the sentence is not acceptable in Cantonese.

(13) C. *Māt néih juhng meih *jēung* dī faahn sihk báau a?

乜你重未將D飯食飽呀？

M. Zěnme nǐ hái méi *bǎ* fàn chī bǎo?

怎麼你還沒把飯吃飽？

"How come that you still haven't had enough?"

Yet, in contrast to the strict observation of the disposal requirement in Cantonese, Mandarin accepts the corresponding form as a well-formed sentence. [14] In fact, as

---

14   The behavior of *chī fàn* in (13) is not necessarily representative of other Mandarin verbs in this regard. For example, it is not possible to say *bǎ yīfu xǐ de hēn lèi* 把衣服洗得很累 "to feel exhausted from washing clothes." However, from the examples to be cited later, it is evident that the semantic requirement of a disposal reading is not to be taken literally to account for the great variety of situations in which the pretransitive construction is used in Mandarin.

exemplified by the following sentences, Mandarin exhibits a much higher degree of tolerance than Cantonese for the transgressive or versatile use of the pretransitive construction.

(14) M. Wǒ *bǎ* tā hèn tòu le.

      我把他恨透了.

   C. *Ngóh *jēung* kéuih hahn tau la.

      我將佢恨透了.

      "I hate his guts."

(15) M. Nǐ *bǎ* wǒ jí huài le.

      你把我急壞了.

   C. *Néih *jēung* ngóh gāp waih la.

      你將我急壞喇.

      "You got me worried sick."

(16) M. Tā *bǎ* ge érzi bìng sǐ le.

      他把個兒子病死了.

   C. *Kéuih *jēung* go jái behng séijó.

      佢將個仔病死咗.

      "He lost his son through death."

(17) M. Tā *bǎ* wǒ kū de xīn dōu fán le.

      他把我哭得心都煩了.

   C. *Kéuih *jēung* ngóh haam dou sām dōu fàahn saai.

      佢將我喊到心都煩晒.

      "He cried so much that he got on my nerves."

(18) M. Zhè gùshi *bǎ* wǒ xiào de dùzi dōu téng le.

      這故事把我笑得肚子都疼了.

   C. *Nī go gújái *jēung* ngóh siu dou tóuh dōu tung le.

      呢個故仔將我笑到肚都痛喇.

      "This story made me laugh so mush that my belly ached."

In (14), *hèn tòu* "to bear extreme hatred" stands for the emotional state of *wǒ* "I," the impact being more on the subject NP rather than on the pretransitive NP. In (15) and (16), the verbal phrases are both status descriptions of the pretransitive NPs; but in neither case is the subject NP directly responsible for the outcome. The verb *kū* "to cry" in (17) does not have the pretransitive object *wǒ* as its goal of action. The grammatical subject in (18), *zhè ge gùshi* "this story," is clearly not the actor of the verb *xiào* "to laugh." In short, none of the sentences is a true case of disposal, which explains why the pretransitive is not applicable in Cantonese. Yet, all of them may appear in the *ba*-form in Mandarin. In this regard, the two dialects vary drastically in their readiness to relax and extend the semantic reading of disposal to include a wide variety of cases, some of which, such as (18), may be readily characterized as a stylistic device to achieve a special effect in vivid narration.[15]

To take another look at this device of vivid narration, let us compare the following sets of examples:

(19) C.   a.   Ngóh sé nī go bougou sé dou tàuhtàuh sih douh.

呢個報告寫到頭頭是道.

b.   Ngóh *jēung* nī go bougou sé dou tàuhtàuh sih douh.

我將呢個報告寫到頭頭是道.

c.   *Nī go bougou sé dou ngóh tàuhtàuh sih douh.

呢個報告寫到我頭頭是道.

d.   *Nī go bougou *jēung* ngóh se dou tàuhtàuh sih douh.

---

15   In justifying the notion of disposal as characteristic of the use of *ba* in Mandarin, Li and Thompson argue that disposal may be inferred or understood in an implicit way. They claim a nondisposal verb like *ài* 愛 "to love" may take on a disposal reading when an hyperbolic expression like *yào sǐ* 要死 "want to die" is added to the verb as in the sentence *Tā bǎ xiǎomāo ài de yào sǐ* 他把小貓愛得要死 "He loves the kitten so much that he wants to die." They suggest that "such intense love must have some effect on the small cat," an implied case of disposal which "is sufficient to warrant the use of the *ba* construction."(pp. 468–469.) However, as *yao si* refers to the person who loves and not the object of the passion, the hyperbolic disposal seems to be directed more to the subject than to the *ba* object. This is but one of the many cases that have yet to be resolved in the framework of disposal. In Cantonese, *jeung* is never used in this manner.

呢個報告將我寫到頭頭是道.

M.　a.　Wǒ xiě zhè ge bàogào xiě de tóutóu shì dào.

我寫這個報告寫得頭頭是道.

　　b.　Wǒ *bǎ* zhè ge bàogào xiě de tóutóu shì dào.

我把這個報告寫得頭頭是道.

　　c.　*Zhè ge bàogào xiě de wǒ tóutóu shì dào.

這個報告寫得我頭頭是道.

　　d.　*Zhè ge bàogào *bǎ* wǒ xiě de tóutóu shì dào.

這個報告把我寫得頭頭是道.

"I wrote the report in such a manner that the arguments are both clear and logical."

(20)　C.　a.　Ngóh sé nī go bougou sé dou sèhng máahn móuh fan.

我寫呢個報告寫到成晚冇瞓.

　　b.　*Ngóh *jēung* nī go bougou sé dou sèhng máahn móuh fan.

我將呢個報告寫到成晚冇瞓.

　　c.　Nī go bougou sé dou ngóh sèhng máahn móuh fan.

呢個報告寫到我成晚冇瞓.

　　d.　*Nī go bougou *jēung* ngóh sé dou sèhng máahn móuh fan.

呢個報告將我寫到成晚冇瞓.

M.　a.　Wǒ xiě zhè ge bàogào xiě de yí yè méi shuì.

我寫這個報告寫得一夜沒睡.

　　b.　?Wǒ *bǎ* zhè ge bàogào xiě de yí yè méi shuì.

我把這個報告寫得一夜沒睡.

　　c.　Zhè ge bàogào xiě de wǒ yí yè méi shuì.

這個報告寫得我一夜沒睡.

　　d.　Zhè ge bàogào *bǎ* wǒ xiě de yí yè méi shuì.

這個報告把我寫得一夜沒睡.

"Writing the report kept me up the whole night."

In the first set, the complement expression refers to the quality of the report which the agent achieves through his writing effort. The event represents a bona fide case of execution; hence the pretransitive permutation is permissable in both Cantonese and Mandarin, as shown in (19)b. The c. and d. versions of (19) are incorrect because only the agent and not the patient may occupy the regular subject position. The situation is, however, quite different in the second set. As a stylistic device, both dialects allow a modification of the regular word order. As the agent and the patient swap positions in the sentence as in (20)c., the telling of the event becomes more dramatic in result. There is only one condition attached to this stylistic modification, namely, the complement expression ("to be up the whole night") has to refer back to the agent ("I") and not to the patient ("report"), a stipulation that both Mandarin and Cantonese observe as shown in the ungrammaticality of (19)c. But beyond this step the two dialects part company. Only Mandarin, and not Cantonese, may apply the pretransitive construction to the secondary or derived object, the agent writer. Hence, (20)d. is acceptable in one dialect but not in the other one. If we examine the above sentences in pairs, it is evident that the pretransitive construction in Mandarin may readily apply to any sentence with an object, regardless of its derivational relationship with the verb. In Cantonese, however, the operation discriminates against a derived object, as evidenced by (20)d. This difference in object identification and selection explains why none of the following Mandarin sentences are acceptable in Cantonese. [16]

(21)　M.　Zhè duàn lù *bǎ* Xiǎo Lǐ pǎo de shàng qì bù jiē xià qì.

這段路把小李跑得上氣不接下氣.

C.　*Nī dyuhn louh *jēung* A-Léih jáu dou seuhng hei m̀h jip hah hei.

呢段路將阿李走到上氣唔接下氣.

"Little Li was out of breath through running this route."

16　The following sentences, (21)–(24), are all taken from Hsueh (1989).

(22) M. Zhè píng máotáijiǔ *bǎ* tā hē de lànzuìrúní.

這瓶茅台酒把他喝得爛醉如泥.

C. *Nī jēun màauhtòihjáu *jēung* kéuih yám dou laahn jeui yùh nàih.

呢樽茅台酒將佢飲到爛醉如泥.

"He became completely drunk after a bottle of maotai."

(23) M. Zhè bān xuéshēng *bǎ* Wáng lǎoshī jiāo de xīnhuīyìlěng.

這班學生把王老師教得心灰意冷.

C. *Nī bàan hohksāang *jēung* Wòhng sāang gaau dou sàm fuì yi láahng.

呢班學生將王生教到心灰意冷.

"Teacher Wang became depressed from teaching this class of students."

(24) M. Kàn, *bǎ* tā lèi de⋯

看，把他累得⋯

C. *Tái, *jēung* kéuih guih dou⋯

睇，將佢瘤到⋯

"Look, how exhausted he is!"

To some linguists, the pretransitive form in the above sentences may seem causative in function.[17] Hence, sentence (21), for example, is derived from (21) a. & b.

(21) a. Zhè duàn lù a, shǐ Xiǎo Lǐ pǎo de shàng qì bù jiē xià qì.

這段路呀，使小李跑得上氣不接下氣.

b. Zhè duàn lù pǎo de Xiǎo Lǐ a, shàng qì bù jiē xià qì.

這段路跑得小李呀，上氣不接下氣.

As *Xiǎo Lǐ* sits in the object position in (21)b., it is readily qualified for the pretransitive operation. Such qualification for the causative usage of the pretransitive is, however, non-existent in Cantonese.

---

17 For this causative reading of the pretransitive form, see Chao (1968), p. 345, and Tsao (1987), pp. 38-41.

V. The Pretransitive as a Linguistic Necessity

5.1.   Insofar as there is a regular S–V–O sentence corresponding to the pretransitive form in the language, the pretransitive construction seems to be an optional mechanism in Chinese, an operation perhaps more preferable in one dialect than the other. As shown in the examples in (1) and (25), Mandarin and Cantonese differ in their choice for the pretransitive. Deviation from the habitual pattern of selection may sometimes yield a strange, but not necessarily unacceptable, sentence.

(25)　C.　a.　Kéuihdeih náhmjyuh duhk hóu syū jauh syunsou ge la.

　　　　　　　　佢哋諗住讀好書就算數嘅喇.

　　　　b.　?Kéuihdieh náhmjyuh *jēung* syū duhk hóu jauh syunsou ge la.

　　　　　　　　佢哋諗住將書讀好就算數嘅喇.

　　M.　a.　?Tāmen xiǎng niàn hǎo shū jiù suàn le.

　　　　　　　　他們想念好書就算了.

　　　　b.　Tāmen xiǎng *bǎ* shū niàn hǎo jiù suàn le.

　　　　　　　　他們想把書念好就算了.

　　　　　　"They think their job will be done when they finish their schooling."

Both dialects, however, have a large of number of sentences where the use of the pretransitive is a necessity and not an option. In a 1948 article, Lü made the first attempt to discuss the various syntactic conditions under which the pretransitive construction had to be employed. [18] He examined a wide variety of early vernacular texts and offered a list of seven conditions to characterize its obligatory use. Interested readers may refer to the article and also reviews of it by Wang (1959) and Sanders (1986). In general, Lü claims that "this construction is used in most cases when there is a postverbal element other than the ordinary object, that cannot be easily separated from the verb."(p. 212) In modern Mandarin, for example, the *ba*-construction is required to produce the following sentences:

18　Lü (1948) lists a total of thirteen conditions to account for the obligatory and optional uses of the pretransitive construction. His examples are drawn from a variety of vernacular writings mostly of the Ming/Qing era, from the 14th century to the 19th century.

(26)　　Tā lìkè *bǎ* nà fēng jǐnjí de xìn sòng gěi shōuxìnrén.

　　　　他立刻把那封緊急的信送給收信人.

　　　　*Tā lìkè sòng nà fēng jǐnjí de xìn gěi shōuxìnrén.

　　　　他立刻送那封緊急的信給收信人.

　　　　"He immediately delivered the urgent letter to the receiver."

(27)　　Qù *bǎ* dàmén shàngle suǒ.

　　　　去把大門上了鎖.

　　　　*Qù shàngle suǒ dàmén.

　　　　去上了鎖大門.

　　　　"Go lock the main door."

(28)　　Tā *bǎ* qián là zài jiāli le.

　　　　他把錢落在家裡了.

　　　　*Tā là qián zài jiāli le.

　　　　他落錢在家裡了.

　　　　"He left his money at home."

(29)　　Tā xiǎng *bǎ* xīn mǎi de bù zuò chéng mián'ǎo.

　　　　他想把新買的布做成棉襖.

　　　　*Tā xiǎng zuò xīn mǎi de bù chéng mián'ǎo.

　　　　他想做新買的布成棉襖.

　　　　"He wanted to use the new cloth to make a padded jacket."

(30)　　Tāmen *bǎ* tā kàn zuò zìjǐ de nǚér.

　　　　他們把她看作自己的女兒.

　　　　*Tāmen kàn tā zuò zìjǐ de nǚér.

　　　　他們看她作自己的女兒.

　　　　"They treated her like their own daughter."

　　Without going into much detail, it is evident that all of the above cases involve two noun phrases (NP) in the predicate, an object NP and another NP of some sort: an

indirect object, a retained object, a locative, etc. It seems that, as a general rule of thumb, when there are two NP's in a predicate, it is considered too clustered a grouping of information for clear communication. [19] Thus, it becomes necessary or highly desirable to evict one of them, usually the one whose reference has been established in the discourse, from the immediate domain of the verb so as to reserve room for the main message. In the above examples, since the message concerns primarily the location, relocation, or some kind of a transformation of a certain item, that item, which is the direct object NP, is targeted for the pretransitive movement. Similar reasoning may be applied to the preferred, albeit optional, use of the pretransitive with the directional complement in Mandarin.

(31)   *Bǎ* tā qǐng lái.

        把他請來.

        "Invite him over."

(32)   Qù *bǎ* tāmen zhǎo huílái.

        去把他們找回來.

        "Go find them and bring them back."

(33)   *Bǎ* zhè ge ná chū wàibian qù.

        把這個拿出外邊去.

        "Take this outside."

In fact, it has been reported that the most common situation where the pretransitive is used is when the sentence contains a directional expression. [20]

---

19 Also to be avoided is the grouping of Object and Complement in the same postverbal slot. Either the object is to be lifted out of the confines or the verb will be repeated to provide each component its own verbal domain.

20 According to a study based upon colloquial essays, stories, and speeches, 40% of the collected *ba*-sentences end with a directional suffix and another 28% contain a directional phrase. Figures are quoted in Li & Thompson (1981), p. 490. A half-hour TV program which I listened to have a total of seven *ba*-sentences, all of which were related to the directional complement. This prominent use of *ba* in directional sentences poses actually an important question in terms of language pedagogy. Even on the basis of these preliminary findings, it is obvious that a good textbook should introduce the *ba*-construction before the directional complement, thereby equipping the students with the necessary linguistic skill to produce proper sentences. The 1980 Beijing text entitled *Practical Chinese Reader* does not follow this order of presentation and, as a consequence, it teaches sentences such as *Nǐ ná huí nà fēng xìn lái le ma?* 你拿回那封信來了嗎 ? "Have you gotten and returned with that letter?"

Compared with Mandarin, the Cantonese dialect is less restrictive with its syntactic rules on the operation of the pretransitive. In the following set of sentences where *ba* is almost always required in Mandarin, the southern dialect prefers the non-*jeung* pattern.

(34) M. Qǐng nǐ tì wǒ *bǎ* zhè běn shū huán gěi túshūguǎn.

　　請你替我把這本書還給圖書館.

C. M̀hgòi néih bōng ngóh wàahn fàan nī bún syū béi tòuhsyūgún lā.

　　唔該你幫我還翻呢本書俾圖書館喇.

"Please return this book to the library for me."

(35) M. Zhōngguó rén *guǎn* māma de māma jiào shénme? [21]

　　中國人管媽媽的媽媽叫什麼？

C. Jùnggwok yàhn ngaai màhmā ge màhmā jouh mātyéh a?

　　中國人嗌媽媽嘅媽媽做乜嘢啊？

"What do the Chinese call their mother's mother?"

(36) M. Nǐ *bǎ* wǒ de màozi fàng zài nǎr le?

　　你把我的帽子放在哪兒了？

C. Néih jàijó ngóh déng móuh hái bīn syu a?

　　你擠咗我頂帽喺邊處呀？

"Where did you put my hat?"

(37) M. Bié *bǎ* zhǐ rēng zài cèsuǒ li.

　　別把紙扔在廁所裡.

C. M̀hhóu dám dī jí hái chisó syu.

　　唔好扰D紙喺廁所處.

"Don't throw the paper into the toilet."

(38) M. Zhànshí *bǎ* chē tíng zài ménkǒu.

　　暫時把車停在門口.

21　*Guǎn* is one of the pretransitive variants, but its use is limited to only one verb, *jiào* "to call (by some name)." See Chao (1968), p. 343.

C. Jaamsìh tìhng ga chē héung mùhnháu douh.

暫時停架車响門口度.

"Park your car in front the gate for the time being."

(39) M. Tā *bǎ* yào yòng de dōngxi dōu bān xià lóu lái le.

他把要用的東西都搬下樓來了.

C. Kéuih bùn saai yiu yuhng ge yéh lohklàih lòuhah la.

佢搬晒要用嘅野落嚟樓下喇.

"He has moved to downstairs all the items he needs to use."

While there is the same need to avoid crowding the verb domain with crucial information, Cantonese prefers the serial verb construction over that of the pretransitive, thereby finding for each NP its own verbal niche. It is perhaps because of this prevalence in structural choice that the pretransitive construction is sometimes described as foreign to Cantonese or a borrowing from the northern dialects. [22] There are, however, some situations where the *jeung*-construction is compulsory in Cantonese. The following is a discussion of the conditions in which the pretransitive has to be utilized.

5.2. When the complement component in the predicate is a verbal expression that contains its own noun phrase, the standard practice is to adopt the serial verb sequence: $V_1 + O_1 + V_2 + O_2$. However, when the complement verb is by nature a bound form and has to be attached to the main verb to form a free unit, the object of the main verb has to be transposed out of the domain by means of the pretransitive movement: *jeung* $+ O_1 + V_1 - V_2 + O_2$. For example, contrast the following two sentences:

(40) C. Tùhng ngóh yihk nī geui jouh Yìngmán.

同我譯呢句做英文.

Tùhng ngóh *jēung* nī geui yihk jouh Yìngmán.

同我將呢句譯做英文.

M. Tì wǒ *bǎ* zhè jù fān chéng Yīngwén.

替我把這句翻成英文.

"Please translate this sentence into English."

---

22 See Norman (1989), p. 221.

(41)　C.　Tùhng ngóh *jēung* nī geui yihksìhng Yìngmán.

同我將呢句譯成英文.

*Tùhng ngóh yihk nī geui sìhng Yìngmán.

同我譯呢句成英文.

　　　M.　Tì wǒ *bǎ* zhè jù fān chéng Yīngwén.

替我把這句翻成英文.

Same as (40)

While both *jouh* and *sìhng* carry the same function of marking the medium into which the sentence is translated, the former is a free morpheme and the latter is bound. The free status of *jouh* allows it to appear in two different word orders as illustrated in (40). On the other hand, the bound form *sìhng* in (41) is attached to the main verb *yihk*, blocking out the original space for the object *geui*. As a result, the pretransitive is the only possible path to follow, transposing *geui* to a preverbal slot. This obligatory use of *jēung* pertains essentially to one complement verb *sìhng*. The following is a few more examples to illustrate its use.[23]

23　On the use of Verb-*sìhng*, it should be noted that in the following three sentences where the non-pretransitive is used, the objects are placed differently. If the verb is monosyllabic, *sìhng* has to be attached to the verb to form one functioning unit, with the object coming afterwards. If, on the other hand, the verb is a two-syllable form, *sìhng* may appear either before or after the object. In the former case, it becomes part of the verb; in the latter, it forms alliance with *gám*, a pro-adverbial meaning "in this manner."
1.　Māt hā sìhng néih gám a?　　(How have they bullied you?!)
　　乜蝦成你咁呀？
2.　Māt jitmòh sìhng néih gám a?　　(How have they tortured you?!)
　　乜折磨成你咁呀？
3.　Māt jitmòh néih sìhng gám a?
　　乜折磨你成咁呀？！
In the following pair of examples (4. & 5.), however, semantic ambiguity arises as the postverbal objects may be the objects of the verbs or the objects in the complements. Hence, there are two possible readings: "to make you up in such a way" or "to make someone else up like you."
4.　Māt fa sìhng néih gám a?
　　乜化成你咁呀？
5.　Māt fajòng sìhng néih gám a?
　　乜化裝成你咁呀？
Sentence 6. can have only one meaning, so do sentences 7. and 8. which are phrased in the *jēung* pattern.
6.　Māt fajòng néih sìhng gám a?　　(They've made you up like this!)
　　乜化裝你成咁呀？
7.　Māt *jēung* néih fa sìhng gám a?
　　乜將你化成咁呀？
8.　Māt *jēung* néih fajòng sìhng gám a?
　　乜將你化裝成咁呀？

(42)　C.　*Jēung* go daahngōu chitsìhng sàam fahn.

將個蛋糕切成三份.

"Cut the cake into three pieces."

(43)　C.　*Jēung* Tìn'ònmùhn sihgín sésìhng yāt go kekbún.

將天安門事件寫成一個劇本.

"Turn the Tiananmen incident into a play."

(44)　C.　*Jēung* néih dábaahnsìhng yāt go baakyèpó.

將你打扮成一個伯爺婆.

"Dress you up like an old lady."

(45)　C.　*Jēung* néih dī tàuhfaat jíngsìhng go pàngtàuh.

將你D頭髮剪成個崩頭.

"Turn your hair into the punk style."

5.3.　When a verb takes both a direct object (DO) and an indirect object (IO) in a sentence, the order in which they appear in Cantonese is the exact opposite of that in Mandarin. Hence,

(46)　M.　Gěi wǒ (= IO) qián (= DO).

給我錢.

　　　　C.　Béi chín (= DO) ngóh (= IO).

俾錢我.

"Give me money."

If the DO is definite in reference, the preferred ordering in Mandarin is in the *ba*-pattern. Cantonese, on the other hand, still opts for the non-pretransitive.

(47)　M.　*Bǎ* nà xiē qián gěi wǒ.

把那些錢給我.

　　　　C.　Béi gó dī chín ngóh.

俾嗰D錢我.

"Give me that money."

This selection pattern holds true in general when the DO is a nonhuman noun. However, if both the DO and IO are human terms, the situation becomes quite complicated, as indicated in the following table.

(48)

Direct O	Indirect O	Pretransitive	Non-Pretransitive
Noun	Noun	yes	no
	Proper Noun	yes	yes
	Pronoun	yes	yes
Proper Noun	Noun	yes	no
	Proper Noun	yes	no
	Pronoun	yes	yes
Pronoun	Noun	yes	no
	Proper Noun	yes	no
	Pronoun	yes	no

There seems to be two principles at work. First, if both the DO and IO belong to the same grammatical category, e.g. both are nouns, proper nouns, or pronouns, then the pretransitive form is strongly preferred. The juxtaposition of two objects of the same type next to each other in the same post-*béi* slot may easily create confusion as to *who* is giving *whom*. Examples are

(49) C. *Jēung* nī go guhaak béi gó gó fógei.   (DO$_N$ IO$_N$)

將呢個顧客俾嗰個個伙記.

?Béi nī go guhaak gó gó fógei.

俾呢個顧客嗰個個伙記.

M. *Bǎ* zhè ge gùkè gěi nà ge huǒjì.

把這個顧客給那個伙記.

"Give this client to that clerk."

(50) C. *Jēung* Baahk síujé béi Chàhn táai.   (DO$_{PpN}$ IO$_{PpN}$)

將白小姐俾陳太.

?Béi Baahk síujé Chàhn táai.

俾白小姐陳太.

M. *Bǎ* Bái xiǎoje gěi Chén tàaitaai.

把白小姐給陳太太.

"Give Ms. Bai to Mrs. Chan."

(51) C. *Jēung* kéuih béi néih.   (DO~Pn~ IO~Pn~)

將佢俾你.

*Béi kéuih néih.

俾佢你.

M. *Bǎ* tā gěi nǐ.

把他給你.

"Give her to you."

The second underlying principle is that there is a selection criterion based upon the specificness of the noun phrases. Generally speaking, a noun is less specific than a proper noun, which in turn is less specific than a deitic pronoun. A personal noun stands for a general class of people while a pronoun represents a specific member in a set. Even though a noun may be qualified by a definite demonstrative, the reference of, say, *that student* may not be particular enough for an immediate identification. A proper noun such as *Mr. Wang* is, on the other hand, more specific than a noun but not as specific as a pronoun. There may be more than one *Mr. Wang* in a room but there can be no more than one *you* at one time. If we adopt a scale from 1 to 3 to indicate the specificness of a noun phrase, with 3 marking the highest degree of specificity, we may modify the above table in (48) by showing the association between the two noun phrases in this regard:

(52)

Direct O			Indirect O		Pretransitive	Non-Pretransitive
Noun	1	=	Noun	1	yes	no
		<	Proper Noun	2	yes	yes
		<	Pronoun	3	yes	yes
Proper Noun	2	>	Noun	1	yes	no
		=	Proper Noun	2	yes	no
		<	Pronoun	3	yes	yes
Pronoun	3	>	Noun	1	yes	no
		>	Proper Noun	2	yes	no
		=	Pronoun	3	yes	no

Now, with regard to the double object construction in Chinese, the general reading of the two objects is that the IO is more specific in reference than the DO. For example, if the DO is in the interrogative form, hence non-specific in reference, the general order in Cantonese is for IO to be followed by DO, a direction from nonspecific to specific.

(53) C. Nógh yìnggòi béi bīn bún syù néih a?

我應該俾邊本書你呀？

"Which book should I give you?"

On the other hand, if the IO is interrogative, the regular order of IO followed by DO will turn to the direction from specific to nonspecific in the predicate, a reversal that Cantonese does not readily endorse. As a result, the specific DO needs to be transferred out of the verb phrase either through topicalization or the pretransitive.

(54)　C.　?Ngóh yìnggòi béi bún syū bīn go a?

　　　　　我應該俾本書邊個呀？

　　　　　Bún syū ngóh yìnggòi béi bīn go a?

　　　　　本書我應該俾邊個呀？

　　　　　Ngóh yìnggòi *jēung* bún syū béi bīn go a?

　　　　　我應該將本書俾邊個呀？

　　　　　"Who should I give this book to?"

If we examine the rating of the noun phrases in (52) in light of this directional reading from less specific to more specific, we see that whenever the principle is violated, the regular sequence of *DO + IO* is barred. When the DO rating is higher than that of IO, the direction is from more specific to less specific, a course that calls for the use of the pretransitive. Otherwise, when the DO is less specific than the IO, the pretransitive is an optional choice, with perhaps a slight difference in emphasis. In the case where there is an equation in rating between the two NPs, they are identical in grammatical status. And, in accordance with the first principle, the pretransitive is obligatory. The following are further examples to demonstrate the complexity of the double object construction.[24]

(55)　C.　Béi nī go hohksāang Chàhn táai.　　　　　　　$DO_N < IO_{PpN}$

　　　　　俾呢個學生陳太．

　　　　　Jēung nī go hohksāang béi Chàhn táai.

　　　　　將呢個學生俾陳太．

　　M.　*Bǎ* zhè ge xuésheng gěi Chén tàitai.

　　　　　把這個學生給陳太太．

　　　　　"Give this student to Mrs. Chen."

(56)　C.　*Béi Chàhn táai nī go hohksāang.　　　　　　$DO_{Pp N} > IO_N$

24　Of course the dative can be marked by another *béi* 俾. For example, *Béi syū ngóh.* 俾書我＝ *Béi syū béi ngóh.* 俾書俾我 "Give me the book." Yet, when both objects are pronouns, even the use of the second *béi* would not improve the acceptablity of the string *béi néih béi ngóh.* "Give you to me."

俾陳太呢個學生.

Jēung Chàhn táai béi nī go hohksāang.

將陳太俾呢個學生.

M. *Bǎ* Chén tàitai gěi zhè ge xuésheng.

把陳太太給這個學生.

"Give Mrs. Chen to this student."

(57) C. *Béi kéuih gó go lóuhbáan.   DO_{Pn} > IO_N

俾佢嗰個個老板.

Jēung kéuih béi gó go lóuhbáan.

將佢俾嗰個個老板.

M. *Bǎ* tā gěi nà ge lǎobǎn.

把他給那個老板.

"Give him to that boss."

(58) C. Béi Baahk xíujé ngóhdeih lā.   DO_{PpN} < IO_{Pn}

俾白小姐我哋啦.

Jēung Baahk xíujé béi ngóhdeih lā.

將白小姐俾我哋啦.

M. *Bǎ* Bái xiǎojie gěi wǒmen ba.

把白小姐給我們吧！

"Why don't you give Miss Bai to us?"

(59) C. *Bīn go wah béi ngóhdeih Chàhn sāang ga?   DO_{Pn} > IO_{PpN}

邊個話俾我哋陳生㗎？

Bīn go wah *jēung* ngóhdeih béi Chàhn sāang ga?

邊個話將我哋俾陳生㗎？

M. Shéi shuō *bǎ* wǒmen gěi Chén xiānsheng de?

誰說把我們給陳先生的？

"Who said that we'd be given to Mr. Chan?"

(60) C. Bīn go wah béi Chàhn sāang ngóhdeih ga?   DO$_{PpN}$ < IO$_{Pn}$

邊個話俾陳生我哋架？

Bīn go wah *jēung* Chàhn sāang béi ngóhdeih ga?

邊個話將陳生俾我哋架？

M. Shéi shuō *bǎ* Chén xiānsheng gěi wǒmen?

誰說把陳先生給我們？

"Who said that Mr. Chen would be given to us?"

In Cantonese, *béi* "to give" is the ubiquitous marker of the double object construction. In some cases, when another verb is added to the sentence more descriptive of the actual manner of the giving action, the structure changes into a serial verb construction, e.g. *béi* —> *sung béi* "to give as a present." Each verb in the predicate can take on its own object, the DO following the action verb and the IO following *béi*. The complexity regarding specificness becomes irrelevant to the arrangement of the two objects. The pretransitive is always an optional choice. A few examples of the V–*béi* type are:

(61) C. Ngóh gàau go múi béi néih la.   DO < IO

我交個妹俾你喇.

Ngóh *jēung* go múi gàau béi néih la.

我將個妹交俾你喇.

M. Wǒ *bǎ* mèimei jiāo gěi nǐ la.

我把妹妹交給你了.

"I'm turning over my sister to you."

(62) C. Gaangngáang sāk kéuih béi ngóh.   DO = IO

監硬塞佢俾我.

Gaangngáang *jēung* kéuih sāk béi ngóh.

監硬將佢塞俾我.

M. Yìng *bǎ* tā sāi gěi wǒ.

硬把他塞給我.

"(Someone) stuck him to me against my will."

(63)　C.　Bātyùh je Chán sèuh béi gó bāan lā.　　　　DO > IO

不如借陳SIR 俾啲個班啦.

Bātyùh *jēung* Chán sèuh je béi gó bāan lā.

不如將陳SIR 借俾啲個班啦.

M.　Bùrú *bǎ* Chén lǎoshī jiè gěi nà bān ba.

不如把陳老師借給那班吧！

"Why don't we loan Mr. Chen to that class?"

5.4.　　When the main verb of the sentence is in itself a Verb-Object in combination, leaving no room for an additional NP to follow it, the proper disposal object has to appear in the pretransitive position. For example,

(64)　C.　*Jēung* douh mùhn yàuh hùhngsīk.

將度門油紅色.

*Yàuh douh mùhn hùhngsīk.

油度門紅色.

"Paint the door red."

Hùhngsīk "red color" is the nominal in the verbal unit that takes precedence over *mùhn* in occupying the post-verbal position. However, in the following sentence of the same reading where the color term *hùhng* is now an adjective rather than a noun, the post-verbal nominal position become available. Hence, the pretransitive is no longer compulsory. In fact, between the following two sequences, the non-pretransitive form seems more preferable.

(65)　C.　Yàuh hùhng douh mùhn.

油紅度門.

Jēung douh mùhn yàuh hùhng.

將度門油紅.

M. *Bǎ* mén chī hóng.

把門漆紅.

Some more examples of the V-O compound type are:

(66) C. Néih *jēung* dī jyùyuhk *chit jó pín* meih?

你將D豬肉切咗片未呀？

"Have you sliced the pork?"

(67) C. M̀hhóu dáng yàhndeih *jēung* ngóh *dihng yìhng.*

唔好等人哋將我定型.

"Don't let others fix my image."

(68) C. *Jēung* néih *baahn háai.*

將你扮蟹.

"Turn you into a crab. : Tie you up."

(69) C. M̀hgeidāk *jēung* douh mùhn *séuhng só.*

唔記得將度門上鎖.

"I forgot to lock the door."

(70) C. Sìhsìh *jēung* ga chē *dá laahp* wuíh hóu dī ga.

時時將架車打蠟會好D㗎.

"It'd be better if you wax the car often."

5.5.   When the message of a sentence stresses the all-inclusiveness of the action, covering the entirety of the disposed object, the *jeung*-construction is very often used. In some cases, it is even required in order to produce an acceptable sentence. For example, in the following sentences, the use of the adverbial *hahmbaahnglaahng* and *chyùhnbouh,* both meaning "all," automatically calls for the operation of the pretransitive.

(71) C. Kéuih tái cho saai dī tàihmuhk.

佢睇錯晒D題目.

"He read all the questions wrong."

(72) C. Kéuih *jēung* dī tàihmuhk *hahmbaahnglaahng* tái cho saai.

佢將D題目冚唪唥睇錯晒.

*Kéuih *hahmbaahnglaahng* tái cho saai dī tàihmuhk.

"He read all the questions wrong."

(73)   C.   Ngóh yíhgìng *jēung* dī yéh *chyùhnbouh* nīng jáu la.

我已經將D嘢全部擰走喇.

*Ngóh yíhgìng *chyùhnbouh* nīng jáu dī yéh la.

我已經全部擰走D嘢喇.

"I have already moved away everything."

This situation in Cantonese is similar to the use of *dōu* or *quán*, both meaning "all," in Mandarin. As noted in other studies, these inclusive adverbs refer only to the scope or quantity of the noun standing before the verb and never to that of the one after it. Therefore, if it is the object that is being focused, the pretransitive construction may apply to move the object-NP to a preverbal position. [25]   Sentences (73) and (74) are examples from Mandarin to illustrate this characteristic behavior of the scope adverbs.

(73)   M.   Tā *bǎ* tímù dōu kàn cuò le.

他把題目都看錯了.

(74)   M.   Tā *bǎ* tímù quán kàn cuò le.

他把題目全看錯了.

"He read all the questions wrong."

Again, like Mandarin, Cantonese may employ the interrogative word to indicate the all-inclusiveness of an action. Examples are:

(75)   C.   Kéuih *jēung* māt chín dōu yuhng saai.

佢將乜錢都用晒.

*Kéuih dōu yuhng saai māt chín.

佢都用晒乜錢.

M.   Tā *bǎ* shénme qián dōu yòng wàn le.

25   Lü (1955), p. 142-143.

他把什麼錢都用完了.

"He used up all the money."

(76)　C.　Kéuih *jēung* mātyéh yàhn dōu dākjeuih saai. [26]

佢將乜嘢人都得罪晒.

*Kéuih dōu dākjeuih saai mātyéh yàhn.

佢都得罪晒乜嘢人.

　　M.　Tā *bǎ* shénme rén dōu dézuì le.

他把什麼人都得罪了.

"He has offended everyone."

Another form that falls under this general category of scope is the verbal complement *múhn* "full." For example,

(77)　C.　Kéuih *jēung* buhng chèuhng gwa múhn saai wá.

佢將埲牆掛滿晒畫.

"He has hung pictures all over the wall."

One thing to notice about (77) is that there is another object in the sentence, *wá* "pictures," which is the true object of the verb *gwa* "to hang." Semantically, *buhng chèuhng* "the wall" is more like the place where the pictures are hung. However, as convincingly argued in Teng (1975), *chèuhng* here is not a true locative for the simple reason that for a noun to serve in this capacity, it needs to take on a locative marker, *syu* in Cantonese, as in the following sentence. [27]

26　This inclusive use of an interrogative in a pretransitive construction is limited to *mātyéh* "what" and its associations. Other interrogative words do not seem able to participate in this operation. For example, compare (76) with the following sentence and also ii. with iii.
　i.　　*Kéuih *jēung bīngo yàhn* dōu dākjeui saai.
　　　佢將邊個人都得罪晒.
　　　"He has offended everyone."
　ii.　Kéuih *jēung mātyéh dehngfòng* dōu dásou dāk gòngònjehngjehng.
　　　佢將乜嘢地方都打掃得乾乾淨淨.
　iii.　*Kéuih *jēung bīndouh dehngfòng* dōu dásou dāk gòngònjehngjehng.
　　　佢將邊度地方都打掃得乾乾淨淨.
　　　"He has made every place spotlessly clean."
27　Teng (1975), pp. 90-93.

(78) C. Kéuih *jēung* dī wá gwa múhn saai hái buhng chèuhng syu.

　　　俉將D畫掛滿晒喺埲牆處.

　　　"He has hung all the pictures on the wall."

In other words, the nominal *buhng chèuhng* "the wall" in (77) identifies not so much the

location where the pictures are hung but rather the location which the agent decorates with

pictures. It is the object of a disposal action which in itself contains a verb and an object.

As for the scope of the action verb, it is evidently the preverbal *chèuhng* "the wall" and not

the postverbal *wá* "the pictures" that the complement *múhn* refers to. It should be noted

that if the notion of all-inclusiveness is absent in the sentence, as in the following cases,

the use of the pretransitive would be incorrect. Their counterparts in Mandarin are,

however, acceptable. [28]

(79) C. *Kéuih *jēung* buhng chèuhng gwajó hóu dò wá.

　　　俉將埲牆掛咗好多畫.

　　M. Tā *bǎ* qiáng guà le hěn duò huàr.

　　　他把牆掛了很多畫兒.

　　　"He hung a lot of pictures on the wall."

(80) C. *Kéuih *jēung* go fājēun chaapjó yāt jah fā.

　　　俉將個花樽插咗一才乍花.

　　M. Tā *bǎ* huāpíng chāle yì bǎ huār.

　　　他把花瓶插了一把花兒.

　　　"He placed a bunch of flowers in the vase."

The notion of all inclusiveness applies to the following cases where the pretransitive

seems optional. Yet, to some native speakers, the use of the *jeung*-construction seems more

---

28 I do not know how to explain this dialectal difference. Semantically *chèuhng* "the wall"
　　may serve as the disposal object as in (77), and grammatically there is the formal absence
　　of the locative marker, *syu*. Yet, unlike the situation in Mandarin, sentence (80) is not
　　acceptable in the southern dialect. For more discussion on the Mandarin version, see Wang
　　Huan (1959), pp. 12-13, and Li and Thompson (1981), pp. 470-472.

dramatic in telling the encompassing nature or totalling effect of the action. *Sèhng-* Measure marks the entirety of the following noun.

(81) C. Kéuih yāt sáu póh héi ngóh sèhng go yàhn.

佢一手抱起我成個人.

Kéuih yāt sáu *jēung* ngóh sèhng go yàhn póh héi.

佢一手將我成個人抱起.

"He lifted me up completely in one grab."

(82) C. ?Māt johng waaih saai sèhng ga chē ga?

乜撞壞晒成架車㗎？

Māt *jēung* sèhng ga chē johng waaih saai ga?

乜將成架車撞壞晒架？

"How come that you have crashed the entire car?"

One may have noticed the presence of the morpheme *saai* in most of the above examples of all-inclusiveness. *Saai* is a verbal suffix that appears after a verb or a verb-complement unit, marking again completeness in reference to the relevent noun. Yet, despite this semantic reading, its sole presence does not require the use of the pretransitive. In the following pair of examples, the first one in fact sounds more natural to a native ear.

(83) C. Sihk saai dī faahn lā.

食晒D飯啦.

Jēung dī faahn sihk saai lā.

將D飯食晒啦.

"Finish the rice."

5.6. The last group of disposal verbs we will examine in relation to the necessary use of the pretransitive construction comprises individual words and expressions with idiomatic readings or usages. Some of them are literary forms, whose colloquial counterparts fare just as well in a non-pretransitive pattern. Others appear in morphological patterns that generally do not require the pretransitive. Their idiosyncratic needs have, therefore, to be

individually recorded in a dictionary.

(84) C. Néih bàhbā *jēung* hèimohng *geitok* hái néih sān seuhng.

你爸爸將希望寄託喺你身上.

*Néih bàhbā *geitok* hèimohng hái néih sān seuhng.

你爸爸寄託希望喺你身上.

"Your father places his hope on you."

cf. Néih bàhbā *jài* saai dī hèimohng hái néih sān seuhng.

你爸爸擠晒D希望喺你身上.

(85) C. Yiu *jēung* sàmléihhohk *póupinfa*, sàmléihhohkgā búnsān sīn yiu jéungngāak

kwàhnjong sàmléih.

要將心理學普遍化，心理學家本身先要掌握群眾心理.

*Yiu séung *póupinfa* sàmléihhohk…

要想普遍化心理學…

"To promote the study of psychology, the psychologists have first to gain a

firm understanding of the mind of the people."

cf. Yiu *tèuigwóhng* sàmléihhohk,…

要推廣心理學…

(86) C. Nī go séhwúih sìhsìh wúih *jēung* dī yàhn *sèungyihpfa*.

呢個社會時時會將D人商業化.

*Nī go séhwúih sìhsìh *sèungyihpfa* dī yàhn.

呢個社會時時商業化D人.

"This society often commercializes the masses."

cf. Nī go séhwúih sìhsìh wúih *gaauwaaih* yàhn.

呢個社會時時會教壞人.

"This society has a corrupting influence on people."

(87) C. Ngóh hóu séung *jēung* dī gōngfū *chyùhn lohkheui*.

我好想將D功夫傳落去.

*Ngóh hóu séung *chyùhn* dī gōngfū *lohkheui.*

我好想傳D功夫落去.

"I really would want to pass down my *kungfu* skills."

cf. ⋯*chyùhn* dī gōngfū béi houhyàhn ⋯

傳D功夫俾後人.

"⋯pass the *kungfu* to the future generations."

cf. Yàuh seuhngbihn *chyùhn* dī yéh *lohk heui.*

由上邊傳D嘢落去.

"Pass this down from upstairs."

(88) C. Gitgwó kéuihdeih *jēung* nī gihn sih *gwàijeui yù* bīn go a?

結果佢哋將呢件事歸罪於邊個呀？

*Gitgwó kéuihdeih *gwàijeui* nī gihn sih *yù* bīn go a?

結果佢哋歸罪呢件事於邊個呀？

"So, finally who did they blame this on?"

cf. Gitgwó kéuihdeih *laaih* saai gihn sih hái bīn go douh a?

結果佢哋賴晒件事喺邊個度呀？

(89) C. Jeuigahn kéuih jyunjó dī hóumeih, *jēung* kéuih ge sànyìhng *yàuhchìhng*

yāt dī, jeuk fàan dī kwàhn.

最近佢轉咗D口味，將佢個身型柔情一D，著翻D裙.

"She has recently changed her taste, feminizing her appearance by wearing

skirts."

The verbs in (85) and (86) both carry the suffix *fa*, which Chao describes as a modern
and somewhat foreign suffix corresponding in function to that of "-ize" in English. [29] The
use of *chyùhn lohkheui* in (87) is a metaphorical extension of the directional complement
in a temporal sense. The expression *gwàijeui yù* in (88) is a derivative from the classical
language, as indicated by its old locative posposition *yù*. In the last example, the word

29 Chao (1968), pp. 225-226.

yàuhchìhng is originally a noun meaning "tender feelings"; its use as a verb to mean "to feminize" is highly unconventional, probably the spontaneous product of a whimsical writer who likes to play on words.

VI. The *Jeung* -Construction as a Form of Topicalization

6.1.   Linguists have long been puzzled by the flexibity of the pretransitive construction. Aside from specific cases where its presence is required by certain linguistic conditions, some of which have been discussed above, there are many situations in which the use of the pretransitive seems entirely optional. Speakers may also vary in their speech habits and preferences. But, is the use of the pretransitive truly a matter of arbitrary choice, dependent on the whims of the speaker at the time? Wang Huan in her 1959 article strongly argues for a contextual examination to capture not only the grammatical factors but also the discoursal scenarios that explain the variation in use. [30] As noted by linguists later, the regular V–O sequence and the pretransitive form are in reality answers to completely different questions. [31] For example,

(90)   M.   Wǒ màile nà liàng chē le.

　　　　我賣了那輛車了.

　　　　"I sold that car."

(91)   M.   Wǒ *bǎ* nà liàng chē mài le.

　　　　我把那輛車賣了.

　　　　"I sold that car."

In spite of the same English rendition, the first sentence reports an event as an answer to "What did you do?" whereas the second answers the question "What have you done with that car?" *Che* is part of the message to be conveyed in (90). In (91), however, *che* is the center of the utterance and a comment is made about its transaction. The two sentences

---

30   Wang Huan (1959), pp. 12–13.
31   A number of linguists have utilized the question-answer format to uncover the discoursal difference between the two forms. See Thompson (1973) pp. 215–216, Li & Thompson (1981) p. 483, and Tsao (1987) p. 22.

are therefore quite different in terms of their communicative functions. The pretransitive highlights *che* as the topic on the discoursal level, even though structually it may be described as the object of the verb *mài*. In other words, even there is no grammatical need, the pretransitive construction may still be triggered for discoursal reasons. To advance a post-verbal noun phrase in a sentence is to assign it a new topical role as deemed necessary from the context.

Contrary to Mandarin, Cantonese would use the same S–V–O sentence as answers in both scenarios outlined above.

(92) C. Ngóh maaihjó ga chē la.

我賣咗架車喇.

"I sold the car."

It is true that the *jeung*-construction may be employed to topicalize the object (93), but a more common form of topicalization for a case like this would be simply to place *chē* at the very front (94).

(93) C. Ngóh *jēung* ga chē maaihjó la.

我將架車賣咗喇.

(94) C. Ga chē, ngóh maaihjó la.

架車，我賣咗喇.

From the Cantonese data that we have studied and rendered into Mandarin, it is quite evident that the pretransitive is not as productive a topicalization device in the southern dialect. The following are a few examples showing this dialectal difference:

(95) C. Màhfàahn néih *fax* gó dī yìuchíng seun béi ngóh táitái.

麻煩你 fax 嘅個D邀請信俾我睇睇.

M. Qǐng nǐ *bǎ* nà xiē yāoqǐng xìn *fax* gěi wǒ kànkan.

請你把那些邀請信 fax 給我看看.

"Please fax those invitation letters to me for a look."

(96) C. Làuh go jái hái ngūkkéi, m̀hhaih géi hóu gwa.

留個仔喺屋企，唔係幾好啩！

M. *Bǎ* xiǎohár líu zài jiā, bú tài hǎo ba.

把小孩兒留在家，不太好吧！

"It isn't too good to leave the kids at home, is it?"

(97) C. Mìhngmìhng jìdou gihn sih gányiu lā, dímgáai juhng jouh dāk gihn sih gam lásāi ge?

明明知道件事緊要啦，點解重做得件事咁喇西嘅？

M. Míngmíng zhīdao shìqíng yàojǐn, zěnme huì *bǎ* shìqíng zuò de zème mǎhu?

明明知道事情要緊，怎麼會把事情做得這麼馬虎？

"You obviously knew about the importance of this task. Why did you do such a lousy job?"

(98) C. Go neui dím? M̀hhóu mahn la! Kéuih lóuhdauh nīng kéuih chēutheui dong yéh maaih, néih wah cháam m̀hcháam a!

個女點？唔好問喇，佢老竇擰佢出去當啲野賣，你話慘唔慘呀？

M. Nǚér zěnme yàng? Bié wèn ba! Tā bàba *bǎ* tā ná chūqu dàng huòwù mài, nǐ shuō kělián bù kěliàn?

女兒怎麼樣？別問吧！她爸爸把她拿出去當貨物賣，你說可憐不可憐？

"What happened to the girl? Her father took her out and traded her like a piece of commodity. Isn't that pathetic?"

(99) C. Fongsàm lā, ngóh m̀hwuíh dongjó néih haih sàuhyàhn ge.

放心喇！我唔會當咗你係仇人嘅.

M. Fàngxīn ba. Wǒ bú huì *bǎ* nǐ dàng zuò chóurén de.

放心吧！我不會把你當作仇人的.

"Don't worry, I won't regard you as my enemy."

The dialectal contrast clearly testifies that, by comparison, Cantonese is rather dilatory in its readiness to adopt the pretransitive for the topical function. However, the fact that all the above sentences can be rephrased according to the *jeung*-pattern also indicates

that the mechanism is available should the speaker chooses to use it. Our data, in fact, supply us with evidence that point to such a discoursal significance. First, despite the S–V–O sequence in sentence (92), it is necessary to use the *jeung*-construction to phrase the pertinent question, "What did you do with the car?" or "How did you dispose of your car?"

(100) C.   Néih *jēung* ga chē dím la?

你將架車點啦？

M.   Nǐ *bǎ* chē zěnme le?

你把車怎麼了.

Like *zěnme* "how" in Mandarin, *dím* is a pro-verb, [32] whose identity is derived from that of an interrogative adverb in combination with an unknown verb: *dím* + Verb "how to Verb?" Because of this dual status, *dím* may occupy the position regularly reserved for a verb in a sentence but it may not take on an object as a regular verb can. So, where would an object appear in a pro-verb question? The pretransitive construction is called on to resolve the dilemma. In this capacity, the pretransitive may indeed be characterized as a grammatical necessity. But, insofar as the pretransitive is used to introduce the grammatical object as the discoursal focus of the conversation, its topical function is both vital and clear. If we compare the following two *dím*-questions, it is also evident that the pretransitive is not only topical in function but also disposal in meaning.

(101) C.   Něih *jēung* ga chē dím a?

你將架車點呀？

"What did you do with the car?"

(102) C.   Ga chē dím a?

架車點呀？

"What about the car?"

While (102) may connote the meaning of "What did you do with it?", in which case *chē* has been turned into the primary topic of the sentence occupying the subject position in

---

32   For the behavior of the pro-verb in Mandarin, see Chao (1968), p. 349 and pp. 660–662.

the sequence, [33] it may also be intended as a question to elicit an answer such as "The car is great." The disposal reading is, however, unequivocally delivered in the pretransitive form in (101).

6.2.   The topical function of the pretransitive is most evident in the scenario where its presence is necessary to focus the attention on the object under discussion. For example, the difference between the following two forms is not immediately discernable unless placed in their respective contexts.

(103) C. a.   Yàuh Sàamfàahnsíh jà ga chē fàan làih ···

由三藩市揸架車翻嚟···

b.   *Jēung* ga chē yàuh Sàamfàahnsíh jà fàan làih ···

將架車由三藩市揸翻嚟···

"To drive (the car) back from San Francisco ···"

The scenario is essentially about a car trip back from San Francisco. If the emphasis is on its impact on the driver, stressing the physical exhaustion, the non-pretransitive form is used as in (104).

(104) C.   Yàuh Sàamfàahnsíh jà ga chē fàan làih, pa wúih hóu guih gwa.

由三藩市揸架車翻嚟，怕會好癐掛！

"To drive (the car) back from SF? I'm afraid that it will be very exhausting."

On the other hand, if it is the condition of the car that is of concern here, the *jeung*-form would be used to bring *che* to the foreground, as in (105).

(105) C.   *Jēung* ga chē yàuh Sàamfàahnsíh jà fàan làih, pa m̀hdāk gwa.

將架車由三藩市揸翻嚟，怕唔得啩.

"To drive the car back from SF? I don't think it (i.e. the car) is going to make it."

To rephrase (105) in the following manner by foregoing the *jeung* pattern would be con-

---

33   For more discussion on the primary and secondary topics and the interaction between the two, see Tsao (1987).

fusing as to what is the factor that causes apprehension: the condition of the car, the health condition of the driver, the road condition, the weather situation, the time factor, or what?

(106) C. Yàuh Sàamfàahnsíh jà ga chē fàan làih, pa m̀hdāk gwa.

由三藩市揸架車翻嚟，怕唔得嘅.

6.3.   The pretransitive construction is often used when the disposed object forms the topic of a series of comments. Structurally, the pretransitive noun phrase is the grammatical object of each of the ensuing verbs, as the following sentences illustrate:

(107) C. Kéuih yāt go yàhn *jēung* luhk go jáinéuih *chou daai*₁, *yéungyuhk sìhng yàhn*₂, jàn haih m̀hgáandāan.

佢一個人將六個仔女湊大，養育成人，真係唔簡單.

M. Tā yí ge rén bǎ liù ge érnǚ dài dà, yǎngyù chéng rén, shízài bù jiǎndān.

他一個人把六個兒女帶大，養育成人，實在不簡單.

"It's truly not an easy job for him to bring up six children, taking good care of them until they become grown up."

(108) C. *Jēung* tìuh lāailín *chaakjó lohklàih*₁, *jín dyún síu síu*₂, *joih dèng fàan séuhngheui*₃.

將條拉鏈拆咗落嚟，剪短少少，再釘翻上去.

M. Bǎ lāliàn chāi xiàlai, jiǎn duǎn yìdiǎnr, zài dīng shàngqu.

把拉鏈拆下來，剪短一點，再釘上去.

"Take off the zipper, cut it a bit shorter, and sew it back on."

(109) C. *Jēung* dī ngàuhyuhk *hái séuihàuh chùngchùng*₁, *chit sìhng bohk pín*₂, *joih yuhng síusíu yìhm lálá*₃, yìhnhou sīnji *lohk wohk heui cháau*₄.

將D牛肉喺水喉冲冲，切成薄片，再用少少鹽喇喇，然後先至落鑊去炒.

M. Bǎ niúròu zài lóngtóu dǐxia xǐ yì xǐ, qiē chéng báo piàn, zài yòng yán yān yan, ránhòu zài fàng dào guōli qù chǎo.

把牛肉在龍頭底下洗一洗，切成薄片，再用鹽腌腌，然后再放到鍋裡去炒.

"Wash the beef under running water, slice into thin pieces, marinate with a little salt, and then stir fry in the wok."

In the company of a series of comments, a disposal object which would not normally appear in the pretransitive with certain verbal expressions is often ready to temporarily disregard the restriction. For example, unlike its northern counterpart, Cantonese does not accept the following type of sentences where the pretransitive NP share a part-whole relation with the direct object of the verb or where the direct object is the so-called retained object of the pretransitive NP. [34]

(110) C. *Kéuih *jēung* pìhnggwó sihkjó sàam go.

佢將蘋果食咗三個.

M. Tā *bǎ* píngguó chī le sān ge.

他把蘋果吃了三個.

"He ate three of the apples."

(111) C. *Go chaahklóu jēung kéuih bóng héi léuhng jek sáu.

個賊佬將佢綁起兩隻手.

M. Nà ge zéi bǎ tā bǎng qǐ liǎng zhī shǒu.

那個賊把他綁起兩隻手.

"The thief tied up his hands."

In the first sentence, the three apples are part of a bigger quantity; and, in the second, the hands belong to the victim that has been robbed. To phrase these in idiomatic Cantonese, one would have to say:

(111) a. C. Kéuih sihkjó sàam go pìhnggwó.

佢食咗三個蘋果.

(112) a. C. Go chaahklóu bóng héi kéuih léuhng jek sáu.

個賊佬綁起佢兩隻手.

---

34 Both topics on the part-whole relation and the retained object have been closely studied in many works. Particularly, see Lü (1955), pp. 133-135, Li & Thompson (1981), pp. 470-572.

b. C. Go chaahklóu *jēung* kéuih léuhng jek sáu bóng héi.

個賊佬將佢倆隻手綁起.

However, when expanded into longer utterances, both (110) and (111) are found acceptable in the following sentences.

(113) C. Kéuih *jēung* pìhnggwó *sihkjó sàam go, dámjó sei go,* juhng *làuhfàan yāt go béi néih.*

佢將蘋果食咗三個，扰咗四個，重留翻一個俾你.

M. Tā *bǎ* pìngguó chīle sān ge, rēngle sì ge, hái gěi nǐ liúle yí ge.

他把蘋果吃了三個，扔了四個，還給你留了一個.

"He ate three of the apples, threw away four, and saved one for you."

(114) C. Go chaahklóu jēung kéuih bóng héi léuhng jek sáu, bóng héi léuhng jek geuh, sākjó sèhng go yàhn yahp màhbàaudóih syu.

個賊佬將佢綁起兩隻手，綁起兩隻腳，塞咗成個人入麻包袋處.

M. Nà ge zéi bǎ tā bǎng qǐ liǎng zhī shǒu, bǎng qǐ liǎng zhī jiǎo, bǎ tā zhěngge rén sāi dào mábāo kǒudài li qù.

那個賊把他綁起兩隻手，綁起兩隻腳，把他整個人塞到麻包口袋裡去.

"The thief tied up his hands and legs, and put him in a sack."

The oddity of the initial verb phrase in each of the sentences disappears as it is succeeded by other verbal expressions, all commenting on the same pretransitive object. When followed by a series of comments, the discoursal role of the disposal NP at topic becomes increasingly prominent, thereby allowing the temporary suspension of its syntactic association with the verbs in the ensuing comments. What one may initially reject on the basis of grammatical rules may no longer appear objectionable in the realm of discourse.

The following are more examples of this nature.

(115) a. C. * *Jēung* jek cháang mōk pèih.

將隻橙剝皮.

M. *Bǎ* júzi bāo pí.

把橘子剝皮.

"Peel the orange."

b. C. *Jēung* jek cháang mōk pèih, mīt hòi géi káai.

將隻橙剝皮，搣開幾楷.

M. *Bǎ* júzi bāo pí, fēn kāi jǐ bànr.

把橘子剝皮，分開幾瓣.

"Peel the orange and separate it into sections."

(116) a. C. * *Jēung* tìuh fu wuhn yāt tìuh lāailín.

將條褲換一條拉鏈.

M. *Bǎ* kùzi huàn yì tiáo lāliàn.

把褲子換一條拉鏈.

"Change the zipper of the pants."

b. C. *Jēung* tìuh fu wuhn jó lāailín sīnji jeuk lā.

將條褲換咗拉鏈先至著啦.

M. *Bǎ* kùzi huànle lāliàn zài chuān ba.

把褲子換了拉鏈再穿吧.

"Change the zipper of the pants before putting them on."

(117) a. C. **Jēung* néih ge dihnsih béi yāt ga ngóh.

將你嘅電視俾一架我.

M. *Bǎ* nǐ de diànshì gěi wǒ yì tái.

把你的電視給我一台.

"Give me one of your TV sets."

b. C. *Jēung* néih ge dihnsih béi yāt ga ngóh, béi yāt ga ngóh muìhṃúi. Néih wah dím a?

將你嘅電視俾一架我，俾一架我妹妹。你話點呀？

M. *Bǎ* nǐ de diànshìjī gěi wǒ yì tái, zài gěi wǒ mèimei yì tái. Nǐ shuō hǎo ma?

把你的電視機給我一台，再給我妹妹一台。你說好嗎？

"Give me one of your TV sets and give another one to my sister. How about that?"

(118) a.   C.   * *Jēung* go fājēun chaapjó yāt jah fā.

將個花樽插咗一𧂑花.

    M.   *Bǎ* huāpíng chāle yǐ bǎ huār.

把花瓶插了一把花兒.

"He placed a bunch of flowers in the vase."

  b.   C.   Kéuih *jēung* go fājēun chaapjó dī fā, báai hái go haaktēng syu, jànhaih géi hóutái ga.

佢將個花樽插咗D花，擺喺個客廳處，眞係幾好睇嘅.

    M.   Tā bǎ huāpíng chāle yǐ xiē huār, fàng zài kètīng li, zhēnshi tǐng hǎokàn de.

他把花瓶插了一些花兒，放在客廳裡，眞是挺好看的.

"He placed some flowers in the vase and put it in the living room. It really looked pretty."

As the above sentences show how the pretransitive form may extend its operation beyond the scope of one sentence, serving as the head of a succession of verbal comments, the following few demonstrate a juxtaposition of several pretransitive expressions, with only the first one being explicitly marked by *jeung*. The disposed objects are different, but the repeated markers may be deleted in the surface form.

(119) C.   Chéng *jēung* yuhtwai sùngchìh, gèiyuhk sàu gán.

請將穴位鬆弛，肌肉收緊.

    M.   Qǐng bǎ xuèwèi sōngchí, jīròu shōu jǐn.

請把穴位鬆弛，肌肉收緊.

"Relax your acupoints and tighten your muscles, please."

(120) C.   Yànwaih m̀hséung chòuhjyuh yàhndeih, sóyíh *jēung* go dihnwá màngjó, dānggwōng gaau ngam, dihnsih náuh saisēng dī.

因爲唔想嘈住人哋，所以將個電話揢咗左，燈光較暗，電視扭細聲D.

M. Yīnwèi bù xiǎng dǎrǎo biérén, suǒyi *bǎ* diànhuà bá diào, diàndēng nǐng àn,

diànshī kāi xiǎoshēng yìdiǎnr.

因爲不想打擾別人，所以把電話拔掉，電燈撐暗，電視開小聲點兒.

"As he didn't want to disturb others, he unplugged the phone, dimmed the light,

and turned down the volume of the TV."

6.4.   We have thus far provided many examples from our data to demonstrate that, as a
process of topicalization, the pretransitive construction moves the object from a post-ver-
bal to a preverbal position.   Unlike the situation in Mandarin, the pretransitive NP is
almost always the direct object of the verb in the predicate.   The movement process could
have followed two different routes.   It may have simply lifted the object out of its regular
post-verbal position and placed it preverbally, or it may have first copied the object to the
preverbal position and deleted the postverbal version afterwards.   In either case, the pre-
transitive marker may have been in the deep structure as marker of the accusative or it
may have been created through the topicalization process. [35]   Compared with the first
scenario of direct transposition, the second hypothesis seems not only cumbersome in that
it requires two steps of copying and deletion, it also finds little support from Mandarin
where the postverbal slot is always left empty after the movement of the object.   Our stud-
ies of the Cantonese material, however, may seem to supply us with evidence that copying
may indeed be the first step to take in this particular process of topicalization.

In   each   of   the   following   examples,   we   find   not   only   a   transposed   object
unequivocally marked by *jēung* but also a pronoun that occupies the postverbal object po-
sition.

(121) C.   Ngóh séung *jēung* pò syu cháam jó *kéuih*.

我想將棵樹斬咗左佢.

---

35   For example, Li (1971) considers *ba* to be the accusative case marker, which is normally deleted
on the surface unless it occupies the pretransitive position.

M. Wǒ xiǎng *bǎ* shù kǎnle.

我想把樹砍了.

"I want to chop down the tree."

(122) C. Chìnkèih m̀hhóu *jēung* dī tàuhfaat yíhm hāk *kéuih*.

千祈唔好將D頭髮染黑佢.

M. Qiānwàn bié *bǎ* tóufa rǎn hēi.

千萬別把頭髮染黑.

"Be sure not to dye your hair black."

(123) C. Néih yáuh móuh *jēung* dī syū jài fàan hóu *kéuih* a?

你有冇將D書擠翻好佢呀？

M. Nǐ *bǎ* shū gē huí yuánchù le ma?

你把書擱回原處了嗎？

"Have you put the books back properly?"

(124) C. Màhfàahn néih bóng ngóh *jēung* fùng seun dá dá *kéuih*.

麻煩你幫我將封信打打佢.

M. Láojià nín gěi wǒ *bǎ* zhè fēng xìn dǎ yì dǎ.

勞駕您給我把這封信打一打.

"May I ask you to type this letter for me?"

(125) C. Ngóh géi sìh yáuh *jēung* go lóuhpòh lèihjó *kéuih* a?

我幾時有將個老婆離咗佢呀？

M. Wǒ shénme shíhou *bǎ* ge tàitai lí le?

我什麼時候把個太太離了？

"When did I divorce my wife?"

(126) C. *Jēung* kéuih jaathéi *kéuih*!

將佢紮起佢.

M. *Bǎ* tā bǎng qǐlai.

把他綁起來.

"Tie him up."

The use of a postverbal *kéuih* in a pretransitive sentence is quite a common phenome-non in Cantonese, although Mandarin speakers in general do not accept this "tagged-on" object, which they consider redundant and therefore not necessary. [36] The redundancy may indeed be viewed as a case of copying, by means of which a postverbal object is copied to the pretransitive position for discoursal reasons. As a result, there are two identical NPs in the sentence, the sencond of which becomes either pronominalized, or deleted, or first pronominalized and then deleted. The following diagram schematizes this process:

(127)

S + V + O ----- Topicalization -----> S + *jeung*-Object + V + Object

                ↓

--- Pronominalization ---> S + *jeung*-Object + V + *keuih*

                ↓

-------- Deletion --------> S + *jeung*-Object + V
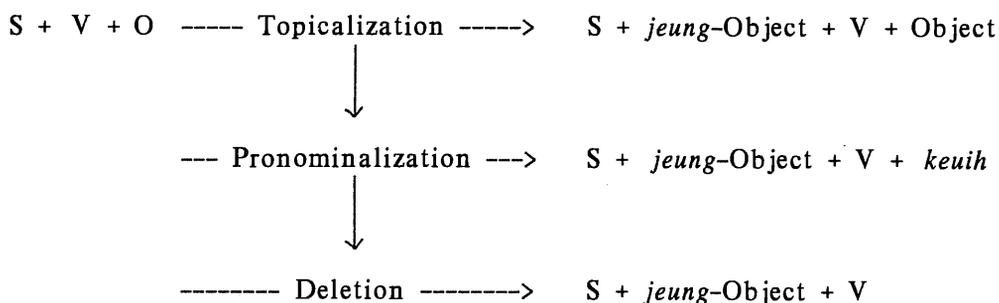
The same scheme may be proposed for Mandarin, the only difference being that the last step of deletion is compulsory in Mandarin but optional in Cantonese. Under certain conditions, however, the deletion of *kéuih* is also obligatory in Cantonese. As noted at the beginning of this discussion, the verb phrase in a pretransitive sentence has to contain, in addition to the verb itself, an extra element that may be a suffix, a complement, another object, or an adverb. With the exception of the adverb, all the elements that may appear in the verb phrase do so postverbally. As the direct object NP is also by nature a postverbal element, the sequence in the verb phrase may be in two different orders as represented be-low. X stands for that extra element in the verb phrase.

(128) i.   V + X + Object

---

36 Some speakers seem to accept the following sentence: *Nǐ bǎ chá hē le tā.* 你把茶喝了他. However, even for them, the redundant *tā* may appear only in a command and not in other types of sentences. This use also seems to be acceptable in the Wu dialects.

    ii.   V + Object + X

If (128) is submitted to the process described in (127), there are two different results in word order if the last step of deletion is skipped:

(129) i.   S + *jēung*-Object + V + X + *keuih*

      ii.   S + *jēung*-Object + V + *keuih* + X

Sentence (121) – (126) are examples of the first type of arrangement. The second type, namely with *keuih* sitting before X, is however not acceptable in Cantonese, thereby making the deletion a compulsory step. As illustrated in the following sentences, it is also not possible to reverse the order between *keuih* and the X element in (129) ii., even though by doing so it would produce an order identical to (129) i. Only those that are derived directly from (129) i. are acceptable in the language.

(130) a. C. diu dī yeh lohklàih ⟶ * *jēung* dī yéh diu *kéuih* lohklàih

            吊D嘢落嚟   將D嘢吊佢落嚟

                              * *jēung* dī yéh diu lohklàih *kéuih*

                              將D嘢吊落嚟佢

                      ⟶ *jēung* dī yéh diu lohklàih

                              將D嘢吊落嚟

              "lower the things down with a rope"

      b. C. jài dài dī yéh   ⟶ *jēung* dī yéh jài dài *kéuih*

             擠低D嘢   將D嘢擠低佢

                "put down the things"

(131) a. C. wàahn fàan bún ⟶ * *jēung* bún syū wàahn fàan *kéuih* béi tòuhsyūgún

            syū béi tòuhsyūgún   將本書還翻佢俾圖書館

            還翻本書俾圖書館

                      ⟶ * *jēung* bún syū wàahn fàan béi tòuhsyūgún *kéuih*

                              將本書還翻俾圖書館佢

                      ⟶ *jēung* bún syū wàahn fàan béi tòuhsyūgún

將本書還翻俾圖書館.

"return the book to the library"

b.　C.　wàahn fàan bún syū --→　　jēung bún syū wàahn fàan kéuih

還翻本書　　　　　　　　將本書還翻佢

　　　"resturn the book"

(132) a.　C.　jip gòu go jauh　　--→　　jēung go jauh jip gòu kéuih

摺高個袖　　　　　　　將個袖摺高佢

　　　"roll up the sleeve"

b.　C.　jip gòu dī go jauh　--→　　jēung go jauh jip gòu dī kéuih

摺高D個袖　　　　　　將個袖摺高D佢

　　　"roll up the sleeve a bit more"

c.　C.　jip gòu go jauh sàam chyun　--→　* jēung go jauh jip gòu kéuih 3 chyun

摺高個袖三寸　　　　　　　將個袖摺高佢三寸

　　　　　　　　　　　　--→　? jēung go jauh jip gòu 3 chyun kéuih

　　　　　　　　　　　　將個袖摺高三寸佢

　　　"roll up the sleeve by 3 inches"

(133) a.　C.　dájo go jái yāt chāan--→　* jēung go jái dájó kéuih yāt chāan

打咗個仔一餐　　　　　　將個仔打咗佢一餐

　　　　　　　　　　　--→　* jēung go jái dájó yāt chāan kéuih

　　　　　　　　　　　將個仔打咗一餐佢

　　　　　　　　　　　--→　jēung go jái dájó yāt chāan

　　　　　　　　　　　將個仔打咗一餐

　　　"beat up the son"

b.　C.　dá séi jek mān　　--→　　jēung jek mān dá séi kéuih

打死隻蚊　　　　　　　將隻蚊打死佢

　　　"kill the mosquito"

(134) a.　C.　* yàuh douh mùhn　　--→　* jēung douh mùhn yàuh hùhngsīk kéuih

　　　　　　　　hùhngsīk　　　　　　　　將度門油紅色佢

　　　油度門紅色　　　　　　　　*jēung* douh mùhn yàuh hùhngsīk

　　　　　　　　　　　　　　　　將度門油紅色

　　　　"paint the door red"

b.　C.　yàuh hùhng douh mùhn　--→　*jēung* douh mùhn yàuh hùhng *kéuih*

　　　油紅度門　　　　　　　　　　將度門油紅佢

　　　　"paint the door red"

There are other restrictions and problems regarding this use of *kéuih*, which makes the above argument on its derivation from a retained and, therefore, redundant object somewhat speculative, awaiting further investigation. For example, regardless of the number of the object NP, the final pronoun is always in the third person singular, *kéuih*.

(135)　C.　Nàu dāk jai, *jēung* bàan fógei cháau saai *kéuih*.

嬲得滯，將班伙記炒晒佢.

＊Nàu dāk jai, *jēung* bàan fógei cháau saai *kéuihdeih*.

嬲得滯，將班伙記炒晒佢哋.

M.　Qì qǐlai, *bǎ* huǒji dōu kāichú le.

氣起來，把伙記都開除了.

"In a fury, he fired his assistants."

Also, unlike sentence (126) where both the pretransitive object and the retained object can be in the third person pronoun, the following cases where the pretransitive objects are in the first and second persons do not allow pronominalization.

(136)　C.　＊Ngóh géisìh yáuh *jēung* néih wan màaih *néih* a?

我幾時有將你搵埋你呀？

Ngóh géisìh yáuh *jēung* néih wan màaih a?

我幾時有將你搵埋呀？

M.　Wǒ shénme shíhòu bǎ nǐ guān qǐlai le?

我什麼時候把你關起來了？

"When did I lock you up?"

(137) C. *Gam yùhngyih jauh *jēung* ngóh gáau dihm *ngóh*?

咁容易就將我攪掂我？

Gam yùhngyih jauh *jēung* ngóh gáau dihm?

咁容易就將我攪掂？

M. Zème róngyi jiù bǎ wǒ bǎi píng?

這麼容易就把我擺平？

"You can take care of me so easily?"

· It is apparent from the above data that this pronoun *kéuih* appears only at the end of the pretransitive sentence. However, in some non-pretransitive sentences such as the following, this sentence-final pronoun is also conspicuously present. The disposal verb is now followed by both its object and its pronominalized version.

(138) C. Jáamjó pò syu *kéuih*.

斬咗棵樹佢.

M. *Bǎ* shù kánle.

把樹砍了.

"Take down the tree."

(139) c. Fong chèuhng jek jauh *kéuih*.

放長隻袖佢.

M. *Bǎ* xiùzi fàng cháng.

把袖子放長.

"Make the sleeve longer."

(140) C. Kéuih hóu séung dihn lyùn dī táuhfaat *kéuih*.

佢好想電擎D頭髮佢.

M. Tā hěn xiǎng *bǎ* tóufa tàng de hěn juǎn.

他很想把頭髮燙得很捲.

"He wants to have his hair permed in a really curly fashion."

(141) C. Kéuih yíhgìng jāpfàan gòjehng gàan fóng *kéuih* la.

佢已經执翻乾淨間房佢喇.

M. Tā yǐjīng *bǎ* fángjiān shōushi gānjìng le.

他已經把房間收拾乾淨了.

"He has already cleaned up the room."

Our speculation on this object redundancy phenomenon is that when a pretransitive form is converted back to its regular V–O sequence, the pronominalized form is kept as a remnant feature of the pretransitivazation. As the following diagram shows, in spite of the seeming resemblance between stages i. and iv., the latter is a secondary S–V–O sequence, three steps removed from the primary form.

(142)

i.   Subject + Verb – X + Object

ii.   Subject + *jeung*-Object + Verb – X + Object

iii.   Subject + *jeung*-Object + Verb – X + *kéuih*

iv.   Subject + Verb – X + Object + *kéuih*
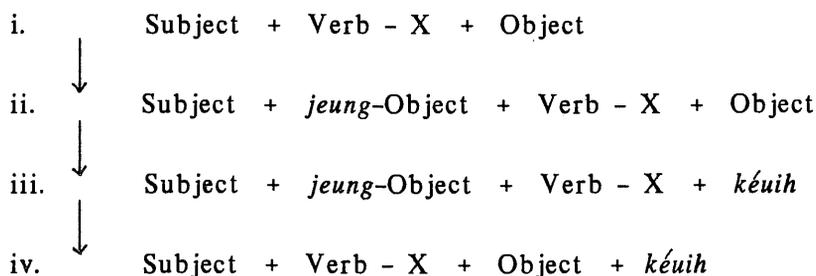
One way to prove the relationship between the product in iv. and the pretransitive operation is that the same kind of restrictions that apply to the pronominalization in step iii. are found in step iv. as well. Corresponding to the set of starred items in (130)–(134), the following sentences where the object comes before the X element in the verb phrase exhibit similar constraints in the non-pretransitive form. [37]

(143) a. C. diu dī yéh lohklàih ──→ * diu dī yéh *kéuih* lohklàih

吊D嘢落嚟   吊D嘢佢落嚟

---

37   A very interesting case to note here is the curse form *Séijó kéuih* 死咗佢 "Drop dead!". As the intransitive verb does not take on an object in any case, the presence of the final *kéuih* is truly intriguing.

* diu dī yéh lohklàih *kéuih*

吊D嘢落嚟佢

"lower the things down with a rope"

b. C. jài dài dī yéh   --→   jài dài dī yéh *kéuih*

挤低D嘢   挤低D嘢佢

"put down the things"

(144) a. C. wàahn fàan bún syū--→   * wàahn fàan bún syū *kéuih* béi tòuhsyūgún

béi tòuhsyūgún   還翻本書佢俾圖書館

還翻本書俾圖書館   * wàahn fàan bún syū béi tòuhsyūgún *kéuih*

                   還翻本書俾圖書館佢

"return the book to the library"

b. C. wàahn fàan bún syū--→   wàahn fàan bún syū *kéuih*

還翻本書   還翻本書佢

"return the book"

(145) a. C. jip gòu go jauh   --→   jip gòu go jauh *kéuih*

摺高個袖   摺高個袖佢

"roll up the sleeve"

b. C. jip gòu dī go jauh   --→   jip gòu dī go jauh *kéuih*

摺高D個袖   摺高D個袖佢

"roll up the sleeve a bit more"

c. C. jip gòu go jauh   --→   * jip gòu go jauh *kéuih* sàam chyun

sàam chyun   摺高個袖佢三寸

摺高個袖三寸   * jip gòu go jauh sàam chyun *kéuih*

                   摺高個袖三寸佢

"roll up the sleeve by three inches"

(146) a. C. dá jó go jái yāt chāan--→   * dá jó go jái *kéuih* yāt chāan

打咗個仔一餐   打咗個仔佢一餐

$*$ dá jó go jái yāt chāan *kéuih*

打咗個仔一餐佢

"beat up the son"

b.　C.　dá séi jek mān　——→　dá séi jek mān *kéuih*

打死隻蚊　　　　　　打死隻蚊佢

"kill the mosquito"

(147) a.　C.　$*$ yàuh douh mùhn hùhngsīk ——→ $*$ yàuh douh mùhn *kéuih* hùhngsīk

油度門紅色　　　　　　　　油度門佢紅色

$*$ yàuh douh mùhn hùhngsīk *kéuih*

油度門紅色佢

"paint the door red"

b.　C.　yàuh hùhng douh mùhn　——→　yàuh hùhng douh mùhn *kéuih*

油紅度門　　　　　　　　油紅度門佢

"paint the door red"

The striking similarity in behavior between the two types of *keuih*-final sentences strongly suggests that they are derivationally related. In both cases, *kéuih* behaves like a grammatical marker of a transformational process that pretransitivizes a sentence for discoursal purposes.[38]

---

38 There are, however, some examples that display a more rigid use of this final *kéuih* in the non-pretransitive sentence. A long object NP may appear with the final pronoun in a pretransitive form but rejects it in the non-*jēung* form. Examples are:

i.　a.　C.　*Jēung* ngóh góng ge yéh sé dài *kéuih*.
　　　　　將我講嘅野寫低佢.

　　b.　C.　$*$ Sé dài ngóh góng ge yéh *kéuih*.
　　　　　寫低我講嘅野佢.
　　　　　"Write down what I said."

ii.　a.　C.　Māt néih séung *jēung* ngóh sung béi néih gó pò syu cháam jó *kéuih* a?
　　　　　乜你想將我送俾你嗰棵樹斬咗佢呀?

　　b.　C.　$*$ Māt néih séung cháam jó ngóh sung béi néih gó pò syu *kéuih* a?
　　　　　乜你想斬咗我送俾你嗰棵樹佢呀?
　　　　　"What! You want to cut down the tree that I gave you as a present?"

VII. The Pretransitive Noun Phrase

7.1.   As emphatically characterized in all the studies on the pretransitive construction, a preverbal object has to be either "definite" or "generic" in reference. [39] When an object is indefinite, it generally cannot occur in a pretransitive sentence.   The following sentences demonstrate the same reference restriction in Cantonese.

(148) C.   Kéuih *jēung nī gihn sih* tái dāk taai gáandàan la.

　　　　佢將呢件事睇得太簡單喇.

　　M.   Tā *bǎ* zhè shì kàn de tài jiǎndān le.

　　　　他把這事看得太簡單了.

　　　　"He has oversimplified this matter."

(149) C.   *Kéuih *jēung yàt gihn sih* tái dāk taai gáandàan la.

　　　　佢將一件事睇得太簡單喇.

　　M.   *Tā *bǎ* yì jiàn shì kàn de tài jiǎndān le.

　　　　他把一件事看得太簡單了.

　　　　*"He has oversimplified a matter."

As in Mandarin, the noun phrase *nī gihn sih* in (148) consists of three elements: the demonstrative, the measure word, and the noun, and it is the presence of the demonstrative *nī* "this" that establishes the definiteness of the noun referent.   *Nī* is a definite demonstrative and it is also deictic in nature.   Its counterpart for far reference is *gó* "that," corresponding to *nà* in Mandarin.   However, unlike Mandarin which does not have any means to mark neutral reference like what "the" does in English, Cantonese resorts to the measure word for this function.   As discussed elsewhere, a *measure-noun*(M-N) combination in Cantonese may indicate definite but non-deictic reference. [40]   Hence, *Bún syū hóu hóutái.* means "The book is interesting."   The measure word *dī* stands for plural reference, as in *dī syū* "the books."   With this knowledge of the referential function of an M-N unit, we may

---

39   For more on this topic, see Li & Thompson (1981), pp. 465-466.
40   For a detailed discussion on the use of M-N as a definite indicator, see Cheung (1987).

readily understand why the pretransitive NP in most of the examples cited above appear in the pattern of M-N. The following is another sentence to show this difference between the two dialects.

(150) C. *Jēung go* sàuyàmgēi hòi daaihsēng dī.

將個收音機開大聲D.

M. * *Bǎ* ge shōuyīnjī kāi dàshēng yìdiǎnr.

把個收音機開大聲一點兒.

"Turn up the radio a little bit."

When used postverbally, a M-N unit may stand for either definite or indefinite reference, the latter being a short form of *yāt-M N* "a Noun." Therefore, the following sentence can have two readings:

(151) C. Béi go jái ngóh.

俾個仔我.

a. Give me the son. *or*

b. Give me one of the sons.

In a pretransitive position, however, there is only one possible interpretation. [41]

(152) C. *Jēung* go jái béi ngóh.

將個仔俾我.

Give me the son.

7.2. Relating to this issue of reference is the fact that while most cases of the pretransitive contain a preverbal M-N unit, there are some where the measure word is omitted. In general, there is no difference in meaning between the two forms as illustrated below:

---

41 A Measure-Noun combination may appear as a *ba* object in Mandarin as a short form for *yi-*M-N. For example, *Tā bǎ ge háizi sǐ le.* 他把個孩子死了. "He lost his child through death." See Tsao (1987), p. 30–32 and Hsueh (1989) pp. 108–109. Sentences of this type do not appear in Cantonese.

(153) C. Mhhóu *jēung* yéh jài hái syu.

唔好將嘢擠嗰係處.

(154) C. Mhhóu *jēung* dī yéh jài hái syu.

唔好將D嘢擠嗰係處.

M. Bié bǎ dōngxi fàng zài zhèr.

別把東西放在這兒

"Don't put the things here."

In contrast, the non–pretransitive form corresponding to the *jeung*-sentence always contains the measure word. As commonly known, a Verb–Object combination without an intervening measure word often connotes a general action, and the non-modified object does not necessarily carry any particular reference. A classic example is *sihk faahn* "to eat," literally meaning "eat-rice." Hence, in the following two sentences, the first one without the measure serves more like a general reminder whereas the second sentence with the M–N unit refers to specific unwelcomed objects.

(155) C. Mhhóu jài yéh hái syu.

唔好擠嘢嗰係處.

"Don't put things here."

(156) C. Mhhóu jài dī yéh hái syu.

唔好擠D嘢嗰係處.

"Don't put the things here."

7.3.   In summary, the following table describes the referential characteristics of a nominal unit in reference to the pretransitive construction.

(157)

	Non-Pretransitive V–NP	Pretransitive *jeung*–NP–V
[M–N] NP	+ Definite – Definite	+ Definite
[N] N	– Definite	+ Definite

VIII. Other Remarks

This paper has discussed with ample illustrations the general characteristic features of the pretransitive in Cantonese, some of which are conspicuously absent in Mandarin. On the one hand, the Cantonese version is more restrictive in that it only applies to disposal verbs, disallowing all the extended usages of the pattern that characterize the *ba*-construction as one of the most versatile structures in Mandarin. On the other hand, however, there are fewer syntactic conditions that require its use in Cantonese. Even when there is a choice, the dialect opts for the post-verbal arrangement rather than the pretransitive. As a pragmatic device, the pretransitive is often used to highlight the topic in a conversation, a discoursal operation that may sometimes override the grammatical regulations. Pretransitive sentences that may otherwise sound unacceptable in isolation are found permissable in a discoursal context. The sentence-final *kéuih* in both the pretransitive and non-transitive sentences poses as a possible indicator of a transformation that consists of both copying and pronominalization.

Like its Mandarin counterpart *ba, jeung* was historically a full verb meaning "to

take." It appeared in the serial verb construction in texts dated form the sixth century and began to take on a disposal reading in the Tang dynasty. [42] As amply exemplified in Lü's work (1948), the use of the pretransitive in the Yuan/Ming vernacular writings already betrayed signs of its later development (e.g. the retained object in the postverbal position). However, it seems that it was not until the eighteenth century that northern Chinese began to use the pretransitive for non-disposal sentences. By comparison, Cantonese is rather reserved in its grammatical development in this regard. Although its pretransitive does serve the function of marking topicalization, its use seldom extends beyond the scope of disposal. In our study, we have noted that the construction is also sometimes stylistically conditioned. It appears less in casual conversation than in formal discourse. A verb more literary in style tends to find itself more susceptible to the *jeung*-mechanism than another colloquial form of the same meaning. The following are a few examples to further illustrate this stylistic difference.

(158) C. Chìnkéih m̀hhóu jong ngóh héung Wòhhahpsek.

千祈唔好葬我响和合石.

M. Qiānwàn bié *bǎ* wǒ zàng zài Héhéshí.

千萬別把我葬在和合石.

"Be sure not to bury me in Wohhahpsek Cemetary."

(159) C. Geidāk yātdihng yíu *jēung* kéuih ngònjong hái yìgùnchúng.

記得一定要將佢安葬喺衣冠塚.

M. Jìzhù, yídìng yào *bǎ* wǒ ānzàng zài yīguānzhǒng.

記住一定要把我安葬在衣冠塚.

"Remember, you have to bury my remains in the tomb where my personal effects are to be kept."

---

42 For some general discussion on the historical development of the *ba*-construction, see Ohta (1958), Lü (1948), Huang (1986), and an unpublished paper by Sun Chaofen (1986).

(160) C. Faaidī jaap dài ngóh góng ge yéh.

快D劄低我講嘅嘢.

M. Kuài bǎ wǒ shuō de huà xiě xiàlai.

快把我說的話寫下來.

"Quick, jot down the things I said."

(161) C. M̀h sèuiyiu *jēung* ngóh góng ge yéh geiluhk lohklàih ge.

唔需要將我講嘅嘢記錄落嚟嘅.

M. Bù xùyào *bǎ* wǒ shuō de huà jìlù xiàlai.

不需要把我說的話記錄下來.

"There is no need to record the things I said."

As the written language in Cantonese is based essentially on Mandarin, it is conceivable that both stylistic and linguistic features of the northern language may readily find their way into the Cantonese dialect, first through writing then in speech. The present study is by no means a stylistic investigation of the pretransitive construction and makes no claim that Cantonese speakers are more ready to adopt the form when they write than when they speak. A project of this nature requires a much larger corpus, both written and spoken, than what I have amassed. However, only by continuously pursuing the topic, closely scrutinizing data of various sorts and comparing them with both historical and dialectal materials, will we be able to attain a better comprehension of the multi-dimensional nature of the pretransitive as used in the Cantonese language.

REFERENCES

Chao, Yuen Ren.

  1968 *A Grammar of Spoken Chinese.* Berkeley and Los Angeles: University of California Press.

Cheung, Hung–nin Samuel　張洪年.

1972　*Xianggang yueyu yufa de yanjiu* 香港粵語語法的研究. Hong Kong: The Chinese University of Hong Kong.

1973　"A comparative study in Chinese grammars: the *ba*-construction." *Journal of Chinese Linguistics,* 1.3: 343–382.

1989　"Yueyu liangci yongfa de yanjiu." *Proceedings of the Second International Conference on Sinology*, 753–774. Taipei: Academia Sinica.

Gao, Huanian　高華年.

1980　*Guangzhou fangyan yanjiu* 廣州方言研究. Hong Kong: Commercial Press.

Hsueh, Frank F. S.

1989　"The structural meaning of *ba* and *bei* constructions in Mandarin Chinese: Do they really mean *disposal* and *passive*?" in J. Tai & F. Hsueh, eds., *Functionalism and Chinese Grammar*, Monograph Series No. 1, Chinese Language Teachers Association.

Huang, Shuanfan.

1986　"The history of the disposal construction revisited: Evidence from Zen dialogues in the Tang dynasty." *Journal of Chinese Linguistics*, 14.1: 43–52.

Li, Charles and Sandra Thompson.

1981　*Mandarin Chinese: A Functional Reference Grammar*. Berkeley and Los Angeles: University of California Press.

Li, Ying Che.

1971　*An Investigation of Case in Chinese Grammar*. Seton Hall University Press.

1974　"What does 'disposal' mean? Features of the verb and noun in Chinese." *Journal of Chinese Linguistics*, 2.2: 200–218.

Lu, Shuxiang　呂淑湘.

1948　"*Ba*–zi yongfa de yanjiu," 把字用法的研究 in *Hanyu yufa lunwenji* 漢語語法論文集, 1955, Beijing: Kexue Chubanshe.

Mei, Guang 梅廣.

    1978   "Ba-zi ju," 把字句 *Wenshizhe xuebao* 文史哲學報, 27: 145–180. Taiwan: National Taiwan University.

Norman, Jerry.

    1987   *Chinese.* Cambridge: Cambridge University Press.

Ohta, Tatsuo 太田辰夫.

    1958   *Chuugokugo rekishi bungoo* 中國語歷史文法 Tokyo: Koonan Shoin.

    1987   *Zhongguoyu lishi wenfa.* Tr. by Jiang Shaoyu 蔣紹愚 & Xu Changhua 徐昌華. Beijing: Beijing University.

Rao, Bingcai, et al. 饒秉才等

    1981   *Guangzhouhua fangyan cidian* 廣州話方言詞典. Hong Kong: Commercial Press.

Sanders, Robert.

    1986   "Diversity and frequency as a reflection of social factors: The application of variable rules to the analysis of disposal in the Beijing speech community. Ph.D. Dissertation, University of California, Berkeley.

Sun, Chaofen.

    1986   "A historical study of the evolution of the Chinese *ba*: a case of analogy." (Unpublished paper)

Teng, Shou-hsin.

    1975   *A Semantic Study of Transitivity Relations in Chinese.* Berkeley & Los Angeles: University of California Press.

Thompson, Sandra.

    1973   "Transitivity and some problems with *ba* construction in Mandarin Chinese." *Journal of Chinese Linguistics,* 1.2 : 208–221.

Tsao, Feng-fu.

    1987   "A topic-comment approach to the *ba* construction." *Journal of Chinese Lin-

guistics, 15.1: 1–54.

Wang, Li 王力.

    1955   *Zhongguo yufa lilun* 中國語法理論. Shanghai: Zhonghua Shuju.

Wang, Huan 王還.

    1959   *Bazi ju he beizi ju* 把字句和被字句. Shanghai: Shanghai Jiaoyu Chubanshe.

Yuan, Jiahua 袁家驊.

    1960   *Hanyu fangyan gaiyao* 漢語方言概要. Beijing: Wenzi Gaige Chubanshe.

Zhu, Dexi 朱德熙.

    1984   *Yufa jianghua* 語法講語. Beijing: Commercial Press.

從現代方言看內外轉

張日昇　張群顯

香 港 理 工 學 院

Opinions vary as to the ontological nature of the dichotomy inner(內) vs. outer(外) as an attribute concerning the 16 rime groups in Middle Chinese.　Views on this issue fall into two major standpoints.　Thus, one views the inner vs. outer difference as concomitant with a difference in the lexical incidence of a certain division(等) within a particular rime group; while the other views it as concomitant with a phonetically motivated opposition resulting in two major classes of syllable nucleus in Middle Chinese.　The following table summarizes the main differences between the two standpoints.

	Divisionist	Phoneticist
How are the clauses in 《 四聲等子 》 treated which refer to the labels "inner" and "outer" ?	as definitional	as non-definitional
- the inner–outer value of 臻 group	outer	inner
- the inner–outer value of 果 and 宕 groups	inner	outer
- total number of inner groups	8	7
- total number of outer groups	8	9
Any motivation for the dichotomy?	little	yes
- its position in the sound pattern of Middle Chinese	nil	significant
- any reflex in modern dialects?	little	at least in Pekinese and Cantonese

It should be clear from the comparison that the "phoneticist" position differs from the "divisionist" one in that it is based on the hypothesis that a major opposition operates in Middle Chinese phonology which divides the phonetic space for the syllable nucleus into two. The degree of correctness of this hypothesis depends very much on whether or not and to what extent we can find simple reflexes of the hypothesized Middle Chinese opposition in modern dialects.

It is in this vein of thought that the authors revisit the ontological question about the inner and outer rime groups in the light of newly available data of the dialects in the Pearl River Delta. Data of five select dialects are tackled and correspondence statistics are found to corroborate the hypothesis advocated by the "phoneticist" position.

1. 研究的背景

"內轉"和"外轉"的名目始見於《韻鏡》和《七音略》，但兩韻圖對"內外轉"的意義卻隻字未提。後人對"內外轉"的意義欠缺第一手資料，是內外轉的解釋到今尚無定論的最終原因。

對內外轉的最早論述見於《四聲等子·辨內外轉例》和《切韻指掌圖·辨內外轉例》。前者謂：

> 內轉者，唇舌牙喉四音更無第二等字，唯齒音方具足；外轉者，五音四等具足。今以"深曾止宕果遇流通"括內轉六十七韻，"江山梗假效蟹咸臻"括外轉一百三十九韻。

《切韻指掌圖·辨內外轉例》的說法與此如出一轍，僅有字眼上的輕微差別。[1] 兩韻圖的《辨例》是從特定音類之有字無字這個角度來區分內外轉之始。這種觀點，可稱爲"等列說"。

與此分庭抗禮的另一種觀點則以韻腹的屬性來區分內外轉。這一路看法濫觴自江永：[2]

1　"內轉者，取唇舌牙喉四音更無第二等字，唯齒音方具足；外轉者，五音四等都具足。舊圖以'通止遇果宕流深曾'八字括內轉六十七韻，'江山梗假效蟹咸臻'八字括外轉一百三十九韻。"
2　見《古韻標準·平聲第十二部·總論》。

二十一侵至二十九[凡]，詞家謂之閉口音，顧氏合爲一部。愚謂：此九韻與眞
至先十四韻相似，當以音之侈弇分爲兩部。神珙等韻分[深]攝爲內轉，咸攝爲
外轉，是也。

代表這一觀點的影響最深遠的說法出自羅常培1933。羅氏十分具體地將元音的空間如
下圖所示切成兩半，分別相應於內轉和外轉：
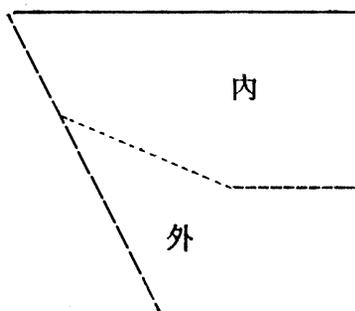
與此互爲表裡，他更進一步提出 " 果 "" 宕 " 二攝應爲外轉，" 臻 " 攝應爲內轉的說
法。

兩派源流發展，高明1978與李新魁1986論之甚詳，此不贅。以下簡要地列出兩
說的主要分歧所在：

	等列說	韻腹屬性說
如何看《四聲等子·辨內外轉例》？	以之爲定義	僅作爲參考
– 臻攝的內外值	外	內
– 宕攝及果攝的內外值	內	外
– 外轉攝數	八	九
– 內轉攝數	八	七
內外轉之別在音系中的意義？	不關心	關心
– 在中古音系中的地位	無	關鍵性的一組對立
– 與現代音的呼應	無	有
"內""外"叫法的由來？	關心	不大關心

2. 現代方言的關鍵地位

上表列出了看來一共有九個分歧點，但韻腹屬性說的一切特點其實均源自它的根本關切所在——找出中古音系裡韻腹的"自然類"(natural classes)。

"自然類"在音系研究中是個至關重要的概念。簡單地說，自然類理論要求一個音類的內部在靜態的性質和動態（包括共時和歷時兩方面）的表現上具有某些方面的共同點；而理論性最強的自然類，往往以一些有兩個值的(binary)參項(parameters)——例如"清濁""開合"等對立——爲因子。韻腹屬性說心目中的內外轉，正是中古韻腹系統中具有結構意義的一組對立，是關於中古音系的整體假說中重要的一環。

上述對立若確實存在，必定會在起碼某些現代方言裡有所反映；而對立在現代方言中呼應得越廣汎和越簡單乾淨，就越能支持這個對立的存在。

在呼應得廣汎與否的問題上，即有方言多寡方面的數量問題，也有是否遍及不同親疏的方言的分佈問題。就現階段來說，據筆者了解，只有廣州話和北京話有中古與現代韻腹對立呼應的研究。就量來說是兩宗，就分佈來說僅佔現代六大方言北方、吳、湘、客贛、粵、閩[3]中的北方和粵兩大方言。[4]

在呼應得夠不夠簡單乾淨的問題上，就有資料的數量化和將有關的古今音變描述明晰化（包括程序化）的要求。在這方面，談及中古與廣州話韻腹對立呼應的周法高1968和俞光中1986僅是定性的論述，也沒作明晰的音變描述。至於分別全面地論述中古到北京話和中古到廣州話音變的 Chen 1976 和 Chen & Newman 1984-5，在音變的表述上正是高度明晰化；而由於作爲音變起點的"簡化中古音系"正是採納了內外轉的韻腹屬性說，這兩篇論文遂在客觀上成爲一邊七攝另一邊九攝的中古韻腹對立假說的有力的支持。但在量化方面，則兩文僅止於列出中古音類和現代音類之間的對應字數。再說，兩文的目的也不在於探討中古韻腹對立問題，對該對立的支持僅是其副產品而已。

3　分類從詹伯慧1981說。
4　劉勛寧1983指出："在古入聲字的分派上，〔廣州話和清澗話〕兩個方言間存在著一種奇特而嚴格的對應關係。這就是清澗話裡哪些爲舒聲、哪些爲促聲，跟廣州話裡的哪些歸長入、哪些歸短入是互相對應的。"而且，"廣州話、清澗話和古韻攝之間的對應關係是嚴格的。"周法高1984更在劉文的基礎上，進一步指出上述分派"和切韻外轉、內轉的區分也非常近似。"劉文將清澗話歸入"北方方言西北官話中的陝北話"，因此就類屬來說還沒有超出粵語和北方話兩大方言的範圍。

以上的論述表明，中古韻腹對立的假說，有待對更多的、分佈更廣的方言的量化研究去進一步支持它或否定它。而這正是本文所希望起到的作用。

3. 本文所考察的方言

詹伯慧與本文作者之一張日昇共同主持了由 1986 到 1990 的"珠江三角洲方言調查"，而本文另一作者張群顯也參與其事；已出版的調查報告有詹伯慧、張日昇 1987 與 1988。本文就是以這次調查的結果為基礎，提供一些對中古韻腹對立假說的探討有幫助的材料。

使用這些方言調查的材料，除了因利乘便外，還因為這個調查本身包含了一些有利於探討中古韻腹對立問題的因素。

第一，所調查的方言分佈，廣及六大方言中的粵、閩、客贛三大方言，而其中閩和客贛兩大方言又缺乏針對中古韻腹對立問題的研究。

第二，字音（包括現代和中古）資料早經轉化為電腦可處理的形式，方便作定量的分析和減少人工勞動上的錯誤。

第三，所調查的方言中，香港市區話和香港錦田話在調查過程中特別注意到長短韻腹的對立，而眾所周知，現代韻腹的長短對立是中古韻腹對立的存在及存在方式的最佳線索。

"珠江三角洲方言調查"共調查了31個方言點，本研究選取了其中五個點的材料來進行分析。這五個點是香港市區、香港錦田、台城、惠州、隆都，其中隆都又分成文、白兩個系統。它們在漢語方言系統中的位置見下圖：
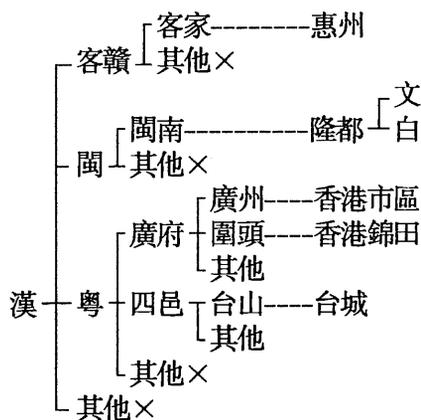
圖中凡有"×"號者，均表示該調查没包括那些類別的方言。由此可見，所選的五個方言在一定的條件限制下做到了在方言類上盡可能廣的分佈。除此之外，這五個點的選擇還有一些別的理由。第一，香港市區、廣州市區、澳門市區三地講的都是廣州話，音系非常接近，在與中古的對應上，一個點可以代表三個點。第二，香港市區和香港錦田是我們唯一有韻腹長短資料在手上的方言，其資料勢在必用。第三，隆都是31個點中唯一的閩方言點。第四，惠州在所調查的客家方言中位置最爲邊遠。第五，台城是我們所調查的唯一的台山話，而台山話在四邑話中最爲人熟知，且被認爲是相當能保存古音的一種方言。

4. 香港市區及錦田材料的分析

五個方言點的材料，我們分開兩組來分析：香港市區和錦田是一組，其他的是另一組。

香港市區和錦田作一組處理，根本原因不在於兩者同屬廣府話，而在於那是我們唯一有韻腹長短資料在手上的方言。廣府話韻腹的長短之別跟中古的韻腹對立有一定的相關性這一點殆無疑問，我們這裡要看的是這中古韻腹對立將十六攝如何畫分，以及通過定量的分析看相關的程度有多高。

先看香港市區的材料。有關數字見下表，表後再作說明。

香港市區字音分佈

攝別	腹類			總計
	長腹	ŋ̩	短腹	
假	129		3	132
蟹	97		207	304
效	180		90	270
咸	187		34	221
山	491		13	504
梗	71		223	294
江	48		6	54
核心外轉	1203 (67.6%)		576 (32.4%)	1779 (100%)
果	101			101
宕	296			296
假說外轉	1600 (73.5%)		576 (26.5%)	2176 (100%)
遇	13	3	284	300
止	5		348	353
流	8		183	191
深	6		69	75
曾	9		103	112
通	3		238	241
核心內轉	44 (3.5%)	3 (0.2%)	1225 (96.3%)	1272 (100%)
臻	20		255	275
假說內轉	66 (4.3%)		1480 (95.7%)	1547 (100%)

現代字音按韻腹的長短分成長、短及不能以長短論之的三類。長韻腹包括 a:、ɛ:、œ:、ɔ:；短韻腹包括 ɐ、e、ø、o。[5] 不能以長短論之的是自成音節的 ŋ。

高元音韻腹 i:、u:、y: 的處理須特別說明。在一般認爲其後接有韻尾的情形下，這些高韻腹只能視爲長音，理所當然歸入長韻腹類；然而，當這些韻腹單獨成韻時，也就是一般認爲的"沒有韻尾"時，其實也可分析爲帶有一個跟韻腹本身音色相同的韻尾，例如 i: 韻是韻腹 i（先不管音長）加上韻尾 i 等等。按後一種分析，韻腹的長短就被中和 (neutralized)，看不出來了。光就發音本身看，不能決定它們屬長韻腹還是短韻腹，倒是它們在各攝中的分佈的明顯傾向決定了它們的短韻腹的身分。因此，i:、u:、y: 三韻歸短韻腹陣營。

在攝的分類上，我們先撇開其內外轉身分有爭議的果、宕、臻三攝，而以兩派均同意爲外轉的七攝爲"核心外轉"，以兩派均同意爲內轉的六攝爲"核心內轉"。結果，核心外轉今天成爲長：短韻腹的比例是 68：32，[6] 而核心外轉今天成爲長：短韻腹的比例則是 4：96。前一比例看到傾向性，但相關度不十分高；然而，若聯系起後一比例來看，長短韻腹跟外轉內轉的呼應還是明顯的。

接著看有爭議的三攝。果、宕二攝的長短腹分佈格局明顯地跟核心外轉相似，而臻攝的分佈格局則明顯地跟核心內轉相似。既然如此，我們大可將果宕添加到核心外轉一邊構成"假說外轉"，將臻添加到核心內轉一邊構成"假說內轉"，然後再看看擴大而成的假說外轉和假說內轉的長：短比例。結果，內轉還是 4：96，而外轉則"改進"爲 74：26（或 73：27）。這改進是可圈可點的，可以理解爲，果宕二攝的"外轉性"比核心外轉的平均值還要強。事實上，果宕二攝沒有一個字是短韻腹的。

看過香港市區的情況後，再來看錦田的。有關數字見下表。

5　其中"ø"有人標作"θ"或"œ"，在韻尾 -ŋ/-k 之前的"e"有人標作"ɪ"或"i"，在韻尾 -ŋ/-k 之前的"o"有人標作"ʊ"或"u"。
6　四捨五入去掉小數點，下同。

香港錦田字音分佈

攝別	腹類			總計
	長腹	ŋ	短腹	
假	129		3	132
蟹	175		119	294
效	176		88	264
咸	171		27	198
山	466		7	473
梗	97		192	289
江	43		5	48
核心外轉	1257 (74.0%)		441 (26.0%)	1698 (100%)
果	87		2	89
宕	289		1	290
假說外轉	1633 ==== (78.6%)		434 === (21.4%)	2077 ==== (100%)
遇	10	9	274	293
止	4		345	349
流	6		176	182
深	2		71	73
曾	6		103	109
通	3		234	237
核心內轉	31 (2.5%)	9 (0.7%)	1203 (96.8%)	1243 (100%)
臻	26		239	265
假說內轉	57 == (3.8%)		1442 ==== (95.6%)	1508 ==== (100%)

　　錦田的長韻腹包括 A:、æ:、ɛ:、œ:、ɔ:；短韻腹包括 ə、e、θ、o。自成音節的 ŋ 和高元音韻腹（在錦田要包括 ʊ）的處理跟香港市區相同，茲不贅。

　　核心外轉今天成爲長：短韻腹的比例是 74：26，而核心內轉今天成爲長：短韻腹的比例則是 3：97。內外轉跟短長腹的相關程度比香港市區的要更高。跟香港市區一樣，果宕二攝和臻攝的表現是前者像外轉，後者像內轉。假說內轉的長短比例是 4：96，比核心內轉所表現的跟短韻腹的相關度略低，但相差輕微，而假說外轉的長短比例則是 79：21，有顯著的改進。

5. 台城、惠州、隆都材料的分析

　　正如香港市區跟錦田歸爲一組是因爲有韻腹長短的資料，這三點四系統歸在一處是因爲我們没有它韻腹長短的資料。手上没有韻腹長短的資料，並不意味著這些方言就一定没有韻腹長短的差異。正如俞光中 1986 所說：

> 在當代漢語方言裡，并不只有一兩種方言存在長短現象，往往因爲處於附屬地位，不具備音位價值而被忽略了。……如果對這個問題來一個全面調查，成績一定很可觀。可是就目前來看，能夠直接證明〔外內轉跟長短的相關性〕的漢語方言就只有以廣府話爲代表的一些粵地方言了。

　　不管如何，既無韻腹長短的資料，想知道個別韻腹跟內轉或外轉的相關性可就困難一些和費勁一些了。我們的做法是，看有關方言中每一韻腹所轄之字在十六攝中的分佈，從而找出哪些個韻腹明顯地跟外轉相關，哪些明顯地跟內轉相關，哪些看不出相關性。看不出相關性的，有兩種情況：一種是，所轄字數太少，没有統計意義。這種情況除了包括一些真正的韻腹外，還包括了所有自成音節的 ŋ。

　　三種方言四個字音分佈系統每個韻腹在十六攝中的分佈見附錄 1-4。須要指出，在隆都的文讀系統中，我們發覺有必要對高元音韻腹作出跟兩種香港方言相同的處理——"有韻尾"的（以"i-"、"u-"表示）歸入外轉類，自己成韻的歸入內轉類。

　　在三種方言的四個系統中，除了隆都文讀的臻攝外，果宕攝和臻攝的表現都跟兩種香港方言的情況一樣，前者像外轉，後者像內轉，因此也可構成內容相同的假說外轉和假說內轉。

下面集中列出的，是經我們處理後的四個系統中在不同情況下的“外轉型韻腹：內轉型韻腹”的比例數字，其後並附上香港兩方言的相當數字。

	外轉		內轉	
	核心	假說	核心	假說
台城	75：6	80：5	10：66	9：70
惠州	88：12	90：10	15：85	15：85
隆都文讀	74：3	79：2	4：68	(5：51)
隆都白讀	87：5	89：4	32：57	31：60
香港市區	63：32	74：26	4：96	4：96
香港錦田	74：26	79：21	3：97	4：96

6. 對統計資料的進一步討論

從這六個系統的資料所見，假說外轉與假說內轉作爲中古音系韻腹的對立所在這假說得到了正面的支持。只有隆都文讀的臻攝例外，看不到內轉傾向。

隆都文讀（見附錄3）臻攝之所以表現如此，直接的原因是在 269 個臻攝字中，有 242 個是以 ɐ 作韻腹的，而 ɐ 本身又憑它“外轉 408 字，內轉 423 字”的分佈而被定爲跟內轉外轉都看不出相關性的韻腹。然而，外轉 408 字中，有 326 字來自蟹梗二攝，而此二攝從其他四種方言的數字來看，都是“外轉性”比較弱的核心外轉攝。蟹梗二攝的這個特點，在其他四種方言中所造成的後果僅僅是降低了核心外轉跟外轉型韻腹的相關程度，而在隆都文讀，則進一步使得若不算蟹梗二攝在內則會屬內轉型的 ɐ 成爲內外轉傾向不明朗的一個韻腹，並間接遮蓋了臻攝的內轉性。

無論如何，隆都文讀臻攝的孤例不足以影響核心外轉加果宕在一邊，核心內轉加臻攝在另一邊這樣的總傾向。這樣的對立格局，如果說眞有問題的話，也正如上一段所說的，首先出在兩派都同意屬外轉的蟹梗二攝而不在果宕臻三攝。

總結這次審察方言材料的結果，是它支持了以下假說：

(1) 中古音系的韻腹系統存在兩個自然類，一個由“蟹效咸山梗江宕假果”九攝組成（

可稱假說外轉），另一個由“止流深臻曾通遇”七攝組成（可稱假說內轉）。而由於這兩個音類涵括了整個韻腹系統，因此它們合起來構成一個有兩值的參項——也就是“對立”。

(2) 這對立的靜態區分在於韻腹的語音屬性。

(3) 這對立在現代方言的反映有兩方面：音長和音色。

(4) 音長方面，假說外轉反映爲長音，假說內轉反映爲短音。

(5) 音色方面的差別可從舌位來看：假說外轉跟現代方言韻腹中舌位在外緣 (peripheral) 的音——尤其舌位極低的音——相關，而假說內轉則跟舌位偏央 (central) 的音相關。

7. 餘　論

我們審察的方言材料支持了韻腹屬性說，那麼，對等列說我們該如何看待呢？

雖然從方言材料看不出等列說所宗之外轉八攝和內轉八攝能成爲自然類，但這並不一定能對等列說構成致命的威脅，因爲等列說所關切的對象不在音系的構築，也不以自然類作爲建立音類的要求。周法高1968的一段話，很能說明問題：

> 縱使等韻學者起初用外轉和內轉的名稱是由於二等韻的有無，而所以然者，卻有其語音上的根據的。……其表現在《切韻》音的結構和方言中的現象卻更值得我們去注意。如果只斤斤計較於內外轉的原始用法，而忽略了其在音韻結構和方言演變上的意義，那就未免有點“買櫝還珠”的意味了。

等列說的內外各八攝的體系是否眞的“原始用法”暫不可考，但從音系的角度看，這體系本身是不能令人滿意的：如下圖所示，每種韻尾都同時有外轉和內轉，怎麼 *-n / *-t 韻尾的唯一兩攝竟都是內轉呢？

【無韻尾】		*-i	*-u	*-p *-m	*-t *-n	*-k *-ŋ
外		假	蟹	效	咸	山臻	梗	江
內		果遇	止	流	深	曾	宕通

如果說，宕、果之曾經在內轉一邊並非沒有可能，那麼臻攝定錯了位的嫌疑可就相當大了。上圖這個格局，既啟迪了有心重構中古音系的人去提出關於韻腹對立的一番假說，卻也辯證地曝露了自身不合音理的地方，而正面臨最終遭否定的危險。

當然，如果恪守舊韻圖的"成說"，則臻攝只能是外轉，果宕二攝只能是內轉。如此，則自身就能成立的 (independently motivated) 一邊九攝一邊七攝的中古韻腹對立，就只好迴避一下，改用全新的名稱，或改稱"假說外轉"和"假說內轉"以區別於"正統"的但無實質意義的"內轉""外轉"的用法。

參考文獻

Chen, M

　　1976　　"從中古漢語到現代北京話"JCL, 4：113-277

Chen, M & J Newman

　　1984-85　　"從中古漢語到現代粵語"JCL, 12：148-98, 334-88；13：122-70

高　明

　　1978a　　"嘉吉元年本韻鏡跋"載　高明 1978c：284-98

　　1978b　　"四聲等子之研究"載　高明 1978c：389-92

　　1978c　　《高明小學論叢》台北：黎明

李新魁

　　1986　　"論內外轉"載 《音韻學研究》第2輯，中國音韻學研究會編，北京：中華
　　　　　　1986：249-56

劉勛寧

　　1983　　"古入聲在清澗話中的分化與廣州話的長短入"載《語言學論叢》第十輯，
　　　　　　北京大學中文系（編），北京：商務 (1983)

羅常培

　　1933　　"釋內外轉"載 《中研院史語所集刊》40本2分及中國科學院語言研究所
　　　　　　（編）1963《羅常培語言學論文選集》（北京：中華）

張日昇　張群顯

俞光中

1986　"說內外轉"載《音韻學研究》第2輯，中國音韻學研究會編，北京：中華
1986：257-63

詹伯慧

1981　"漢語方言研究概況和有關的幾個問題"載《語文雜誌》8（1981年11月）

詹伯慧、張日昇

1987　《珠江三角洲方言字音對照》香港：新世紀
1988　《珠江三角洲方言詞彙對照》香港：新世紀

中國音韻學研究會（編）

1986　《音韻學研究》第2輯，北京：中華

周法高

1968　"論切韻音"載　周法高1984《中國音韻學論文集》（香港：中文大學）頁13
1984　"讀切韻研究"載《大陸雜誌》69卷4期（1984年8月）頁51-65

附錄1

台城字音分佈

	外轉型腹			中性型腹			內轉型腹			總 計
	a	ɔ	ɛ	e	m	ŋ̩	i	u	ø	
假	90	2	31	1				2		124
蟹	153	97		1			11	23		285
效	250			4				2		256
咸	188	1		6			5			200
山	137	130		138			6	50	2	463
梗	121	4		157			3	1		286
江	8	32						1	2	43
	947	266	31	307			25	77	4	
核心外轉	1244 (75.0%)			307			106 (6.4%)			1657 (100%)
果	5	81	2					2		90
宕	127	157								284
	132	238	2					2		
	372						2			
假說外轉	1616 (79.6%)			307			108 (5.3%)			2031 (100%)
遇	1	24		2	9	9	57	201	1	304
止	9	4		150			95	80		338
流	21			74			85	7	2	189
深	9			4			57			70
曾	45	2		57			1		1	106
通	2						1		227	230
	87	30		287	9	9	296	288	231	
核心內轉	117 (9.5%)			305			815 (65.9%)			1237 (100%)
臻	10	11		9			92	134	3	259
	21			9			229			
假說內轉	138 (9.2%)			314			1044 (69.8%)			1496 (100%)

附錄 2

惠州字音分佈

	外轉型腹			中性型腹			內轉型腹			總計
	a	ɔ	e	θ	y	ŋ	i	u	ə	
假	131	2								133
蟹	90	105	78	2			7	20	1	303
效	276						1			277
咸	209	1	2				3		2	217
山	143	94	254				1	1	5	498
梗	144	5	1				5	1	151	307
江	4	37						1	8	50
	997	244	335	2			17	23	167	
核心外轉		1576 (88.3%)		2				207 (11.6%)		1785 (100%)
果	7	89	1	3	1					101
宕	4	290								294
	11	379	1	3	1					
		391		4						
假說外轉		1967 (90.2%)		6				207 (9.5%)		2180 ==== (100%)
遇	1	13				3		284		301
止	6	4	18	2		3	238	84		355
流	84		1			1	96	9	1	192
深	13						63		1	77
曾	43	1					1		66	111
通	2	4					1		237	244
	149	22	19	2	4	3	399	377	305	
核心內轉		190 (14.8%)		9				1081 (84.5%)		1280 (100%)
臻	2	22	17				98	129	8	276
		41						235		
假說內轉		231 (14.8%)		9				1316 (84.6%)		1556 ==== (100%)

附錄 3

隆都文讀字音分佈

	a	ɛ	ɔ	i-	u-	外轉型腹	ə	θ	ŋ	中性型腹	i	u	o	內轉型腹	總計
假	98	30	2				2								132
蟹	79		55		57		107				2				300
效	68			118			45						40		271
咸	99		1	90			27						1		218
山	134		30	278	50		7								499
梗	44	26	6				219								295
江	2		39		1		1						7		50
	524	56	133	486	108		408				2		48		
核心外轉						1307 (74.1%)				408				50 (2.8%)	1765 (100%)
果	6	2	88					1							
宕	2		291												
	8	2	379												
						389				1					390
假說外轉						1696 (78.7%)				409				50 (2.3%)	2155 (100%)
遇			13		2		5		9		119	145	1		294
止	3	1		1	4		83				254				346
流	7			5			161					7	9		189
深	4			3			67								74
曾	4	1	1				107								113
通			2									1	241		244
	18	2	16	9	6		423		9		373	153	251		
核心內轉						51 (4.0%)				432				777 (67.7%)	1260 (100%)
臻				16	11		242								
						27				242					269
假說內轉						78 (5.1%)				674				777 (50.8%)	1529 (100%)

附錄 4

隆都白讀字音分佈

	a	ɛ	ɔ	θ	外轉型腹	ə	ŋ	中性型腹	i	u	o	內轉型腹	總計
假	29	8	5	6									48
蟹	25	49	24	24		9			4	9			144
效	40	58	33	1		3			2	1	1		139
咸	50	52	3	1		6			4		1		117
山	50	133	29	22		13			2	10			259
梗	44	26	2	3		37			1				113
江	1	3	14							1	2		21
	239	329	110	47		68	0		13	21	4		
核心外轉					735 (87.4%)			68				38 (4.5%)	841 (100%)
果	2	4	29	9					2				46
宕	4	3	72								1		80
	6	7	101	9					2		1		
假說外轉					123 / 858 === (88.7%)							3 / 41 == (4.2%)	967 === (100%)
遇			24	3		1	2		15	46	1		92
止	7	11	3	12		2			45	36	1		117
流	29	7				16	1		43	6	1		103
深	7	11				7			18				43
曾	2	5				17			9		5		34
通	1	27	1	4		4					50		87
	46	61	28	19		47	3		130	88	54		
核心內轉					154 (32.4%)			50				272 (56.9%)	476 (100%)
臻		10	14	2	26	6		6	39	44		83	115
假說內轉					180 === (30.5%)			56 ==				355 === (60.1%)	591 === (100%)

金文中「勿」跟「毋」兩個否定詞在用法上的區別

羅　端

法國高等社會科學院

　　在這次簡短的報告裡，我要指出的是，在金文所示的上古漢語中，「勿」字用於表達禁止，基本上屬於"祈使語氣"的範圍 (modalité déontique)，而「毋」字的用法則和一般看法有別，儘管它表達了必要性，但卻不屬於祈使語氣的範圍。

　　在商朝的卜辭裡，「勿」跟「毋」這兩個否定詞都已經出現了。後世注疏家解釋經書的時候往往對這兩個字的字義不加區分，認為它們都具有「禁戒」和「阻止」的含意。[1]到目前為止，似乎還沒有人對這方面作徹底探討來明確區別這兩個字在金文中的用法。儘管有過一些文章、著作曾經討論了這兩個否定詞，但這些文章中所談的大多為甲骨文或後起的經傳中的使用情形。

　　在甲骨文中「勿」字屢次出現，並且依其前後文義不難確定其意義，而「毋」字卻因字形容易和「女」或「母」等字相混淆，僅僅在少數的幾個句子中確認為作否定詞的「毋」字；故難以準確地定出其意義。至於經傳文獻，我們今天所得見的本子也是經過一再輾轉抄寫，「毋」「無」「无」等字混淆不分，以致使我們難對「毋」字加以分析。

　　現在我再節要地重述關於「勿」、「毋」二字在上古漢語中用法的幾個主要的意見。

　　㈠　呂叔湘根據丁聲樹用「不」和「弗」做為區分的方法來解釋晚周文獻裡「勿」

1　以下舉幾個例子，在它們所附的注解中，「勿、毋」二字相互引為解釋，或者用同樣的字彙來解釋：《禮記・檀弓下》：「其毋以嘗巧者乎」注：「毋，勿也」。《文選・思元賦》：「毋縣縣以倖己兮」舊注：「毋者禁之也」。《論衡・譴告》：「毋，禁止之辭」。《詩・角弓》：「毋教猱升木」箋：「毋猶今人言莫也」。《後漢書・劉昆傳》注：「古文毋為無」。《詩・東山》：「勿士行枚」箋：「勿，無也」。《淮南・脩務》：「寡人敢勿軾乎」注：「勿，無也」。《儀禮・少牢・饋食禮》：「勿替引之」注：「勿猶莫也」。

跟「毋」之間的不同。[2]呂氏指出:「毋與勿之用法不同,毋爲單純式,勿爲含代名止詞式,略與毋之、毋是相等。其區別與不與弗之區別平行,毋與不相當,勿與弗相當」。[3]不過他也承認這種區分辦法對商朝和周朝早期的文獻不適用。他於是提出了另一種解釋方法:「故晚周之勿等于毋之,此固無可否認之事實,而遽謂毋之音合而始有勿,則又未必其然。私謂毋與勿或原爲各別之語詞,其最初之分別不在包含止詞與否而在辭氣之強弱。勿較強,毋較弱;故常語用毋,而高文典冊亦時以勿爲之。厥後毋已有 mi̯uag > mi̯u 之傾向,乃有以勿代毋之之通例。〔 … 〕弗之與不,亦有與此相類者」。[4]

(乙) Dobson 跟呂叔湘一樣先排除了「勿」字在周朝早期等於「毋＋之」的這種觀點。他從「語氣」和「強弱」的角度來區分這些否定詞:

　　(一)語氣助動詞:

　　　・以 *p-音開頭的系列——陳述式:「不」*pwət（單純式）,「弗」*piwət（強調式）。

　　　・以 *m-音開頭的系列——祈使式:「毋」*miwo（單純式）,「勿」*miwət（強調式）;假定式:「無、无」*miwo,「亡、罔」*miwang。

　　(二)否定繫詞:「非」*piwər。[5]

(丙) Serruys 在一九七四年與一九八二年有關甲骨文文法分析的兩篇文章中,提出有關否定詞區分的這雙重標準:

　　(一)「不」與「弗」用於陳述句子而「勿」與「毋」是用於禁止式的句子。(二)「不」與「毋」用以否定 stative、不及物或被動的動詞。而「弗」和「勿」則用以否定主動、及物或使役的動詞。另外他拋棄「強弱」不同的解釋。[6]

(丁) 高嶋謙一在一九七三年提出的博士論文是有關對甲骨文中否定詞的分析。他接

2　丁聲樹〈釋否定詞弗、不〉,載《慶祝蔡元培先生六十五歲論文集》,一九三五年,九六七－九九六頁。
3　呂叔湘〈論毋與勿〉,載《漢語語法論文集》一九八四年,七九－八〇頁。
4　同上,八三頁。
5　見 Dobson W.A.C.H. *Early Archaic Chinese*, 一九六〇年,四二－四五頁。
6　見 Serruys Paul L.M. "Studies in the Language of the Shang Oracle Inscriptions",《T'oung Pao》Vol. LX. 1-3, 一九七四年,五九－七四頁;"Towards a Grammar of the Language of the Shang Bone Inscriptions",《中央研究院國際漢學會議論文集》,一九八一年,三四一－三五四頁。

著把這篇論文的結論做進一步發展，並在他一九八八年的〈甲骨卜辭中否定詞形態的分析〉一文中發表。[7]該文中也包含 Serruys 的區分觀點，但另加上一個新的衡量標準，就是商朝人觀念中「可控制」與否的動詞 (controllability/uncontrollability)。因此，依高嶋謙一的觀點，「不」和「弗」用於不可控制的動詞，而「勿」和「毋」則用於可控制的動詞。

現在，我想指出這兩個字，不論在甲骨文或金文中，在用法上都有明顯的區別，表達兩種不容混為一談的語意。

首先，談「勿」字的用法：

經過對甲骨文、金文和其他周朝早期文獻的仔細觀察，我們可以發現：「勿」字的確具有「祈使」和「禁止」的基本語義性質。我在這裡不多談這個「勿」字在句子中的分布情況。因為「勿」字的用法，在基本上是要靠語意環境──特別是交談者之間的關係──來解決。

「勿」字是一個含有語氣成份的否定詞，它基本上表達的是：在兩個人彼此之間緊密關係下的一種必要性 (obligation)。這種必要性是由發言者所提出，並且涉及主語和謂語之間的關係。譬如今天尚見的這條熟語：「請勿踐踏草地」等於「我禁止你踐踏草地這種行為」。由此觀之，我們可以理解「勿」字主要是用在兩人彼此之間具有緊密關係的環境中──不管交話者是「現實」或「假想」的人物──「勿」字在金文裡主要出現在直接引語的談話中。

當這種必要性被加之於受言者的時候，「勿」字所表達的「禁止」是發言者所發的。如果這種必要性被加在第三者的時候，發言者就不見得是這種限制的來源。

從語言行為的角度來看，「勿」字是表達一種指令。在它出現的句子中基本上都帶有主動的性質和未來的含義。

現在，我們舉幾個把限制直接加於受話者的例子：

(1)女（汝）雖（推）于政勿雍（雍）遠（律）庶民　　　　　（毛公鼎）

(2)茍（敬）夙（夙）夕勿灋（廢）朕命　　　　　　　　　　（番生簋）

7　Takashima K, "Morphology of the Negatives in Oracle Bone Inscriptions," 載 *Computational Analyses of Asian & African Languages*, n 30, 一九八八年，一一三──一三三頁。

(3)用夙（夙）夜勿灋（廢）朕命　　　　　　　　　　　　（叔夨伯鼎）

(4)王曰盂…勿吏（使）虐（暴）虐　　　　　　　　　　　　（盂盨）

(5)女（汝）勿剋（克）余乃辟一人　　　　　　　　　　　　（大盂鼎）

(6)女（汝）…勿吏（使）敢又（有）虐止　　　　　　　　　（蔡簋）

(7)剌（烈）伐匿厌（侯）駿方勿遺壽幼　　　　　　　　　　（盂鼎）

(8)勿侮（侮）鰥夷（寡）　　　　　　　　　　　　　　　　（父辛卣）

在這些直接引語的例子裡，「勿」字的使用，是要讓發言者把謂語表達的行爲強加於主語，而這裡的主語也就是受言者。因此，這類句子具有強大的推動力量，而這種必要性帶有「指令」的意義。

現在我們再看看把限制間接加於第三者的情形：

(9)往已叔姬虔敬乃后孫孫勿忘　　　　　　　　　　　　　（吳王光鑑）

(10)哀成弔（叔）之鼎永用瑢（祭）祀死（司）于下土台（以）事康公勿或（有）能（罷）台（怠）　　　　　　　　　　　　　　　　　　（哀成叔鼎）

(11)侯氏從譮（告）之曰枼（世）藶（萬）至于辝（予）孫子勿或（有）渝改　　　　　　　　　　　　　　　　　　　　　　　　（齊鎛）

(12)順（訓）余子孫萬枼（世）無彊用之勿相（喪）　　　　（越王鐘）

上面我們已經提到，在交談者雙方關係緊密的環境下，「勿」字也能表達一種加於第三者的限制，亦即：這種必要性或這種限制，並不是針對受話者而發。在這種情況下，發言者不再是設限制的人，他提出的這種必要性，其實應歸於一種規範上或道德上的評斷。

✳　　　✳　　　✳

接下來我們再看「毋」字的用法：

毫無疑問，最讓人感到困難的是「毋」這個否定詞的用法。一般認爲在上古漢語中，「毋」字就如同「勿」字具有「禁止」的意思。這裡不再重提各家對這個字的解釋。何況，這些解釋一般只涉及了它後期文獻中的用法。

在金文中，「毋」字主要出現於交談性質的直接引語句子中，但它是否就能因此當成一個祈使語氣之詞呢？

我個人觀點是：「毋」字，這種能分析成「否定＋必要」的禁止意義，並不屬於祈使語氣或情態的範圍。因為發言者並不負責話裡對受言者，或第三者，所加的限制。發言者只是指出這種限制的客觀性質而已。這從例⑬到例⑯可以看得出來：

⑬余非童（庸）又萌（昏）女（汝）毋敢妄寍（寧） （毛公鼎）

⑭王曰牧毋敢弗帥先王乍（作）明井（型）用寍（于）乃嚘（訊）庶右岑毋敢不明不中不井（型）乃申（？）政事毋敢不尹（治）丌不中不井（型） （牧簋）

⑮女（汝）顀（推）于政勿雝（雍）逮（律）庶民替（？）毋敢韗櫜（中飽），韗櫜（中飽）迺敄（侮）鰥寡（寡）善效乃友正毋敢潚（酗）于酒女（汝）毋敢豕（墜）才（在）乃服 （毛公鼎）

⑯…曰其自今日孫＝子＝毋敢望（忘）白（伯）休 （縣妃簋）

在上述四個例句中，我們看到了：「毋＋敢＋動詞」的結構，在這裡發言者不可能是設下這種義務限制的來源，也不能把這種義務限制當成主謂結構以外的成分。

因此在同樣的語言環境裡，「毋」字不能用「勿」字代替。如果用「勿」字的話，意思就成了：「我禁止你敢做某件事」，或：「我禁止你敢有某種行為」。這是說不通的，因為不能命令或祈使一個人「敢」或「不敢」。[8]用「毋」字的時候，義務性就屬於主謂結構以內的成分。例⑯的句子後半部就可以看成以下的解釋：「自今以後的子孫不該讓自己有忘伯休的行為」。

「毋」字的使用是在表明受話者，（或第三者），是「自己不該做某事」，或：「自己不該有某種行為」的受制對象，而發言者只是扮演提醒這種客觀限制或約束的角色，而不具有施令者的身份。這和有「勿」字出現時的情況不同。

「毋」字表達的是一種由發言者觀察或體察到的客觀約束，至於「勿」字則是發言者本人表達出的一種必要性的判斷。

由以上的分析，我們可以知道「勿」字確實屬於祈使語氣範圍的詞，而「毋」字

8　如果我們對古典文獻中「敢」字的注釋細加考察，就可以更清楚地了解為何「勿」和「敢」不得並用：《說文》：敢「敔（敨），進取也，从受古聲…」。《廣雅‧釋詁》四：「凡言敢者皆是以卑觸尊不自明之意」。《廣雅‧釋詁》二：「敢，果也」。《論語‧堯曰》：「敢用玄牡」皇疏：「敢，果決也」。根據以上幾條注釋，我試以下面的句子對「敢」字加以闡述——「感到有勇氣（或自由）進行某事以期達成」——所以「敢」字的使用是在「欲」的主觀語氣範圍；而「欲」這個語氣也不能和「須」這個祈使語氣綴合成為「必須想要」（有如「我指令你想要」的情形是說不通的）。

則屬於對事實的陳述。如果這種觀點能成立，那麼像呂叔湘先生所持的「強弱」分別的解釋以及其他著者將「毋」字同「勿」字一樣釋爲祈使語氣詞的看法就有待商榷。

　　當使用「毋」字的時候，謂語和主語雙方已經由必要性的關係，客觀地連接在一起，（看例⒄到例㉒）。發言者只是指出他對這種關係的觀察而已。

　　我們再舉幾個在主謂關係中「毋」字表達一種內在必要性的例子：

⒄虢許上下若（諾）否寧（于）四方死（司）毋童（動）余一人才（在）立（位）
　　　　　　　　　　　　　　　　　　　　　　　　　（毛公鼎）

⒅子＝孫＝永定僳（保）之毋竝丕（厥）邦　　　　　（中山王嚳鼎）

⒆余考不克御事唯女（汝）煲颞（其）敬辟（乂）乃身毋尚爲小子
　　　　　　　　　　　　　　　　　　　　　　　　　（叔蓬父卣）

⒇女（汝）毋弗善效姜氏人　　　　　　　　　　　　（蔡簋）

㉑女（汝）毋弗帥用先王乍（作）明井（型）　　　　（毛公鼎）

㉒爾毋大而悎（慄）毋富而喬（驕）毋衆而囂　　　　（中山王嚳鼎）

　　在某些句子中「毋」字之後跟著有名詞或動詞，構成了陳述性的從句，見下列之三條例句：

㉓用詐（作）大孟（長）姬縢彝釁（盤）禋（祭）喜（奉）是台（以）鼑
　　（用）盟（祭）嘗（祭）帝（祭）祭受毋已　　（蔡侯盤）

㉔齊厌（侯）左（佐）右（佑）毋疾毋已　　　　　（叔夷鎛）

㉕余命女（汝）政于朕三軍蕭成朕師娀之政德諫罰朕庶民左右毋諱
　　　　　　　　　　　　　　　　　　　　　　　　　（叔夷鐘）

　　從結構角度來說，這是一種建立在空位主語上的存在句。儘管「毋」字仍舊是這個句子主謂關聯的標記，但它顯然已經不具有必要性意義了。

　　正由於「毋」字的使用，有些時候只用於指出一種實際情況，只考慮主謂之間的關聯，而不含有「必要」的意義了；所以在這種情況下，一般人就把它和「無」字等同看待，也就相當於口語裡的「沒有」這個詞。在這裡，應該指出「毋」和「無」這兩個否定詞在金文裡有明顯的分別。它們的區分標準主要是和句法結構有關：「毋」

字主要出現在主句關係的層次上，而「無」字只出現於從句，[9]例如：

⒇用祈多福眉壽永令無彊　　　　　　　　　　　　（梁其壺）

⒈義文神無彊親福用寶光瘋身　　　　　　　　　　（瘋鐘）

⒊…靜學（教）無甼（斁）　　　　　　　　　　　（靜簋）

⒐用卿賓客爲德無叚（瑕）　　　　　　　　　　　（曾伯陭壺）

當「毋」跟「無」在結構上的差別逐漸消失，而都能用在主句的層次上之後，「毋」和「無」就成了兩個可以互相替換的詞。但是在有明顯必要性或義務性意義的場合，則仍舊保留「毋」字的使用，例如：

⒊乃盟載書曰：凡我同盟。毋薀年。毋壅利。毋保姦。毋留慝。救災患。

　　　　　　　　　　　　　　　　　　　　　（《左傳》襄十一年）

⒊…盟于督揚曰。大毋侵小。　　　　　　　　　（《左傳》襄十九年）

　　　　　　※　　　　※　　　　※

既已釐清「毋」字的性質和意義，接著我們就可以解釋：不論在甲骨文、金文、或後期的文獻中，「毋」字爲甚麼會用在不具備「指令」、「禁止」、或「必要」等意義的句子中，例如：

⒊婦姅毋其屮（有）子　　　　　　　　　（《乙》四七八六）

⒊…毋屮（有）子　　　　　　　　　　　（《京》二〇四〇）

⒊戊申卜：其烝（祭）䘵（地）毋雨　　　（《存》一・一八八六）

上述三個例子，都是甲骨卜辭的例句。在前兩個例子裡「毋」字是用以否定具有「擁有」意思的「屮」字。在第三例裡，「毋」字是用以否定無人稱的動詞「雨」。那麼，在這種例子裡，「毋」字確實不能解釋成有「指令」或「禁止」意義的否定詞。它只是一個含有陳述性意義的否定詞而已。

　　　　　　※　　　　※　　　　※

最後，我還可以舉一個在《論語》中有「毋」與「勿」並用的例句，雖然這是一

9　由此可見呂叔湘先生對「毋」與「無」原爲通用的看法不符合由金文可得的論據。他認爲：「區別毋爲禁止之義，無爲有無之義，乃後來之事。古代不獨禁止之義可作無，有無之義亦可作毋〔…〕實則兩義初俱有音無字；毋（母）與無（蕪）皆假借字，而二者皆兼有有無與禁止二用。金文毋與母無別，無亦不從亡，許叔重亦姑就后來字形爲說耳，以金文言，假毋爲多，無爲少，其後殆因毋與母之語音漸歧〔…〕而無之本義又增艸爲蕪，故漸舍毋從無，於以知漢人引經率作毋者未必非古，而所謂古文經多作無者適足證明其寫定之晚耳。」（論毋與勿），載《漢語語法論文集》一九八四年，注①九九——〇〇頁）。

個晚於金文的文獻，但我認爲其中還可以察覺這兩個否定詞的區別。我並且認爲正是因爲有這層區分，從而掃除了歷來有關該句文義的疑惑：

「毋友不如己者，過則勿憚改」《論語・學而》[10]

可譯爲：「（仁者）沒有必要結交不如自己的朋友，有了過失就不要怕去改」。前一「毋」字的用法指的是並非孔子要禁止，而是孔子經由觀察所表達的意見，後一「勿」字所表達的必要性被加在第三者，可視爲孔子由道德規範所作的評斷。

REFERENCES

ADAMCZEWSKI, H.

1982 "Grammaire linguistique de l'anglais", Paris, Armand Colin.

CERVONI, J.

1987 "L'énonciation", Paris, PUF.

CHEN Hanping

1986 "Xizhou ceming zhidu yanjiu", Shanghai, Xuelin Chubanshe.

CHENG Xiangqing et altr.

1984 "Liang-han hanyu yanjiu", Jinan, Shandong Jiaoyu Chubanshi.

CIKOSKI, J. S.

1977 "Three Essays on Classical Chinese Grammar: I. An outline Sketch of Word-Classes and Sentence Structure in Classical Chinese." *Computational Analysis of Asian and African Languages* 8, pp. 17–158.

COUVREUR, S.

1950 "CHOU KING", Paris, Cathasia.

DING Shengshu

1935 "Shi foudingci "fu" "bu"", *Academia Sinica*, Studies Presented to Ts'ai Yuan P'ei on His Sixty-fifth Birthday, part II, pp. 967–996.

---

10 楊伯駿，《論語譯注》，一九八〇年，六頁：「無友不如己者——古今人對這一句發生不少懷疑，因而有一些不同的解釋」。康有爲，《論語注》，一九八四年，九頁：「「無」宋刊九經本作「毋」」。《儀禮・公食・大夫禮》，鄭注：「古文「毋」皆作「無」」。故知魯論今文作「毋」，今從之」。

DOBSON, W. A. C. H.

1958 Studies in the Grammar of Early Archaic Chinese. No.1. The Particle *wei* in Early Archaic Chinese", *T'oung Pao*, XLVI, 3-5, pp. 339-368.

1959 "Late Archaic Chinese. A Grammatical Study", Toronto.

1962 "Early Archaic Chinese. A descriptive Grammar", Toronto.

1964 "Late Han Chinese. A Study of the Archaic Han Shift", Toronto.

1966 "Negation in Archaic Chinese", *Language*, 42, 2, pp. 278-284.

DUCROT, O.

1980 "Dire et ne pas dire", Paris, Hermann.

1980 "Les mots du discours", Paris, Les Ed. de Minuit.

1984 "Le dire et le dit", Paris, Les Ed. de Minuit.

GRAHAM, A. C.

1952 "A Probable Fusion-word: wuh (13) = wu (12) + jy (19)", *Bulletin of the School of Oriental and African Studies*, XIV, part I, pp. 139-148.

GUAN Xiechu

1953 "Yinxu Jiagu keci yufa yanjiu", Pékin.

1981 "Xizhou jinwen yufa yanjiu", Pékin, Shangwu yinshuguan.

HARBSMEIR, C.

1981 "Aspects of Classical Chinese", London and Malmö, Scandinavian Institute of Asian Studies Monograph Séries n°45.

HUANG Jingxin

1958 "Qin Han yiqian guhanyu zhong de foudingci "fu" "bu" yanjiu", *Yuyan Yanjiu*, 3, pp. 1-24.

KARLGREN, B.

1972 "Grammata Serica Recensa", Stockolm.

KENNEDY, G.

1952 "Negatives in Classical Chinese", *Wennti*, 1, pp. 1-16.

LÜ Shuxiang

1984 "Hanyu yufa lunwenji", Pékin, Shangwu Yinshuguan.

羅 端

MARTIN, R.

    1983   "Pour une logique du sens", Paris, PUF.

MULDER, J.

    1954   "On the Morphology of the Negatives in Archaic Chinese", *T'oung Pao*, XLVII, 3-5, pp. 251-280.

POTTIER, B.

    1974   "Linguistique générale", Paris, Klincksieck.

    1987   "Théorie et analyse en linguistique", Paris, Hachette.

PULLEYBLANK, E. G.

    1959   "Fei(7), wei(38) and Certain Related Words", *Studia Serica Bernhard Karlgren Dedicata*, S. Egerod et E. Glahn ed., Copenhague, pp. 1178-189.

    1960   "Studies in Early Chinese Grammar. Part I", *Asia Major, NS*, VIII, 1, pp. 36-67.

SCARPARI, M.

    1979   "Le negazioni del cinese arcaico", *Cina*, 15, pp. 227-268.

SERRUYS, P. L.-M.

    1974   "Studies in the Language of the Shang Oracle Inscriptions", *T'oung Pao*, LX, 1-3, pp. 12-120.

YANG Bojun

    1963   "Shanggu wuzhi daici "wang"(16) "wang"(4) "mo"(3)", *Zhongguo Yuwen*, 6, pp. 473-474.

    1980   "Lunyu yizhu", Pékin, Zhonghua Shuju.

YANG Bojun, TIAN Shusheng

    1983   "Wenyan changyong xuci", Changsha, Hunan renmin chubanshi.

YEN, S. L.

    1971   "On Negation with *fei* in Classical Chinese", *Journal of the American Oriental Society*, 91, 3, pp. 409-417.

    1977   "On the negation *wei* in Classical Chinese", *Journal of the American Oriental Society*, 97, 4, pp. 469-477.

In Search of A Grammatical Foundation
for Dialect Subgrouping

Hsin-I Hsieh
University of Hawaii

0. Introduction

Theories are nets: only he who casts will catch. This is Karl Popper's (1968) injunction to scientists, phrased in the exact word of Novalis, urging them to engage bravely in the formulation of scientific hypotheses and in testing them against empirical data. A theory may be imperfect and fallible just as a fishing net may fail to catch fishes of sizes and shapes not intended by its design. But a theory is nevertheless necessary if we want to systematically describe an often overwhelmingly huge body of observational data. Of course, just as facts are unexplainable without a theory, so a theory is empty without its supporting facts. Therefore, there is a healthy relation of mutual dependency between a viable theory and its relevant data body.

This mutually invigorating relation between a theoretic model and its relevant data set, which Popper claimed for natural sciences, is also found between a linguistic theory and the data collection that it attempts to describe. In so far as Chinese dialectology is concerned, the one general fact of paramount importance is that dialects are both similar and different. In order to describe the individual dialects and to compare them for similarity or difference due largely to historical factors, we would need a hypothesis regarding how languages change. Currently, the two dominant theories of sound change in the field of Chinese dialectology is the Neogrammarian theory of regularity in sound change, and the theory of lexical diffusion, whose original architect is Wang (1969). These two dominant theories not only are the foundations for much of dialectal description and comparison, but they are also the groundwork for various attempts to classify or subgroup differ-

ent dialects. For example, Ting's (1982, 1987) classification of Chinese dialects is based on the Neogrammarian concept of regular sound change, but on the other hand, Hsieh's (1973) method of dialect subgrouping is dependent on the concept of lexical diffusion and the usefulness of Hsieh's method has been further explored in such works as Ho (ms), Ogura (1990), Shen (1990).

Although classification and subgrouping of Chinese dialects based on phonological or lexical divergence or convergence have yielded impressive research results, classification and subgrouping of Chinese dialects according to syntactic or semantic features do not have a comparable record of achievement. Paramount among the reasons for such a difference is, of course, that virtually no grammatical (i.e. non-phonological and non-lexical) method of dialect comparison is available. We need badly some such comparative method. If we know how to compare Chinese dialects systematically, with respect to their syntax or semantics, then on the basis of our comparison, we can begin to devise methods for classifying and subgrouping them. We are, therefore, concerned in this paper to propose a comparative method based on syntax and to justify it by arguing for a particular view on grammar which motivates this proposed method of syntactic comparison.

Since the method for comparison would not be convincing unless the theory of grammar on which it is based is shown to be valid, we will devote ourselves both to the description of the method and the justification of its supporting theory of grammar. But since this theory of grammar is a novel one and has rarely been expounded elsewhere (but see Hsieh 1989b, ms), we will have to expand much time and space for its exposition, and this explains why we actually devote a larger proportion of our discussion to justifying the new theory of grammar than to outlining the new grammatical method for comparing dialects.

This paper is organized as follows: In section 1, we outline the grammatical method of comparison. In section 2, we begin our detailed argument for an interactionalist view of grammar by concentrating on the interaction between abstract ·and iconic principles of grammar. Section 3 is concerned with linguistic change and variation. Section 4 discusses

grammatical interactions. Section 5 is devoted to a discussion of Chang's (1990a, b) research results on the placement of the perfective aspect marker *-le* in Mandarin, which form a supporting case for our hypothesis. We then devote section 6 to discussing Chang's (1990a, b) research on the proper characterization of the serial-verb construction in Mandarin and show that its findings dramatically support our claim about grammar as a vast network of internally competing rules and interacting components. The paper concludes with a brief summarizing remark in section 7.

1. A Grammatical Method of Dialect Subgrouping

The method of dialect comparison and subgrouping we are proposing is based on the assumption that internal competition takes place perpetually among rules and that these competing rules may belong to the same component or subcomponent as well as to two or more comparable components or subcomponents in a grammar. Therefore, when we apply this method, we choose a particular sentence pattern which has essentially the same meaning but has different forms among various Chinese dialects. We compare these different forms by asking, for each individual dialect, which components of the grammar are interacting and competing for their domination in this particular historically common sentence pattern. To illustrate and test this method, we resort to Robert Cheng's superior data collection.

Robert Cheng, whose scholarship in terms of descriptive adequacy, range of research interests, and the volume of research output in publication, is virtually peerless in the field of Chinese dialectology, has published a very much condensed version (Cheng 1985) of his life-time extensive research in Chinese dialectology. In this article, Cheng gives an unprecedented detailed and accurate comparison among PM(Peking Mandarin), Tw (Taiwanese), and TM (Taiw-anese Mandarin), by considering virtually all aspects of the grammar. True to his belief that linguistic description should be as theory-neutral as possible, Cheng is quite content in giving us the bare facts without going into theoretic

speculation. Since the data collected by Cheng are in some sense theory-independent, if we impose a particular theory on any portion of his finely distilled data collection, the result would be a theory-dependent interpretation of that particular data set. We point this out so as to remind ourselves that by testing our proposed method of grammatical comparison against any tiny portion of Cheng's data body, we are in principle testing our method against a huge data pool. If we succeed in an example, we can in principle succeed in many other examples.

The single example from Cheng that we will use to illustrate our method has to do with a phenomenon of very general interest to comparative dialectologists. This is the phenomenon in which a dialect, supposedly under the influence of two markedly different dialects, acquires a construction that resembles neither its model in the one dialect nor its model in the other. Previous response to this pervasive fact is to postulate a mixed influence, but virtually no theory has been offered to explain or analyze such a mixed influence or result. More specifically, as Cheng's data show, TM acquires a compromised form between PM and Tw for the sentence construction expressing habitual action as well as for the sentence pattern expressing future action. To see this concretely, let us examine the sentence pairs of (1a)-(1b), (2a)-(2b), and (3a)-(3b) below:

(1) (a) (PM) Ni   chi   bu   chi   niurou?

              you   eat   not   eat   beef

              'Do you eat beef?' ('habitual')

     (b) (PM) Nei   kuai   niurou   ni   chi   bu   chi?

              that   piece beef   you   eat   not   eat

              'Are you going to eat that piece of beef?' ('future')

(Note: Both the habitual and the future forms follow the pattern of A-not-A question.)

(2) (a) (Tw) Li   u   chiah   gubah   bo?

           you   have   eat   beef   not

           'Do you eat beef?' ('habitual')

     (b) (Tw) Hit   te   gubah   li   beh   chiah   m?

           that   piece   beef   you   want   eat   not

           'Are you going to eat that piece of beef?' ('future')

(Note: The habitual form follows the 'u...bo'pattern, but the future form

follows the 'beh...m'pattern.)

(3) (a) (TM) Ni   you   mei   you   chi   niurou?

           you   have   not   have   eat   beef

           'Do you eat beef?' ('habitual')

     (b) (TM) nei   kuai   niurou   ni   yao   bu   yao   chi?

           that   piece   beef   you   want   not   want   eat

           'Are you going to eat that piece of beef?' ('future')

(Note: The habitual form has the *you-mei-you* pattern, but the future form has

the *yao-bu-yao* pattern.)

(The above is based strictly on Cheng 1985:355-58.)

As we can see clearly, each pair here has two sentences, one of which expresses the

habitual action, and the other the future action. However, notice that this contrast is not

formally realized in the PM pair (1a) and (1b), which employ the same *chi-bu-chi* or,

more generally, A-not-A pattern, except that the topicalized object *nei kuai niurou* 'that

piece of beef' helps provide a partial formal contrast. There is, however, a total formal

contrast in the Tw pair (2a) and (2b). The habitual action in (2a) is marked by the form

u-verb-*bo*, meaning 'to have verbed or not' but the future action in (2b) is distinguished by

the form *beh*-verb-*m*, meaning 'want to verb or not'. The meaning distinction maintained by this formal contrast is total. Now, we come to the most intriguing pair of (3a) and (3b) in TM. If TM were to have arbitrarily selected from the model of PM or that of Tw, (3a) and (3b) would be roughly of the same pattern either as (1a) and (1b) or as (2a) and (2b). But, as we can see, the TM forms, though displaying a total formal contrast, through the use of *you-mei-you*-verb 'have not have verbed' for the habitual action and the use of *yao-bu-yao*-verb 'want not want to verb' for the future action, nevertheless follow patterns that are neither similar to the patterns of the PM pair nor similar to those of the Tw pair.

Of course, we intuitively sensed that the TM forms are mixed patterns reached as a compromise between the competing influencing dialects of PM and Tw. And our task is to precisely characterize such a mixture. To this end, we hypothesize that sentences (1a), (2a), and (3a) are adapted through minor variations from the same common general construction. In that common c-structure (i.e. constituent-structure) type, two coordinate sentences S1 and S2 are conjoined by an unexpressed conjunction so that the associated meaning of this c-structure type is just the question of 'whether S1 is true or S2 is true'. In other words, by some procedures of identity deletion, we can adapt this form into various A-not-A questions. We use the term 'adaptation' to avoid the non-crucial issue here of whether transformations have to be invoked in our attempt to account for these variations. In any case, stipulation rules can in general be substituted for transformational operations, if the idea of transformation is objectionable. For ease of exposition, we would proceed as if transformations are involved in the derivations of these variants from a common source. And there seems to be little harm in postulating, as we would, nothing more than the innocent-looking identity deletion. To see how various procedures of identity deletion would yield the variants, let us examine the c-structure trees of (1a), (2a) and (3a), as shown in (4), (5), and (6), respectively.

(4) (PM) (=c–structure of (1a))

'Do you eat beef?'

Note: (1) NPs are (physical) objects but not (mental) events in this construction.

(2) Conjunction reduction deletes the first copy of the two identical NPs which are dominated by V' and the second copy of the two identical NPs which are dominated by S.

(5)   (Tw) (=c–structure of (2a))


```
                                    S
                    ┌───────────────┴───────────────┐
                    S                                S
              ┌─────┴─────┐                  ┌───────┴───────┐
             NP          VP                 NP              VP
              │      ┌────┴────┐             │         ┌──────┴──────┐
              │   Aff(=V)   V'(=NP)          │      Den(=V)      V'(=NP)
              │      │     ┌───┴───┐         │         │         ┌───┴───┐
              │      │     V      NP         │         │         V      NP
              │      │     │       │         │         │         │       │
              li     u   chiah   gubah      li        bo       chiah   gubah
                                             │                   └───┬───┘
                                             ↓                       ↓
                                             e                       e
```
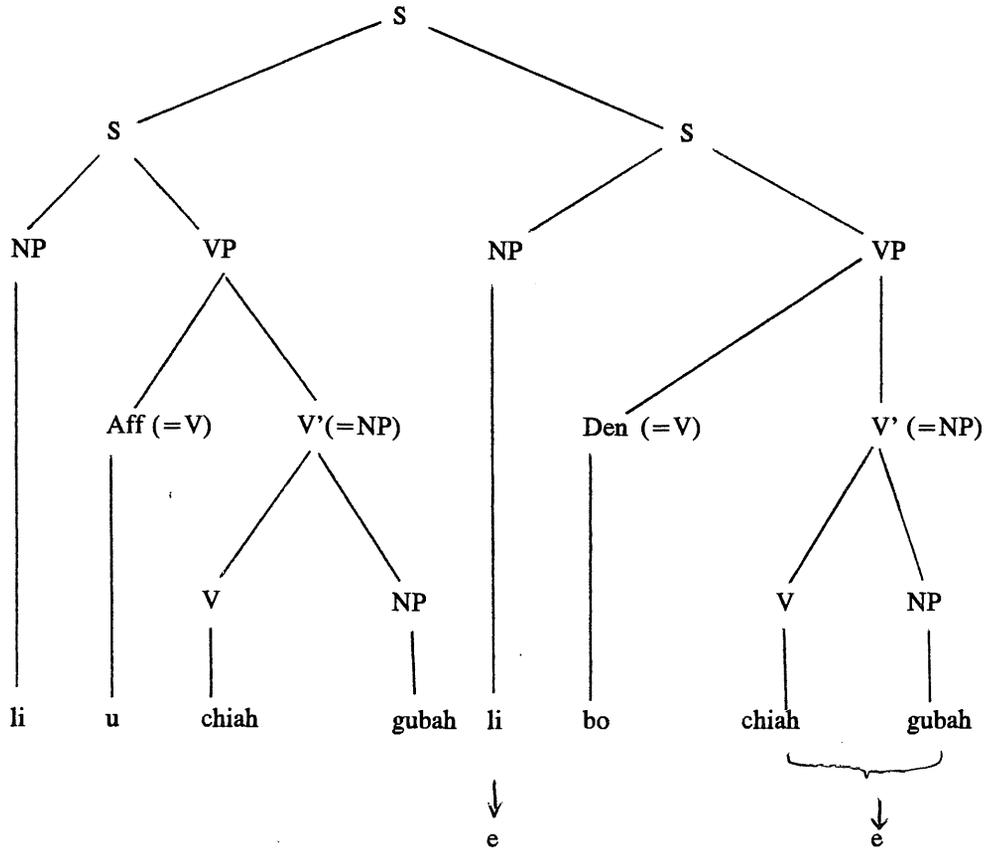
you   have   eat   beef   you   not-have   eat   beef

'Do you eat beef?'

Note: (1) NPs are objects but an NP derived from a V' (represented by '=NP') is an
             event.

        (2) Conjunction reduction deletes the second copy of the two identical NPs
             which are objects or the two identical NPs which are events. A derived NP,
             if deleted, must be deleted as a whole.

(6) (TM) (=c-structure of (3a))

```
                              S
                    _____/ _____
                   /                    \
                  S                      S
              ___/ \___              ___/ \___
             /         \            /         \
           NP          VP          NP          VP
            |        __/ \__        |        __/ \__
            |       /       \       |       /       \
            |    Aux(=V)   V'(=NP)   |     Neg        VP
            |       |      __/ \__   |      |      __/ \__
            |       |     /      \   |      |     /       \
            |       |     V      NP  |      |  Aux(=V)   V'(=NP)
            |       |     |      |   |      |     |      __/ \__
            |       |     |      |   |      |     |     V      NP
            |       |     |      |   |      |     |     |      |
            |       |     |      |   |      |     |     |      |
           ni     you   chi   niurou ni   mei  you   chi   niurou
```

$$\underbrace{\text{chi} \qquad \text{niurou}}_{\downarrow}$$
$$e$$

$$\downarrow$$
$$e$$

Note: (1) NPs are objects but an NP derived from a V' is an event. This means, conceptually in terms of i-structure, TM resembles Tw, not PM.

(2) Conjunction reduction deletes the first copy of the two identical derived NPs (i.e. V-bars) which are dominated by VP and the second copy of the two identical NPs which are dominated by S. This means, in terms of c-structure, TM resembles PM, not Tw.

Hsin-I Hsieh

Let us look at the PM form in (4) first. Here we notice that the NPs that are deleted (deletion is marked by an associated 'e' symbol) are physical objects but not mental events. Another thing we notice is that conjunction reduction, or, more precisely, coordination reduction (see Tai 1969, Sanders and Tai 1972, Huang 1988b) has effected deletions. The first copy of the two identical NPs which are (immediately) dominated by V' is deleted, and so is the second copy of the two identical NPs which are dominated by S. (Here we avoid using the terms 'subject' and 'object', because in LFG (Lexical-functional Grammar) these terms belong to the functional structure not to the constituent structure.)

Next, we examine the Tw form in (5), and here we also notice two things. Our first observation is that NPs are physical objects but in addition an NP which is derived from a V' (although without explicit morphological marking) is a mental event. In the diagram, a derived NP is written as '=NP' and a derived V is written as '=V'. Thus, the symbol 'Aff(=V)' means 'a verb derived from an affirmation-auxiliary', and the symbol 'Den(=V)' denotes 'a verb derived from a denial-auxiliary', and the notation 'V' (=NP)' stands for 'an NP derived from a V-bar'. Our use of the terms 'derived NP' and 'derived V' are justified not by any c-structure notion, but by the iconic notion that a 'V' (=NP)' expression is iconically treated as a mental event and as such is an abstract object, and by the iconic notion that to affirm or deny a mental event is to act on that mental event as if it were an abstract object. The derived NP notation captures this iconic image. Our second observation has to do with conjunction reduction. This procedure of reduction deletes the second copy of the two identical NPs which are physical objects and it also deletes the second copy of the two identical derived NPs which are mental events, or, abstract objects.

Now we come to the intriguing TM sentence in (6). And what do we see here but a mixture with two clear parts? In terms of its iconic imagery the TM sentence in (6) resembles the Tw sentence in (5), but with respect to the detail in conjunction reduction, it resembles the PM sentence in (4). More specifically, in this c-structure, NPs are objects but an NP derived from a V' is an event. This means, in terms of i-structure (iconic or con-

ceptual structure), TM resembles Tw, not PM. On the other hand, conjunction reduction deletes the first copy of the two identical derived NPs (i.e. V-bars) which are dominated by VP and the same procedure also deletes the second copy of the two identical NPs which are dominated by S. This means, in terms of c-structure, TM resembles PM, not Tw.

Although we have compared only sentences (1a), (2a), and (3a), the comparison of sentences (1b), (2b), and (3b) could be conducted in essentially the same way, and the fact that sentence (3b) is a mixture of (1b) and (2b) can be similarly demonstrated and described.

To fully appreciate the results of our comparison above, it is necessary for us to adopt the important four-way division of syntax into the c-structure (constituent-structure), the f-structure (functional-structure), the t-structrue (thematic-structure), and the i-structure (iconic or conceptual structrue), as proposed in LFG (see section 4 for further discussion on LFG). If a syntactic construction can be examined according to how it is constituted in each of these four subcomponents of syntax, then these same four criteria can be used to compare two or more historically related sentence patterns drawn from two or more dialects under comparison. In our particular case of study here, the two aspects we selected for comparison are the i-structure and the c-structure, although upon further study the t-structure and the f-structure may well turn out to be also relevant, especially if sentences more complex in form are included in consideration. To simplify our matter, let us just assume that the i-structure and the c-structure are the only two relevant dimensions for comparison in our example. Then, based on the i-structure alone, TM is to be classified together with Tw, but based on the c-structure alone, TM is to be classified with PM. This split behavior of TM in no way presents a problem. As we increase the number of sentence patterns for comparison, we will accumulate a sufficiently large number of statements of the form 'TM shows the same c-, f-, t-, or i-structure as Tw (or else PM)'. We collect all such statements, and then we apply the statistic methods such as proposed in Hsieh (1973), Ho (ms), or Shen (1990) to figure out the degree to which any two given dialects are simi-

lar to each other, by counting the number of sentence patterns they share with respect to a given syntactic subcomponent. Thus, we can eventually achieve our goal of subgrouping PM, Tw, TM. And the same method of comparison and the same method of counting can be used to achieve a subgrouping of any number of Chinese dialects which we wish to compare for their degree of grammatical similarity or dissimilarity.

Having convinced ourselves that our method of grammatical subgrouping is a viable one, we naturally want to look more deeply into the theory of grammatical interactions on which our method of subgrouping is based. We now conclude our discussion of the proposed grammatical method of dialect subgrouping and begin our discussion of a theory of grammatical interactions.

2. Interaction Between Abstract and Iconic Principles

Few would deny that the theory of transformational generative grammar, whose most recent Chomsky-endorsed version is GB (The Theory of Government and Binding) (Chomsky 1986), has been a major and, for most of its history during the past four decades or so, even a predominant school of linguistics. Yet as a dominant theory, the theory of generative grammar is singularly deficient in two respects: it ignores meaning and it is unable to explain linguistic variations either as they are revealed in time or as they are geographically (and even typologically) manifested. One does not have to probe deep into the history of linguistics to find answers for these shocking shortcomings: Chomsky inherited them directly or indirectly from Saussure. There were perhaps good reasons for Saussure to make the inevitable mistake of neglecting time and geographical variations, because otherwise he could not have concentrated on the formal syntactic properties of a living language. Still, this is a great mistake that requires equally great courage for its correction by preserving the strengths of Saussure's theory and abandoning its weaknesses. Some could have, in an attempt to correct, made the mistake of throwing the baby out with the bath water, not Chomsky: he kept both Saussure's baby and the bath water. It

seems fair to say that while the baby is growing in size, the bath water is also mysteriously growing in quantity and that Chomsky and his loyal adherents of the GB persuasion are now daily awashed in the bath water bequeathed by Saussure.

The refusal by Chomsky to study meaning as part of the grammar seems to have a more profound reason than just being syntax-minded. It is a truism that in order to talk about reality or meaning, one ultimately has to use words and syntactic forms. There is thus a pitfall in semantic investigation: we may end up using syntax to generate semantics and soon find ourselves in the vicious circle of using (proposed) form and (putative) meaning to justify each other. The rise and fall of the movement of generative semantics is usually perceived as just a major, large-scale example of this methodological circularity and as vindication of Chomsky's wise cautiousness. History, however, is likely to be kind and view generative semantics as a failed movement that has nevertheless laid a foundation or provided inspiration for subsequent quests for meaning, such as currently being conducted by the schools of formal semantics, categorial gram-mar, and cognitive gram-mar. These current approaches have learned from the failure of generative semantics and are carefully avoiding the pitfall of circular arguments between syntax and semantics. But more important, they have each developed some promising methodology or technical system for the study of meaning.

Of the researches conducted according to some form of cognitive grammar, Langacker's (1987) work has been very significant and important. Although Langacker has not been entirely clear of circularity in argument, he has shown how one can neverthe-less use hints given by syntax, morphology, and the lexicon to hypothetically reach the conceptual world that must have motivated the grammar of a particular language. It is a pity that Langacker deliberately dissociated himself from Whorf, the original (American) advocate of a theory aiming at showing that culture to some extent determines the language of a particular society. If carefully restated, some of Langacker's research results could have provided the best supporting data for a refined Whorfian hypothesis. This is to

be expected, since the abstract grammar of a language ultimately is informed and supported by a culturally-determined, albeit universally constrained, conceptual world. As the great philosopher Quine (1960,1969) has been reminding us perenially, language has to commit itself to a system of ontology, which, we could add, may be universally principled but which is as flexible as each language can be.

Perhaps, Chomsky is not unaware of the implication of Quine's idea of ontological commitment for his theory of generative grammar, particularly after the typologists led by Greenberg (1966) have shown him and the world of linguists that languages could vary in very substantial ways, especially in word order. To explain typological variations Chomsky sharpened his original idea of an innate universal set of grammatical principles and reformulated them as the theory of universal grammar. This theory says that every individual language has a core grammar whose principles are drawn from a universal inventory. It is not clear, however, whether given two core grammars, they are exactly the same or merely similar--perhaps Chomsky has the latter choice in mind. In any case, a core grammar is modulated according to a set of parameters to yield the final form of an individual grammar, with the presumption that lexicons can differ in any way, and that additional peripheral rules may also be operating. Even as it is revised in this form, the abstract grammar envisioned by Chomsky is still characterized by the vague concept of innateness. Granted we accept Chomsky's core grammar as in some sense innate, we still don't know how the abstract syntax of Chomsky's grammar relate in any deep sense to semantics, and how semantics is ultimately motivated by our cognitive structure. Can the core grammar change in time or is it the case that only the parameters vary to effect historical change in the peripheral grammar?

Tai (1989b) has, in a recent paper, launched one of the most serious campaigns for clarifying this sort of vagueness in Chomsky's idea of an innate grammar. Tai claims, with some justification, that powerful and fundamental grammatical principles fall into a small number of categories, of which Chomsky's innateness principles constitute only one.

Equally important, Tai pointed out, is the category of iconic principles which explain, among other essentially metaphoric phenomena, the fact that Mandarin Chinese syntax and semantics are to a large extent constrained by the syntactic requirement that events must in general be presented according to their conceptual temporal sequence, an idea which Tai himself (1985) pioneered in Chinese linguistics, and which was further supported by the results of Hsieh's (1989a) research on serial verbs in Chinese.

Possibly, Tai feels that he has made an attempt to refute Chomsky's innateness idea as the sole important category of abstract grammatical principles, but it is also likely that he has asked a truly novel question in linguistics: what sorts of iconic principles are universal and what sorts are merely typological or even just language-particular? For example, is temporal-sequence a universal or typological or even just language-specific principle of iconicity? Previously, Hsieh (1989a) has offered the conjecture that some languages may be more iconically oriented and others may be more abstractly inclined. Hsieh's contention is largely based on an original observation by Tai (1985, 1989a) that the lack of rigid morphological markings in Mandarin Chinese is compensated by a set of rigid temporal-sequence constraints. If we assume that some languages are more iconic and some languages are more abstract, then there can in principle be universal iconic principles side by side with universal abstract principles. And once we have separated these two sorts of rules, we can then ask the question: What is the criteria for viewing an abstract principle or an iconic principle as being not only universal but also innate?

To a question like this, the answers may not be forthcoming in the near future. Chomsky has repeatedly cited the so-called Island Constraints discovered by Ross (1967) as his favorite supporting evidence for innate grammatical principles. Now that advances in linguistics, both within and outside of the GB school, have made Island Constraints a questionable claim and hence a shaky example for Chomsky's innateness principles, Chomsky's innateness claim is facing a current crisis. Perhaps, the right question for Chomsky to ask is not what rules are innate but rather what rules are typologically

favored, and as such are potentially universal. One does not have to reflect deeply to realize that being universal is only necessary for being innate but not sufficient. Tax, for example, is universal, but in no sense is it innate. It is designed by human beings and imposed by government.

Admittedly, iconic principles based on human perception of time, space and on visual and tactile ability have often seemed less strong candidates than abstract rules for universal grammatical principles. But this is largely because Kantian philosophy as some form of compromise between rationalism and empiricism has pronounced a verdict significantly in favor of the rationalist claim that human perceptions are based on innate categories and constrained by inherent limitations imposed by such categories. Yet, however much Kant has downplayed the importance of experience, the ghost of experience has not been successfully exorcised away.

One is therefore not surprised to discover this phantom of experience showing up in the technology of robotics where it may seem least expected. In a book on robotics, written in a lucid, reassuringly commonsensical style and with a flair for analogical simplification which together make the deep seem approachable and the revolutionary plausible, Hans Moravec (1988) devoted his opening chapter to discussing in detail the difficulties inherent in any attempt to endow a robot with sight. In general, scientists find it much easier to teach a robot to perform the "higher" functions that formerly belonged solely to human beings (reading, proving theorems, diagnosing diseases) than the "lower" functions that animals have mastered(hearing, seeing, grasping objects). It may seem improbable, but a robot is more easily taught to play expert chess than to move the pieces.

There are evolutionary reasons, as Moravec points out, for which the higher functions are more accessible than the lower functions: Encoded in the large, highly evolved sensory and motor portions of the human brain is a billion years of experience about the nature of the world and how to survive in it. The deliberate process we call reasoning is the thinnest veneer of human thought, effective only because it is supported by this much older and

much more powerful, though usually unconscious, sensorimotor knowledge.

Moravec is by no means alone is calling our attention to the importance of non-logical human perceptual skills as complementary schemes to those human abilities based on logical and mathematical reasonings. Winograd and Flores (1987), for example, have also argued, by invoking the philosophy of Heidegger, for an interactionalist view on language and reality in which a rationalist perceptual structure such as vision is constantly being reshaped by the reality experienced by the biological entity endowed with such a perceptual structure. This view is apparently stimulated by Winograd's (1972) earlier, pioneering research on robotics.

Quite likely, the research results on robotics as discussed by Moravec (1988) and Winograd (1972) serve to re-emphasize the fact that iconic principles, just like abstract principles, are an integral part of human knowledge and language. Seen in this light, the researches on cognitive grammar such as conducted by Langacker (1987), Tai (1989a), and Cheng (1989) are extremely important because they provide evidence for the theory that human language is not merely an abstract system of symbols but is a symbolic system whose justification for being, and for being what it is, is assured by a language-created conceptual world. This theory is exactly the theory propounded by none other than Benjamin Whorf himself.

3. Grammatical Change and Variation

The theory of generative grammar as proposed by Chomsky is unrealistic not only because it evades meaning and, ultimately, ontology, but also because it ignores the fact that languages change both in time and according to geography. Since, as Chomsky claims, the grammar of a language is controlled by a set of rigid rules, there is no way in which a language can change except through contact with another language. But anyone who has worked in any depth with a particular language can tell us that a language is not a conveniently homogeneous system tightly controlled by rigid rules, but rather a system in

which grammatical rules are competing against each other based on social, regional, and stylistic preferences and in which, less obviously but equally plausibly, individual components within the same grammar are competing for their dominance on the eventual form of every grammatical sentence.

Two persistent giants who led a crusade against Chomsky's homogeneity theory and its implied subscription to the Neogrammarian theory of regular sound change are Wang (1969), for his theory of lexical diffusion, and Labov(1966) for his theory of variable rules (see also Bickerton 1971).

The foundation-laying article written by Wang(1969) himself is seminal with two key concepts, the notion of lexical diffusion and the idea of competing changes. Lexical diffusion refers to the gradual spread of the effect of a sound change across the lexicon. Such a diffusion, being gradual, can terminate itself mid-way in its process and thereby leave residual forms which are irregular in the sense that they should have changed but didn't actually change. If a lexical diffusion is disturbed or interrupted by another lexical diffusion, the two diffusions can come into competition if they happen to have totally or partially intersected domains of influence. When this happens, we have a set of two competing changes. In the past two decades or so, Wang and his associates, high-lighting sequentially with representative works by Wang(1969) himself, Chen and Hsieh(1971), Chen and Wang(1975), Lien(1987), and Ogura(1990), have carefully documented their theory and have made it accepted by the field of linguistics as a viable theory of sound change. Although extensions by considering the additional factors of population change and geographic distance are attempted, for example, by Cavalli-Sforza and Wang(1986), the theory remains essentially a theory of sound change and has not developed into a theory of grammatical change in general. Expansion in this direction, however, would seem desirable.

Hsieh(1989b), in a paper orally delivered at the Eighth International Workshop on Chinese Linguistics, at Berkeley, has proposed to extend the theory of lexical diffusion to

make it capable of describing grammatical changes in general. One way to achieve this, as Hsieh suggested, is to develop the idea of competing changes originated by Wang into something more comprehensive so that not only phonological rules but grammatical rules of all kinds are allowed to compete. And not only rules within the same component of a grammar, but different components themselves may also compete for domination in a particular grammatical construction. There is a subtle but very important difference between Hsieh's idea of competing components and the popular idea of interface among the non-semantic components of the grammar(cf. Zwicky 1982, Selkirk 1984, Chen 1987, 1988). The interface theory studies interface as a largely marginal and peripheral interplay between two essentially non-interacting components, in which one component usually provides unexpected conditions for the smooth functioning of the other component. By contrast, Hsieh's concept of grammar as a vast network of competing rules and competing components views competition as a normal and pervasive and not as an accidental and limited-scope interaction between two habitually non-interacting components of grammar.

The competing grammatical rules and components as envisioned by Hsieh has applications beyond grammar as a purely descriptive system. The idea applies to the grammar of a language no matter whether that language is viewed as a historically developing system, a socially differentiated structure, a geographically varied scheme, or a stylistically modulated framework. So understood, Hsieh's not on of grammatical interactions becomes an attempt to make precise the great insight by Jespersen who taught us that 'language is always in a flux.'

We would have difficulty in applying Hsieh's hypothesis beyond the mere phenomena of interface if all we had is a theory of grammar like GB, which assumes that the component of syntax, as separate from semantics, morphology, and phonology, is a sub-system of the grammar in which grammatical conditions are imposed in a concerted way by rules for marking the constituent structure, the case structure, and the thematic structure of a

sentence, with the exact nature of such a concerted operation either left undescribed or arbitrarily decided. In other words, although GB does not preclude the competition of rules in syntax, since these rules are not explicitly assigned to the proper individual sub-components of syntax, there is no effective way to describe such a competition.

4. Internal Interactions

However, with the framework of the Lexical-Functional Grammar (LFG) offered by Bresnan and her associates (Kaplan and Bresnan 1982, Bresnan and Kanerva 1989, Huang 1989, Bresnan ms, Bresnan and Zaenen ms, Bresnan and Kanerva ms, Bresnan and Moshi ms) being available, we can apply Hsieh's interactionalist approach to syntax. The decisively important innovation undertaken by the LFG proponents is a clear and precise division of syntax into four sub-components: the c-structure (constituent structure), the f-structure (functional structrue), the t-structrue (thematic structure), and what we may conveniently call the i-structure (iconic or conceptual structure). With syntax subdivided into four independent and interacting components in this way, competition between two or more components within syntax can be precisely described.

To be brief, grammatical conditions are of two kinds: the prohibitive kind and the permissive kind. Prohibitive rules are rules that prohibit specific (word) orders in c-structure, (subject-or-object-of-predication) relations in f-structure, (thematic-role) combinations in t-structure, and (iconic) images in i-structure. Permissive rules are those that allow specific orders, relations, combinations, and images as optional choices.

The difference between a prohibitive rule and a permissive rule can be illustrated with a simple example. In English, for example, an unaccusative verb such as *lie, fall, come* cannot co-occur with a direct object, so that (7) * *I lie/fall/come the book* is ungrammatical. The prohibition against an unaccusative verb taking a direct object is a prohibitive rule. On the other hand, an unergative verb such as *drink, eat, sing* may co-occur with a direct object. Thus, it is grammatical to say either (8) *I drink/eat/sing* or (9)

I drink/eat/sing it. The permission for an unergative verb to take an optional object is therefore a permissive rule. Phonology can also provide good examples for the distinction between prohibitive and permissive rules. In Mandarin, for example, consonantal clusters of any kind cannot occur initially, and hence *pla, *kla, *tla are all prohibited. On the other hand, a syllable may contain only a nuclear vowel, as *a*, or a nuclear vowel plus a nasal or semivowel ending, as *an, aw,* or both of these and an additional medial glide, as *jan, jaw,* or even as additional initial, as *pjan, pjaw.* Here the prohibitive rule is simply a statement prohibiting the occurrence of an initial consonantal cluster, and the permissive rule says that, subject to further constraints, a syllable may have an optional ending, or medial glide, or initial consonant, in addition to the required nuclear vowel.

Having characterized the distinction between prohibitive rules and permissive rules, we can begin to make precise both the concept of grammaticalness and the concept of degree of being grammatical. If a sentence violates any prohibitive rule from any component of syntax, it is ungrammatical and otherwise it is grammatical. If two variants of a construction are both grammatical, then the variant that satisfies more components by conforming to their permissive rules or conditions is more grammatical than the variant that satisfies less components. In other words, a better concerted operation by the individual components leads to a more grammatical sentence or a more natural reading of a sentence. For example, if the topic of discussion is soft beverage, then (10) *I drink Coke/ Pepsi/Seven Up* is in some sense more grammatical or natural than simply (11) *I drink.* The sentence in (10) not only satisfies the c-structure just as (11) does. It also satisfies the permissive thematic-structure rule of making clear that the patient-role is *Coke/Pepsi/ Seven Up.*

Although rules from within the same component or from different components may act in a concerted manner to install a sentence and make it either more or less grammatical, the rules can also get into conflict. Such a conflict can lead to a double or multiple reading of a grammatical sentence. In one reading, a rule from one component

nate and block the application of a conflicting rule found within the same component or coming from a different component. In the other reading, the reverse would be true. Thus, alternative readings of a sentence can sometimes be analyzed as results of competiting applications of rule. For example, (12) *I drink* is ambiguous between the reading (a) 'I drink alcohol,' and (b) 'I drink something unspecified.' In the (a) reading, a pragmatic permissive rule has applied to delete the direct object just in case it is *alcohol*. By contrast, in the (b) reading, the speaker, assuming that what he drinks is obvious or of no interest to the listener, simply didn't bother to specify it. Here, the speaker is licensed by a c-structure permissive rule that allows an unergative verb to occur without its direct object. Two choices of rule application have led to two different readings of the same sentence *I drink*.

Being grammatical is a relative concept when native speakers are asked to pass grammaticalness judgment on a particular sentence constructed and offered by a linguist. Similarly, the concept of being of a certain construction, such as being a compound or a serial-verb construction, is a relative one when linguists themselves try to give a label to a grammatical pattern in question. In both the two cases, some relativity or fuzziness (Zadeh 1965, Lakoff 1972) is involved. Therefore, if two variants of a putative construction are both grammatical, not only can their relative degrees of being grammatical be compared by looking into how many components they each satisfy, but their relative degrees of belonging to a certain prototypical pattern (Rosch et al. 1976) can also be figured out by the same method. For example, in English, (13) *We consider him as being qualified* and (14) *We consider him qualified* are essentially synonymous. If *being qualified* in (13) and *qualified* in (14) are compared, we find that, in some vague sense, *being qualified* is more like a verb, while *qualified* is more like an adjective. The phrase *being qualified* in (13) seems more like a verb because it contains *being* which is derived from the linking verb *be*, and, by contrast, the past particle *qualified* appearing without any linking verb in (14) is not very different from a pure adjective such as *disappointed* or *surprised*. In other words, *being qualified* with its verb-resembling *being* has satisfied

the requirements of being a verb, but *qualified* alone has not satisfied that requirement.

Clearly, the interactionalist view being proposed here derives its insights from many previous theoreticians on linguistic variations including Jespersen, Wang, and Labov. What makes the interactionalist view unique, however, is that it managed to make degrees of grammaticalness and degrees of being a prototypical construction natural consequences of the competition among rules within the same grammatical component or across different grammatical components. Furthermore, if one assumes that a grammar is a dynamic system of such competitions, then it is only natural for a sentence to change its degree of being grammatical and its degree of being of a certain pattern. In this way, linguistic change is shown to be a natural but not accidental consequence of grammatical structure, and the unjustified separation of diachrony from synchrony initiated by Saussure and still current in GB can be reversed. As a result, structure, competition, and history would now be intimately and precisely related in the grammar of a language. The attainment of this ideal state is likly what prompted Labov and Wang to embark on their immensely important researches on variable rules and lexical diffusion.

We can state more briefly the interactionalist view of grammar which we are offering. A grammar has various components, which in turn have their own subcomponents, which contain rules of two kinds--prohibitive rules and permissive rules. If a sentence violates a prohibitive rule it becomes ungrammatical; otherwise, it is grammatical. Of the grammatical sentences violating no prohibitive rules, some are more grammatical because they satisfy more components or subcom-ponents by complying with their permissive rules, and others are less grammatical because they satisfy less components or subcomponents. Therefore, given a pair of sentences for comparison, one can always determine their relative degrees of being grammatical. Being grammatical is not the only way a sentence can be characterized according to a relativity criterion. Being of a prototypical construction is another way. The statement that rules can compete means that they can exert their mutually reinforcing powers on a sentence to make it more gram-

matical or more prototypical. But it also means that they can become in conflict. If a conflict happens, a double reading or even multiple reading of sentence results. In one of the two alternative readings, a certain rule is applied to the exclusion of the other, conflicting rule, and in the other reading, the reverse is true. Because a grammar is a dynamic system of interplaying components, in which competing rules operate within a component or across the components, the grammaticalness, prototypicalness, and meaning of a sentence may change as a natural consequence of this system-wide interaction. Since competition is a built-in mechanism, a historical change is a natural result of perpetual system-internal competition. Thus, structure, competition, and history are seen to be three intimately and precisely related aspects of the grammar. Synchrony and diachrony, which had been artificially separated since Saussure, can now be reconciled and reunited.

5. How to Place the Perfective Marker -*le* in Mandarin

Indeterminacy or fuzziness resulting from the system-wide interaction of grammatical rules can be illustrated in greater detail by using examples from Mandarin Chinese. For these examples, we will rely on Chang (1990a, b), who, in two separate but thematically well-related papers, made attempts to find out the conditions for placing the perfective aspect marker -*le* within a sentence and to precisely characterize the serial verb construction in Mandarin. Anyone who read Li and Thompson's (1981) reference grammar with any care would probably not fail to notice the sharp contrast between their teeming and brimming insights and the lack of rigor and of soundness of logic in their attempt to articulate these revealing insights. And this impression is confirmed particularly by their treatment of the -*le* placement in terms of an intuitively attractive but logically circular solution based on a vague notion of 'boundedness' (see Hsieh 1989a, Tai 1989a, and Huang 1990 for criticisms) and by their being virtually unable to give serial-verb constructions any precise characterization. And yet, from a more understanding and more generous perspective, one must regard Li and Thompson as having made an epoch-

making contribution with their much needed reference grammar and as deserving deep and full appreciation from all who care for the developing field of Chinese linguistics. And it is in this perspective, precisely, that one can also appreciate the importance of Chang's research results. Based largely on Li and Thompson (1981), who offered their original ideas in addition to summarizing other scholars' research results, and availing herself of recent research results in linguistics both inside and outside of the Chinese field, Chang has proposed new and more reasonable solutions to the problem of the placement of –le and the problem of characterizing the serial verb construction. Chang's solutions are truly innovative in that they blend insights from both the functionalist and the formalist approaches, which as Huang (1990) rightly pointed out can complement each other. Indeed, Chang's solutions are epoch–making in the sense that they are truly innovative and largely convincing, just as Li and Thompson's solutions had been about ten years ago.

In order to solve the problem of the –le placement, Chang gave up Li and Thompson's idea of 'boundedness' and adopted instead the idea of 'saliency.' The perfective aspect marker –le would in general be placed where the saliency point or saliency peak falls in a sentence. If a sentence has only one verb, then that verb automatically attracts the saliency peak. Therefore, if the event indicated by the verb or verb phrase is completed or actuated prior to the speech time, so that the event is in some sense 'completed' as distinct from 'on–going' or is 'real' as distinct from 'conjectured,' then the verb or verb phrase will attract the –le particle, as in (15) *wo he le jiu,* I–drink–perfective–wine, 'I drank some wine,' or (16) *wo he jiu le, ta mei kan jian,* I–dirnk–wine–perfective, he–didn't–look–see, 'I did drink some wine, but he didn't see me drinking it,' or (17) *wo he le jiu le,* I–drink–perfective–wine–perfective, 'I drank some wine.' In sentence (15), the verb alone is the saliency peak; in sentence (16), the verb phrase as a whole is the saliency peak, and in sentence (17) both the verb and the verb phrase are saliency peaks.

We may think that all this is rather neat and simple, but the matter suddenly gets very complicated as soon as two or more potential verbs are present in a sentence. For example,

zou 'walk,' *jin* 'enter,' and *lai* 'come' are three potential verbs. When we form the sequence *zou jin lai* 'to walk into where the speaker is located,' the placement of *-le* becomes a problem. Thus, we have (18a) *ta zou le jin lai,* he-walk-perfective-enter-come, 'He walked into where I was,' but not (18b) **ta zou jin le lai.* In this sentence, *-le* must be attached to the first verb and not to the second. But paradoxically, we also have sentence (19a), *ta zou jin le shufang lai,* he-walk-enter-perfective-book-room-come, 'He walked into the study where I was,' but not (19b) **ta zou le jin shufang lai.* In this sentence, the second but not the first verb attracts *-le.*

This seems a paradox and it makes Chang realize that saliency is not a clear-cut, one-criterion matter, but is a concept made fuzzy by interacting grammatical components. Chang also noted that the exact linear order of *zou-jin-lai* is not accidental and had to be explained.

In order to treat the problem of word order, Chang first resorted to Hsieh's (1989a) idea of imaginary-time sequence which would claim an imaginary-time order for the three potential events. But she made an innovation over Hsieh by successfully making Hsieh's idea precise through an ingenious use of thematic-structure constraints. She postulated a prominence-relation among potential verbs based on the verbs' thematic configurations. First the somehow discourse-related verb *lai* '(come) toward the speaker' is rated the least prominent of the three verbs regardless of its thematic configuration. Then *zou* 'walk' is rated higher than *jin* 'enter' because *zou* has the <Agent, patient> combination which is higher in prominence degree than the <Agent, locative> combination of *jin.* Thus, the problem of word order in a sequence like *zou-jin-lai* is solved, exactly in the spirit of Tai (1985) and Hsieh (1989a) but with unprecedented precision.

In determining the location where *-le* is to be placed, Chang (1990a), inspired by Jackendoff (1987), adopted the notion of 'suppressed thematic role.' A thematic role is suppressed if an NP to which it is assigned (by the verb according to GB) is omitted or deleted. Chang discovered that, in a sequence like *zou-jin-lai,* an overtly manifested

thematic role in general has a higher prominence in terms of *-le* attraction than has a suppressed thematic role. This discovery made the assignment of *-le* straightforward.

An example will help us see how the assignment works. In sentence (19a), all three verbs have their agent roles manifested, but the verb *jin* also has its locative role manifested, unlike *zou* and *lai,* whose non-agent roles are missing. By postulating a reasonable descending prominence chain, namely, (i) <ag, loc>--> <ag, pt(s)>--> <ag, loc(s)>-D, where '(s)' indicates that a thematic role is suppressed and where '-D' indicates that a thematic configuration is discourse-weakened, Chang was able to determine the placement of *-le* in an exact way. The particle *-le* is to be placed with the highest-prominence thematic configuration determined according to this chain. For sentence(19a),this means that *jin* 'enter,' with the highest thematic configuration, attracts *-le*.

However, if all three verbs have their agent roles manifested, but have the remaining roles (patient for *zou,* locatives for *jin* and *lai*) suppressed, then a slightly different chain is effective. This time, the descending prominence chain will be (ii)<ag, pt(s)>--> <ag, loc (s)>--> <ag, loc(s)>-D. The placement of *-le* is then a simple matter of identifying *zou* as the verb with the highest-prominence thematic configuration of <ag, pt(s)> and then assigning *-le* to this verb.

It is true that current research on the complicated matter of thematic hierarchy has not progressed to the point where Chang would be able to simply invoke some universal tendencies to justify her prominence chains formulated in (i) and (ii) above, but the intuitive correctness of these two claims seem quite clear. And one can expect that as Chang and others conduct further research in this direction, the universal justification for claims as made in (i) and (ii) will become more accessible. In any event, we are here witnessing competition affecting both the word order and the placement of *-le* in the three-event sequence illustrated by sentences (18a) and (19a).

There are two forces competing for domination in deciding the word order of sentences (18a) and (19a): thematic configurations and discourse-induced weakening of a

thematic configuration. The word *lai* 'come' and *qu* 'go' in Mandarin can mean 'come' and 'go' when they function as full verbs, but they can also mean simply 'toward the speaker' and 'away from the speaker' when they function as verbs which are somehow weakened in their verbalness by discourse pressure, whose exact nature is still unknown. When these two verbs are so weakened, their thematic configurations become discourse-weakened. This is arguably what has happened in sentences (18a) and (19a), regarding the fact that *lai* and *qu* appear as the last elements in the sequences.

Two competing forces are also present in determining where to place *-le*: the thematic structure and the constituent structure. The suppression of a thematic role is caused by a deletion or omission taking place in a constituent structure, if we follow Baker (1989) and other GB practitioners in assuming that verbs assign thematic roles to their associated NPs. Since a thematic role is assigned by a verb to its associated NP, if that NP is deleted, then the assigned thematic role is reduced in the sense that its c-structure manifestation through the NP disappears. In sentence (19a), the verb *jin* 'enter' attracts the particle *-le,* because its locative role has a c-structure NP. In sentence (18a), however, the verb *zou* 'walk' instead attracts the particle *-le,* because all the verbs have their non-agent roles suppressed, due to the omission of their associated NPs in the constituent structure, and this allows *zou* 'walk,' with an <ag, pt(s)> configuration to rank highest among all three verbs. And as the highest-ranked, *zou* 'walk' attracts *-le*.

The solutions proposed by Chang to the problem of work order and to the problem of the *-le* placement in the three-event serial-verb construction exemplified by sentences (18a) and (19a) seem reasonable and correct. If so, the success of Chang's solutions could have two far-reaching implications.

Rejecting Li and Thompson's (1981) 'boundedness' conditions as the criteria for *-le* placement, Hsieh (1989a, b) has suggested that an understanding of the complicated procedure for *-le* assignment could depend on a careful examination of how abstract grammatical principles and iconic conceptual principles interact to decide the eventual location

for placing the *-le* particle. Building on Hsieh's initial tentative solution of *-le* along this line of thinking, Chang has offered a more precise and convincing solution in terms of the interaction among three components: the constituent structure as an abstract component, the conceptual structure (particularly Tai's termporal sequence) as an iconic component, and the thematic-structure, which, as Jackendoff (1987) and Bresnan and Kanerva (1989) suggest, seems to mediate between these two radically different cómponents (see Huang 1989:3 for an LFG view of how various components of the grammar are related).

In addition to making Hsieh's contention more precise and credible, Chang's treatment of the three-event serial-verb construction also could well have the effect of re-opening the long-standing debate in Mandarin syntax over whether the first verb or the second verb is the 'main verb' in a construction in which two or more verbs occur, a debate which for a while seems to have been securely closed by an eloquently and meticulously argued paper by James Huang (1988) in favor of choosing the first verb as the main one. Eloquent and convincing as James Huang's paper may be, many reasons cited in favor of choosing the second verb as the so-called main verb have not been shown to be entirely false, especially those reasons summarized by Chu-ren Huang and Louis Mangione (1985). If Chang's solution to the placement of *-le* is on the right track, the main-verb-status debate clould be re-opened and could take the new form of an investigation into precisely when the first verb must be regarded as coinciding with the saliency peak and when the second verb must instead be viewed as the location of the saliency peak. If the dialogue should evolve into this new form, linguists specializing in Chinese might find it more profitable to approach the main-verb-status question without undue methodological preference and with genuine interest in finding out what form the phrase structure of a Chinese sentence may assume in principle and how that general form can be modified by thematic, iconic, and other factors. Once the correct general phrase structure is discovered, the question of where the saliency peak falls and how *-le* is attracted to that saliency peak may have a more revealing and interesting answer.

6. Proper Characterization of the Serial-verb Construction

Much more dramatically than Chang's (1990a) treatment of word order and *-le* placement in a three-event serial-verb construction involving an identical agent such as sentences (18a) and (19a), Chang's (1990b) analysis of a two-event serial-verb construction involving an agent and a patient in the first event provides evidence for Hsieh's claim about grammar as a dynamic system of competing rules acting across the boundaries of different components of the grammar. Sentences (20) and (21) illustrate this second type of serial-verb construction: (20) *wo tui dao le ta*, I-push-fall-perfective-him, 'I pushed him down'; (21) *ta zhong shu mai4*, he-plant-trees-sell, 'He plants trees to sell.' Notice that pattern (20) requires *tui* 'push' and *dao* 'down' to be glued into a compound, unlike pattern (21), which requires that the first verb *zhong* 'plant' and the second verb *mai4* 'sell' be separated by their so-called shared object (cf. Baker 1989), namely *shu* 'trees.'

Both pattern (20) and pattern (21), Chang hypothesized, are historically derived from an identical sentence pattern in which two temporally-sequenced events with their agents and patients fully expressed are conjoined as two coordinate conjuncts. The two patterns became divergent through time and their divergence is largely conditioned by the interplay of four grammatical components: semantics, conceptual structure, thematic structure, and constituent structure. From an interactionalist point of view, synchronic patterns of variation are merely the result of historical developments via different pathways, or rather they are on-going historical processes of differentiation momentarily arrested, as it were, by the scrutinizing eyes of the linguist. Therefore, a synchronic description of these two types of two-event serial-verb constructions will naturally mirror their separate historical developments. Since these two patterns are derived from two historically earlier forms that have identical constituent structures but different semantic, conceptual, and thematic structures, we can state their relation either by postulating some transformations, following the GB theory, or by providing some non-transformational stipulations, according to the LFG theory. The choice is not crucial for our analysis, and we will adopt whichever approach that is convenient for discussing a particular point of ours.

To continue, let us look at the c-structures of sentences (20) and (21), shown as (20')

and (21') below:

(20')

S

S₁   S₂

NP   VP   NP   VP

wo   V'   NP   taⱼ   V'

        V'   ASP   taᵢ   ↓   V   ASP

                          e

V   V   -le   dao   -le

tui   <th>   ↓

<ag,pt>   ↓   e

                                            <R-th>

(compound formation)
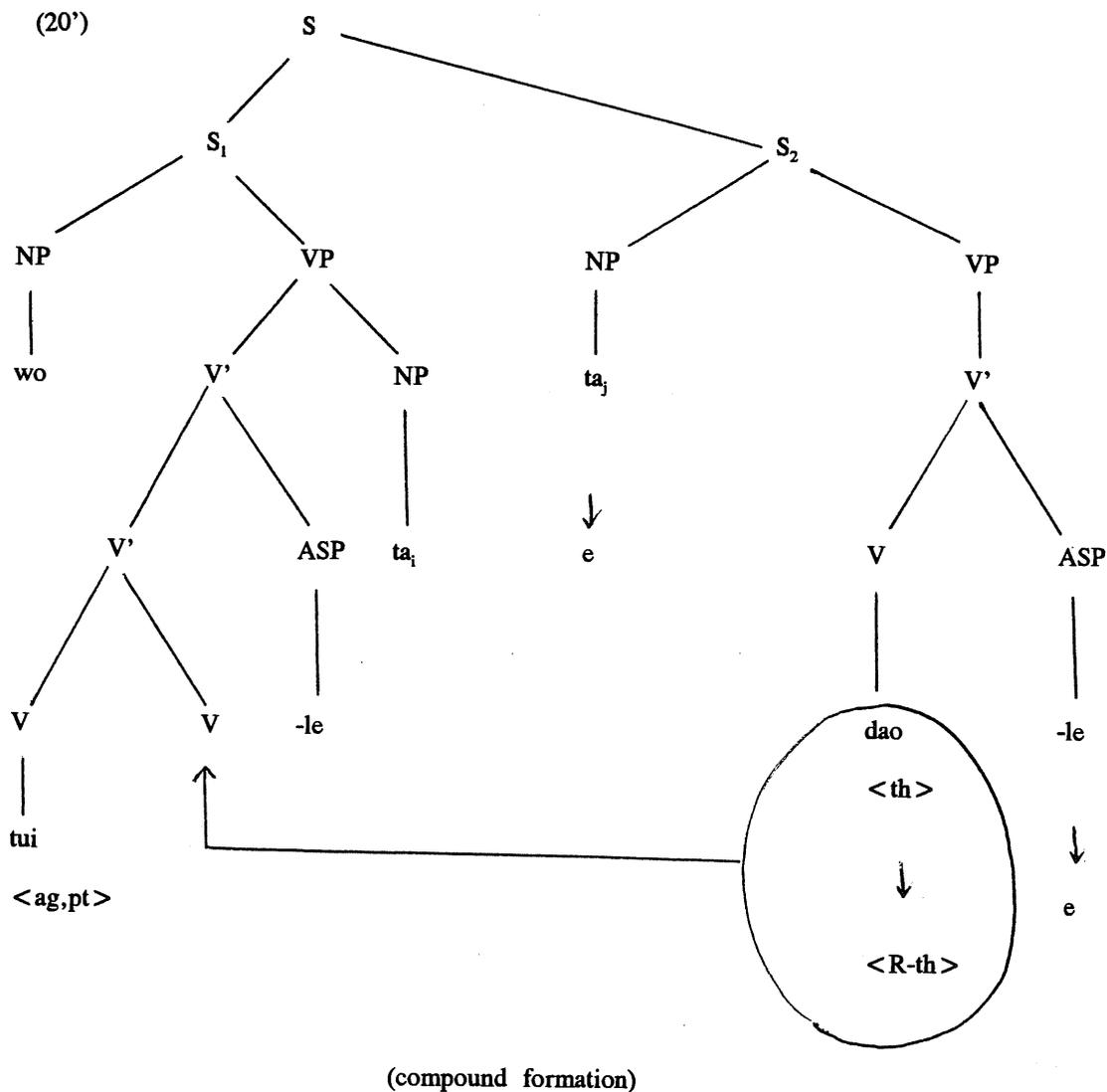
(Coordination reduction by deletion takes place only if i = j)

wo	tui	dao	le	ta.
I	push	fall	ASP	him

'I pushed him down.'

(21')
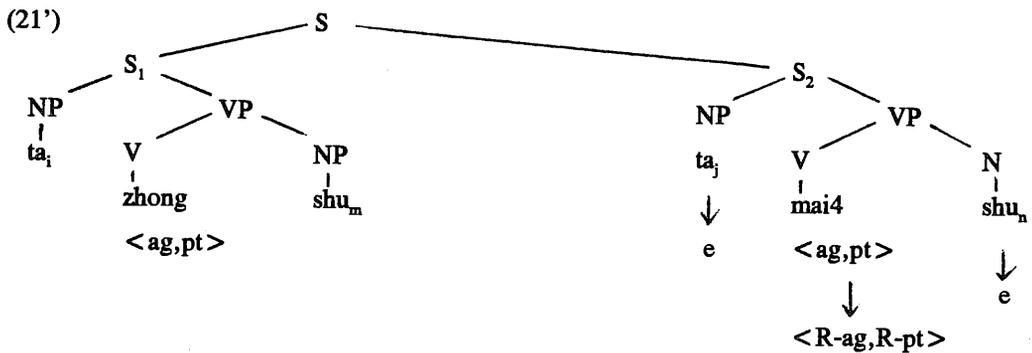
(Coordination reduction by deletion takes place only if i = j and m=n.)

ta	zhong	shu	mai4
he	plant	trees	sell

'He plants trees to sell.'

These two analysis-trees show how sentences (20) and (21) could have been historically derived. For those who are not opposed to transformations, these trees show how (20) and (21) are transformationally derived. For those who object to transformations, that is, to coordination reduction in this case, stipulations rules can be substituted for transformations and trees can be revised to show their post-reduction shapes, with the symbol 'e' representing a deleted node. (Baker (1989) objects to the coordination reduction approach to serial-verb constructions in general, and adopts a double-headed-VP solution; see below.)

Let us carefully examine the tree in (20'). Here we see that ta_i 'him' in S_1 and ta_j 'he' in S_2 need not have a shared reference. If there is no shared reference, no coordination reduction takes place, and the sentence that results would be (20.1) *wo tui le ta_i, ta_j dao le* 'I pushed him_i, and he_j fell.' If, however i=j and ta_i and ta_j have the same reference, then coordination reduction may but need not occur. In other words, shared-reference is necessarily but not sufficient for coordination reduction. If no reduction takes place, we have

(20.2) *wo tui le ta$_i$* , *ta$_i$ dao le*, 'I pushed him$_i$, and he $_i$ fell.' On the other hand, if reduction takes place, ta$_j$ in S$_2$ is deleted (and also ASP in S$_2$ is deleted) and the verb *dao* 'fall' in S$_2$ must move to S$_1$ to form a verb-verb compound with *tui* 'push,' thus *tui dao* 'push down.' Can we state the precise condition for the process of compound formation? Yes. If a theme role <th> becomes reduced into <R-th> because its associated NP is deleted, the verb possessing that <R-th> must move to the transitive verb whose thematic combination <ag, pt> has not been affected by any reduction because none of its associated NPs is deleted. The sentence we obtain by this process of compounding would be (20.3) *wo tui dao le ta* 'I pushed him down.' This would intuitively be a serial-verb construction, although we have to wait till later to give that intuition its justification.

Now let us examine the analysis tree in (21'), and here the matter is even more interesting. In anticipation of our detailed discussion, let us pause to examine the following set of sentences:

(21.1) (ta$_i$ zhong shu$_i$)$_t$, (ta$_j$ mai4 shu$_j$)$_t$

he$_i$ plant trees$_i$ he$_j$ sells trees$_j$

'He$_i$ plants trees$_i$, and he$_j$ sells trees$_j$.'

('t' is time index for the event.)

(Full coordination, no deletion, no temporal sequence)

(21.2) (ta$_i$ zhong shu$_i$)$_t$, (ta$_j$ mai4 shu$_j$)$_{t+1}$

he$_i$ plant trees$_i$ he$_j$ sells trees$_j$

'He$_i$ plants trees$_i$, and then he$_j$ sells trees$_j$.'

(Full coordination, temporal sequence, no deletion.)

(21.3) (ta$_i$ zhong   shu$_i$)$_k$, (ta$_i$ mai4   shu$_j$)$_k$

      he$_i$ plant   trees$_i$ he$_i$ sells   trees$_j$

      'He$_i$ plants trees$_i$, and he$_i$ sells trees$_j$.'

      (Full coordination, same-reference agents, no temporal sequence, no deletion.)

(21.4) (ta$_i$ zhong   shu$_i$)$_k$, (ta$_i$ mai4   shu$_j$)$_{k+1}$

      he$_i$ plant   trees$_i$ he$_i$ sell   trees$_j$

      'He$_i$ plants trees$_i$, and then he$_i$ sells trees$_j$.'

      (Full coordination, same-reference agents, temporal sequence, no deletion.)

(21.5) (ta$_i$ zhong   shu$_i$)$_k$, (e$_i$ mai4   shu$_j$)$_k$

      he$_i$ plant   trees$_i$ e$_i$ sell   trees$_j$

      'He$_i$ plants trees$_i$ and sells trees$_j$.'

      (Same-reference agents, no temporal sequence, second agent deleted.)

(21.6) (ta$_i$ zhong   shu$_i$)$_k$, (e$_i$ mai4   shu$_j$)$_{k+1}$

      he$_i$ plant   trees$_i$ e$_i$ sell   trees$_j$

      'He$_i$ plants trees$_i$ and then sells trees$_j$.'

      (Same-reference agents, temporal sequence, second agent deleted.)

(21.7) (ta$_i$ zhong   shu$_i$)$_k$, (e$_i$ mai4   shu$_i$)$_{k+1}$

      he$_i$ plant   trees$_i$ e$_i$ sell   trees$_i$

      'He plants trees$_i$ and sells them$_i$.'

      (Same-reference agents, same-reference patients, temporal sequence, second agent deleted.)

(21.8) (ta$_i$ zhong shu$_k$)$_k$, (e$_i$ mai4 e$_k$)$_{k+1}$

he$_i$ plant trees$_k$ e$_i$ sell e$_k$

'He plants trees to sell.'

(Same-reference agents, same-reference patients, temporal sequence,

second agent deleted, second patient deleted.)

(18a) ta$_i$ zou le e$_i$ jin e$_i$ lai.

he$_i$ walk ASP e$_i$ enter e$_i$ come

'He walked into where I was.'

(Same-reference agents, second and third agents deleted, imaginary time-

sequence.)

(20.3) wo tui dao le ta$_i$ e$_i$.

I push fall ASP him$_i$ e$_i$

'I pushed him down.'

(Patient in S$_1$ and theme in S$_2$ have the same reference; theme is deleted;

verb in S$_2$ moves to verb in S$_1$ and forms a compound with it.)

(The above analyses are based on Chang (1990a, b); 'temporal sequence'

is in the sense of Tai (1985).)

Sentences (21.1) through (21.8), we notice, are variations based on the same constitu-
ent-structure tree in (21′). Three factors affecting the shapes of these variants are appar-
ent: whether agents have the same reference, whether patients have the same reference, and
whether the first event and the second event are temporally sequenced in the sense of Tai
(1985) and Hsieh (1989a). Of these eight variants, however, only (21.7) and (21.8) would
intuitively be qualified as the 'usual' or 'genuine' serial-verb sentences. The remaining
ones are in varying degrees divergent from the serial-verb construction. In addition to

(21.7) and (21.8), the sentences (18a) and (20.3), as we mentioned, are also intuitively of the serial-verb construction.

Obviously, we are ready to discover the common features of a serial verb construction, based on our analyses of these genuine patterns of the serial-verb construction. All these genuine patterns obeyed the principle of Tai's temporal sequence except sentence (18a), which, however, displays Hsieh's (1989a) imaginary time-sequence. This principle of temporal sequence as originally proposed by Tai (1985) and subsequently refined by Hsieh (1989a), who divided time into real, inferred, and imaginary times, is obviously strongly enforced in these serial-verb patterns. Therefore, we may say that, in general, it is necessary for a serial-verb construction to be composed of two temporally-sequenced events. Put differently, temporal sequencing is the common feature of the genuine patterns of serial-verb construction, and it is the necessary condition under which a sentence will be judged as definitely belonging to the serial-verb type. It is especially in a context like this that one is reminded again of the explanatory power of Tai's temporal sequence principle and of Tai's potentially immortal contribution to Chinese linguistics. Without Tai's innovative concept of temporal sequence, there would be virtually no straightforward and principled way to describe the common feature shared by all genuine patterns of serial-verb construction.

One can view a serial-verb construction, then, as a prototype which has some sort of a core-feature, namely, the feature of having its two or more events temporally sequenced, in addition to some optional peripheral features. A prototype does not necessarily have its core-feature fixed, but in the case of Chinese serial-verb structure, we are lucky to find a fixed core-feature. Regarding the peripheral features, the more such peripheral features a sentence has, the more that sentence appears to be a prototypical serial-verb construction. In our example, sentences (21.7), (21.8), and (18a) all have same-reference agents, although sentence (20.3) has its patient and theme sharing the same reference. And this additional 'shared-reference' feature makes them more prototypical than the other sentences

compared.

Based on African languages which are typologically quite different from Chinese, Baker(1989), whose work has apparently inspired Chang(1990b), has claimed that 'object-sharing' is the crucial feature for the serial-verb construction. A typical Bakerian analysis is given in the tree (22). There, we see that both *push* and *fall* assign a theme-role to the shared object *child*. If Baker's claim is valid for African languages, it is certainly false for Chinese, where, as we have just pointed out, serial-verb constructions must all obey Tai's temporal-sequence principle. Chang's (1990a, b) research results not only gave serial-verb constructions in Chinese an adequate account but also served to call linguists' attention to the importance of Chinese as a language whose unique typology may often effectively challenge and help to refine those preliminary claims on linguistic universals which are made without including Chinese as a significant portion of their data base.

(22)   Baker's (1989) Analysis of Yoruba Serial-Verb Construction:
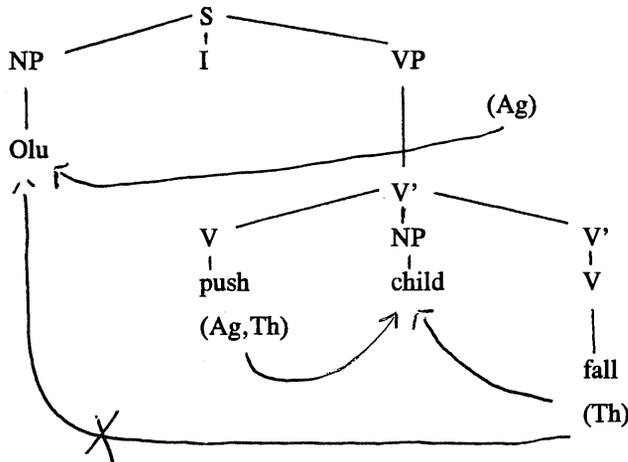
Olú   ti   ọmọ   náà   ṣubú.   (Yoruba)

Olu   push   child   the   fall

'Olu pushed the child down.'

A serial-verb sentence may possess same-reference patients as another secondary feature, as seen in sentences (21.7), (21.8).

We can see that sentence (21.8) (diagramed in (21′)) and sentence (20.3) (diagramed in (20′)) form an interesting pair of contrast. As is clear from (21′) and (20′), sentence (21.8) cannot undergo the process of compound-formation but sentence (20.3) must undergo that process. Chang has no problem in stating this difference, for she can refer to their different reduced thematic-structures. As we see in (21′), the verb *mai4* 'sell' has a reduced <R-ag, R-pt>, and as we also see in (20′), the verb *dao* 'fall' has a reduced <R-th>. The two reduced thematic structures are different and that explains why *mai4* cannot undergo compound-formation but *dao* 'fall' must. To be more explicit, if a serial-verb construction has a second verb whose thematic complex is <R-ag, R-pt>, it cannot go through compound-formation, but if it has a second verb whose thematic complex is <R-th>, it must go through the compound-formation. There seem virtually no exceptions to this rule. In this connection, Chang's research in serial-verb constructions also may have pioneered a sophisticated approach to the study of restrictions on compound-formation, a subject which Li and Thompson (1981) have not chosen to discuss in any depth.

The discoveries made in Chang's (1990a, b) research on the serial-verb structure in Mandarin Chinese illustrate two interesting phenomena: prototype and system-internal competition. But these two phenomena can be easily seen as intimately related, if, as we have suggested, a language is a dynamic system in which various components are competing for dominance over individual constructions. Since such competitions are constantly taking place and in no sense can stop, any time we as linguists force, so to speak, a language to halt so that we can examine it, we are inevitably looking at a system whose internal competitions seem to be momentarily at a standstill. But since these competitions are actually on-going and are in no sense completed, fuzziness and prototypicality are the usual characteristics that we observe in the various constructions which are the domains of such competitions.

In this way, we see that a serial-verb construction must obey Tai's temporal-sequence principle and it may also fulfill selective secondary requirements such as having same-reference agents or patients. Furthermore, as we move further and further away from the prototype of serial-verb construction, we come closer and closer to the coordination construction, which, upon careful investigation might well turn out to be another prototype. We also notice that several components in the grammar of Chinese are interacting to bring out various genuine serial-verb constructions: (1) semantics, since whether two agents or patients share the same reference is a crucial semantic criterion; (2) constituent-structure, since coordination reduction is involved; (3) thematic-structure, since coordination reduction and compounding depend on it; and (4) conceptual-structure, since all genuine serial-verb constructions must obey the principle of temporal-sequence.

7. Concluding Remarks

To conclude, we wish to point out that Chang's (1990a, b) important innovation in the analysis of various serial-verb constructions has yielded results that lend strong support to our proposed hypothesis of an interactionalist grammar, which has internally competing rules and interplaying components. This view of grammar has based itself on the immensely important four-way division of syntax by Bresnan and her associates into the c-structure, the f-structure, the t-structure, and the i-structure. It has also based itself on two great insights--Wang's idea of competing changes and Labov's notion of variable rules. If we adopt the proposed interactionalist view on language, then the history and (inherently variable) structure of a language will be seen to be just two sides of the same coin of competition, one viewed from the perspective of time and one looked at from the perspective of human cognition, which is based on both abstraction and iconic imagery. This interactionalist view could privide a theoretic foundation for a new syntactic method of dialect comparison and subgrouping.

REFERENCES

Baker, Mark C.

   1989   Object sharing and projection in serial verb constructions. Linguistic Inquiry
            20. 513–53.

Bickerton, Derek.

   1971   Inherent variability and variable rules. Foundations of Languages 7.4. 457–
            492.

Bresnan, Joan.

   ms. Level of representation in locative inversion: a comparison of English and
        Chichewa.

   ms. The syntactic projection problem and the comparative syntax of locative inversion.
        To appear in Journal of Information Science and Engineering. (Special issue devot-
        ed to the Proceedings of ROCLING II, Taiwan, 1989). Taiwan: Institute of Infor-
        mation Science, Academia Sinica.

Bresnan, Joan. and Jonni M. Kanerva.

   1989   Locative inversion in Chichewa: a case study of factorization in grammar.
            Linguistic Inquiry 20. 1–50.

   ms. The thematic hierarchy and locative inversion in UG. To appear in E. Wehrli and
        T. Stowell, eds., Syntax and semantics 24: syntax and the lexicon, New York: Aca-
        demic Press.

Bresnan, Joan. and Lioba Moshi.

   ms. Object asymmetries in comparative Bantu syntax.

Bresnan, Joan. and Annie Zaenen.

   ms. Deep unaccusativity in LFG. To appear in the Proceedings of the Fifth Biennial
        Conference on Grammatical Relations, Jan. 13–14, 1990. University of California,
        San Diego.

Cavalli-Sforza, L.L., and William S-Y.Wang.

    1986   Spatial distance and lexical replacement. Language 62. 38–55.

Chang, Claire Hsun-huei.

    1990a   Complex verbs and argument structure: interaction between syntax and morphology. Paper presented at the Second Northeast Conference on Chinese Linguistics, The University of Pennsylvania, Philadelphia, May 4–6, 1990.

    1990b   On serial verbs in Mandarin Chinese: VV compounds and co-verbial phrases. Paper presented at The Ohio State University Mini-conference on Serial Verbs, Columbus, Ohio, May 26–27, 1990.

Chen, Matthew.

    1987   The syntax of Xiamen tone sandhi. Phonology Yearbook 4. 109–149.

    1988   What must phonology know about syntax? To appear in the proceedings of Workshop on the Phonology-Syntax Connection, Center for the Study of Language and Information, Stanford University, May 20-22, 1988.

Chen, Matthew. and Hsin–I Hsieh.

    1971   The time variable in phonological change. Journal of Linguistics 7. 1–13.

Chen, Matthew. and William S-Y. Wang.

    1975   Sound change: actuation and implementation. Language 51. 225–81.

Cheng, Robert L.

    1985   A comparison of Taiwanese, Taiwan Mandarin, and Peking Mandarin. Language 61. 352–77.

    1989   Competing forces in syntactic changes: the case of aspect and phase markers in Taiwanese and Mandarin. Paper presented at the Eighth International Workshop on Chinese Linguistics, POLA, University of California, Berkeley, March 20-21, 1989.

Chomsky, Noam.

    1986   Knowledge of language: its nature, origin, and use. New York: Praeger.

Greenberg, Joseph H.

1966   Some universals of grammar with particular reference to the order of meaning elements. Universals of Grammar, ed. by Joseph H. Greenberg. Cambridge, M.A.: The M.I.T. Press.

Ho, Arlene Yue-ling.

ms. Two methods of subgrouping seven Batanic languages.

Hsieh, Hsin-I.

1973   A new method of dialect subgrouping. Journal of Chinese Linguistics 1.1. 64–92.

1989a   Time and imagery in Chinese. Functionalism and Chinese grammar, ed. by James H-Y. Tai and Frank F. S. Hsueh, 42–94. Chinese Language Teachers Association Monograph Series No. 1.

1989b   History, structure, and competition. Paper presented at the Eighth International Workshop on Chinese Linguistics, POLA, University of California, Berkeley, March 20–21, 1989.

ms. Competition of grammatical rules. To appear in the Proceedings of the Twelfth International Symposium on Asian Studies 1990.

Huang, C-T. James.

1988a   *Wo pao de kuai* and Chinese phrase structure. Language 64. 274–311.

1988b   Modularity and explanation: the case of Chinese A-not-A questions. In Majorie Chan, and Thomas Ernst eds., Proceedings of the Third Ohio State University Conference on Chinese Linguistics, 141–69, Bloomington: Indiana University Linguistics Club Publications.

Huang, Chu-ren.

1989   Mandarin Chinese and the lexical mapping theory. Paper presented at the 1989 International Conference on Sino-Tibetan Languages and Linguistics, at Honolulu, Hawaii.

1990   Review of Functionalism and Chinese grammar (ed. by James H-Y. Tai and

Frank F. S. Hsueh). Journal of Chinese Linguistics 18.2: 318-34.

Huang, Chu-Ren, and Louis Mangione.

1985 A reanalysis of de: adjuncts and subordinate clauses. Proceedings of the Fourth West Coast Conference on Formal Linguistics, ed. by M. Cobler, J. Goldbert, S. Mackaye, and M. Westcoat, 80-91.

Jackendoff, Ray.

1987 The status of thematic relations in linguistic theory. Linguistic Inquiry 18. 369-411.

Kaplan, Ronald M. and Joan, Bresnan.

1982 Lexical-functional grammar: a formal system for grammatical representation. The mental representation of grammatical relations, ed. by Joan Bresnan, 173-281. Cambridge, M.A.: The M.I.T. Press.

Labov, William.

1966 The social stratification of English in New York City. Washington, D.C.: Center for Applied Linguistics.

Lakoff, George.

1972 Hedges: a study in meaning criteria and the logic of fuzzy concepts. Papers from the 8th Regional Meeting, Chicago Linguistic Society, 183-228.

Langacker, Ronald W.

1987 Foundations of cognitive grammar, vol. 1: theoretical prerequisites. Stanford: Stanford University Press.

Li, Charles N. and Sandra A. Thompson.

1981 Mandarin Chinese: a functional reference grammar. Berkeley: University of California Press.

Lien, Chinfa.

1987 Coexistent tone systems in Chinese dialects. Univerity of California (Berkeley) Ph.D. dissertation.

Moravec, Hans.

　1988　Mind children: the future of robot and human intelligence. Cambridge, M.A.:
　　　　Harvard University Press.

Ogura, Mieko.

　1990　Dynamic dialectology. Tokyo: Kenkyusha.

Popper, Karl R.

　1968　The logic of scientific discovery. New York: Harper & Row.

Quine, Willard Van Orman.

　1960　Word and object. Cambridge, M.A.: The M.I.T. Press.

　1969　Ontological relativity and other essays. New York: Columbia University Press.

Rosch, Eleanor et al.

　1976　Basic object in natural categories. Psychology 8. 382–439.

Ross, John.

　1967　Constraints on variable in syntax. M.I.T. Ph.D. dissertation.

Sanders, Gerald A., and James H-Y. Tai.

　1972　Immediate dominance and identity deletion. Foundation of Language 8. 161–
　　　　98.

Selkirk, Elisabeth O.

　1984　Phonology and syntax. Cambridge, M.A.: M.I.T. Press.

Shen, Zhongwei.

　1990　Lexical diffusion: a population perspective and a mathematical model. Journal
　　　　of Chinese Linguistics 18.1. 159–200.

Tai, James.

　1969　Coordination reduction. Indiana University Ph.D. dissertation.

　1985　Temporal sequence and Chinese word order. Iconicity in syntax, ed. by John
　　　　Haiman, 49–72. Amsterdam: John Benjamins Publishing Company.

　1989a　Toward a cognition-based functional grammar of Chinese. Functionalism and

Chinese grammar, ed. by James H-Y. Tai and Frank F. S. Hsueh, 187–226. Chinese Language Teachers Association Monograph Series No. 1.

1989b   Iconicity motivation in Mandarin Chinese. Paper presented at the Second Northeast Conference on Chinese Linguistics, Columbus, Ohio.

Ting, Pang-hsin.

1982   Phonological features for classification of the Chinese dialects. The Tsing Hua Journal of Chinese Studies, New series, 15. 257–73.

1987   Some problem in Mandarin dialects. The Bulletin of the Institute of History and Philology, Academia Sinica 18.5. 809–41.

Traugott, E. C.

1972   A history of English syntax. New York: Holt, Rinehart and Winston.

Wang, William S-Y.

1969   Competing changes as a cause of residue. Language 45. 9–25.

Winograd, Terry.

1972   Understanding natural language. New York: Academic Press.

Winograd, Terry and Fernando Flores.

1987   Understanding computers and cognition. New York: Addison-Wesley.

Zadeh, L. A.

1965   Fuzzy sets. Information and control 8. 338–53.

Zwicky, A. M.

1982   An expanded view of morphology in the syntax-phonology interface. Proceedings of the 11th International Congress of Linguists, Tokyo, August 1982.

On Dialectal Overlapping as a Cause for the Literary/Colloquial Contrast in Standard Chinese

Frank F. S. Hsueh

(The Ohio State University)

0. Abstract

One problem in Modern Standard Chinese is the phenomenon that a sizable number of words have double or even triple readings known as the *literary vs. colloquial* readings, without, however, any basic distinction in meaning. How to systematically and logically explain this phenomenon has remained quite a challenge. This paper tries to demonstrate that this seemingly confusing phenomenon is merely a logical and inevitable result of dialectal overlapping. However, its main purpose will be to propose a few theoretical and methodological hypotheses for the study of the interactions among closely related dialects. Basically, it argues that after the standard speech of the Tang dynasty spread into different geographical areas, different sound changes occurred in different areas and different Mandarin dialects thus appeared. A sound change that started in one area naturally had a tendency to spread into another area, and that often helped create an interesting situation, namely, what occurred *first* in Dialect A became *second* to what occurred first in Dialect B, and vice versa. The relative timing consequently might generate different readings in different dialects for those words which could have been affected by both the sound changes involved. Then, due to social, demographic, and political interactions, the closely related dialects were ' synthesized ' into a new form of standard speech for the elite class, in which two or more different dialectal readings of the same word were all accepted but labelled as either 讀音 *duyin* ' pronunciation for reading ' or 語音 *yuyin* ' pronunciation for speaking ' . This form of ' standard speech ' prevailed from probably the middle of the Ming dynasty to the immediate pre-modern time.

Frank F. S. Hsueh

1. Introduction.

2. The unique nature of the literary/colloquial contrast in Modern Standard Chinese.

3. The merging of the rhymes in the *Geng-Zeng* and in the *Jiang-Dang* rhyme-classes that restructured the syllabe-ending system.

4. The palatalization of syllables with a central low vowel and velar initials.

5. The replacement of two types of consonant endings with semivowels.

6. Sociolinguistic factors for the overlapping of the Mandarin dialects and the formation of the standard speech.

1.   About ten years ago, in honour of the late Professor Ch'u Wan-li, I wrote a paper on the evolution of the entering-tone words (Hsueh 1978). In that paper, I focused my discussion on the formation of the literary and colloquial readings of the entering-tone words, without fully recognizing the important role of many sociolinguistic factors, particularly the political and cultural ones. Reconsideration of the issues involved has led me to believe that many of the sound change rules discussed there have far broader implications than I realized then. In this paper, I will elaborate on these implications in light of more recent discoveries, both by myself and by others. I will also demonstrate that basically three prominent types of sound changes were involved here, as far as the literary/colloquial contrast is concerned. The first is the coalescence of the rhymes 曾攝*Zeng-she* and 梗攝*Geng-she* into a single rhyme, and the coalescence of 江攝*Jiang-she* and 宕攝*Dang-she* into a single rhyme, which probably started in the Loyang-Kaifeng area but eventually spread to both Nanking and Peking. The second is the palatalization of unrounded syllables with a central low vowel and a velar initial. (In terms of the 等韻*Dengyun*, "palatalization of the second-division unrounded words with velar initials".) This change probably first occurred in the Peking area *before* the above-mentioned change from the Loyang-Kaifeng area reached there, but eventually it spread as far as the Nanking area. The third is the replace-

ment of the stop consonant ending with the front semivowel for the entering-tone syll-

ables in both the *Zeng-she* and the *Geng-she,* and the replacement of the ending stop

consonant with the back semivowel for the entering-tone syllables in the *Jiang-she* and

the *Dang-she,* as well as the 通攝*Tong-she,* which probably also started from the Peking

area *before* the change from the Loyang-Kaifeng area reached there. However, even

though the latter did not spread southwards very far, the former did spread (as far south as

Bangpu but short of Nanking) into areas which had been affected by the changes men-

tioned above. As a result of this intricate situation, quite a number of words acquired dif-

ferent readings in different dialects. Subsequent social and political changes, as well as

population movements, primarily during the Ming dynasty, created a new form of

standard speech which adopted the Nanking readings for the words affected by the

changes mentioned above, in preference to their native Peking readings (some of which

were only accepted at random and were called colloquial or ' vulgar ' readings.)

2.　　The phenomenon known as literary/colloquial contrast in reading is a fairly com-

mon one among Chinese dialects. For some non-Mandarin dialects such as Amoy, the con-

trast may almost represent two coexisting sound systems. This is because, at a certain histo-

rical period, native speakers of such dialects tried to read the literary works according to

the pronunciation of the then standard Chinese, but inevitably with a local accent. This

practice often froze in the course of time, giving a large number of words two parallel

readings, the colloquial vs. the literary. For dialects which are more closely related to, and

hence share many common readings with, the ' standard speech ' , such a contrast may

involve only a small portion of their vocabulary. In the sense given above, one may won-

der why Pekingese, the ' standard form ' of Chinese speech, also has a similar phenomenon.

The answer is that this ' standard form ' of speech was not considerd to be 'the standard' by

the educated or elite class, especially during the Ming dynasty but even up to very recent

times. Hence, more ' elegant ' forms of pronunciation had to be adopted into this dialect as

' literary ' readings. Fortunately, the dialect or dialects from which the literary readings were adopted are closely related to, and generally share the same basic sound system with, Pekingese. So the number of words that have acquired double or triple readings are relatively small. Moreover, they are mostly former entering-tone words of two different types, namely, those of the *Geng-Zeng* classes of rhymes and those of the *Tong-Jiang-Dang* classes of rhymes. The seventeen types of words in Appendix One represent roughly all possible cases of the literary/colloquial contrast in Pekingese.

3.   All the 切韻 *Qieyun* rhymes that were included in the *Zeng-she* and the *Geng-she* of the *Dengyun* books later coalesced, except those with entering-tones, into a single rhyme. This was first recorded as the 庚青*Geng-Qing* rhyme in the 中原音韻*Zhongyuan Yinyun* (1324) by 周德清Zhou Deqing of the Yuan dynasty. However, their coalescence started obviously much earlier than Zhou Deqing's time and the process was a rather complex one. According to Zhou Zumo (1943), words of all rhymes with nasal endings in the *Geng-she* already rhymed together in the Loyang dialect as early as the middle of the Tang dynasty (as reflected in 元結Yuan Jie's and 元稹Yuan Zhen's poems), but those of the *Zeng-she* joined the former only during the Song dynasty. In a similar fashion, words of all rhymes with nasal endings in the *Jiang-she* and the *Dang-she* also, according to Zhou Zumo, rhymed together in the Loyang dialect by the middle of the Tang dynasty, and they were all put into the same rhyme (江陽 *Jiang-yang*) in Zhou Deqing's *Zhongyuan Yinyun*. How can we most logically explain these phenomena?

3.1.   It seems to me that both cases of coalescence mentioned above are probably the result of assimilation. On the basis of my phonemicization of the *Dengyun* sound system (Hsueh 1985), I have proposed to explain the coalescence of the *Jiang-she* and the *Dang-she* with the following sound change rule:

$$a \quad \longrightarrow \quad o / \_\_\_\_\_ [C, +velar] \qquad\qquad (1)$$

This rule means that the central low vowel /a/ became the back low vowel /o/ under the assimilating force of the velar ending /k/ or /ŋ/ ; namely, the distinction between the *Jiang-she* and the *Dang-she* simply disappeared after this sound change.

3.2 On the same basis, the coalescence of the *Geng-she* and the *Zeng-she* can be logically summarized with the following rule:

$$o, a \quad \longrightarrow \quad e / \_\_\_\_\_ [C, +\text{palatal}] \qquad (2)$$

This rule means that both the back and the central low vowels become the front low vowel /e/ under the assimilating influence of the palatal ending /k̂/ or /ɲ/. [1] There are, however, two problems. First, most scholars do not yet agree with the proposal that these two rhyme-classes have palatal endings (See, for example, Chou 1983 and Ting 1987.) They still believe that rhymes of both the two classes have a velar ending and, hence, try to differentiate them from the rhymes of the *Tong-Jiang-Dang* classes with a large number of 'front-vowel' symbols (thus, making systematic phonemicization impossible), or with some diphthongs, instead of single vowels, as syllable nuclei (thus, breaking the pattern of the traditional Chinese syllable segmentation). For these scholars, a different explanation for the *Geng-Zeng* coalescence would have to be found. Second, and perhaps more seriously for us, Zhou Zumo's study reveals that the rhymes in the *Geng-she* coalesced first, long before the rhymes of the *Zeng-she* joined them in the Song dynasty. Therefore, we must revise the above rule as follows to reflect this historical fact:

$$a \quad \longrightarrow \quad e / \_\_\_\_\_ [C, +\text{palatal}] \qquad (2')$$

and claim that this sound change took place as early as the middle of the Tang dynasty,

---

1 Scholars all know that the *Geng-she* and the *Zeng-she* are different from the other rhyme-classes with a velar ending (*Tong, Jiang, Dang*) , but they do not agree as to what the difference is. I tend to agree with Hashimoto who proposed that the syllable ending of the former was probably palatal (Hashimoto 1978-79), because the puzzle as to why there were so many rhyme-classes with the velar ending alone (if that hypothesis were right) would be solved, and, more importantly, it would explain the development of the language more logically and systematically. Note that I use /k̂/as the symbol for the entering-tone syllable ending, instead of Hashimoto's /c/, but what is really crucial is the concept behind the symbols, not the symbols per se.

and repeated itself once more early in the Song dynasty, after two other general sound changes had turned the vowel of the syllables of the *Zeng-she* from /o/ to /a/. (They are : o----> a/y (w)__(E), and o ----> a/C__E, where E=[- back] for both rules; see Hsueh 1985 for a detailed discussion). The revision above may seem to be rather cumbersome, but it reflects the historical reality more faithfully and makes the rule simpler and phonetically more believable.

3.3   The inevitable consequences of the changes discussed above are clearly noticeable in all Mandarin dialects. Indeed, we can say that these sound changes marked the beginning of a new era of the Chinese language which was eventually labelled Mandarin Chinese. What is important for us to keep in mind is that these changes started from the Loyang area and probably spread quickly to the Kaifeng area. From Kaifeng, the new capital after the Tang dynasty, these changes acquired a new momentum and spread out even more quickly. Eventually, they covered the whole territory where Mandarin Chinese is now spoken, including Peking and Nanking. However, it would hardly require any special imagination or proof to see that this diffusion must have been a gradual process, like a ripple on a pond, in terms of time and space. Therefore, before these sound changes reached areas beyond the Loyang-Kaifeng district, other sound changes could have already occurred in those places and altered the shape of some syllables in such a way that those syllables could no longer be affected by either or both of these changes, as we shall soon illustrate.

4.   Another major phonological feature which helps to mark off the Mandarin dialects from other Chinese dialects is the acquisition of the medial /y/by a special type of syllable. It involves a large number of words in many rhymes. In terms of *Dengyun* phonology, this is known as the palatalization of the second-division unrounded words under velar initials. On the basis of my phonemicization of the Dengyun system, this can

again be formulated into a strict rule of sound change as follows (Cf. Hsueh 1982 and 1985):

$$\phi \quad ----> \quad y/G \underline{\quad} a \qquad\qquad\qquad (3)$$

This is a very powerful rule which changes all the velar-initial syllables with the central low vowel /a/ as the nucleus and without a medial, regardless of the form of their ending. In general, this is quite true in all Mandarin dialects, but there are apparently some exceptions. For example, the word 客/khak̂/ "guest" is pronounced *ke* /khə/ and the word 耕/kaɲ/ "to plow" is pronounced *geng* /kɨŋ/ in Modern Pekingese. Other examples headed by these two in Appendix One apparently have also changed in the same manner as they have. However, native Pekingese speakers often pronounce these words in a different way. For example, "guest" is *qie* /khyə/ to them, and "to plow" is *jing* /kyɨŋ/ to them. These alternative readings represent exactly what is meant by the literary /colloquial contrast.

4.1   The seemingly exceptional cases mentioned above are all of the unrounded type and belong to the second division of the *Geng-she*. Their colloquial readings indicate that they went through the change symbolized by Rule(3), while their literary forms seem to say that they did not. Are they really exceptions to the sound change rule, or rather, residues from an earlier time? (Cf. Wang 1969.) Probably neither. A more logical explanation could be that when the change represented by Rule (3) was operating in the Loyang-Kaifeng area, the words in question were perhaps no longer qualified to receive input for that rule. In other words, they had been disqualified by an earlier change represented by Rule (2′) in 2.2, which we know occurred in the Loyang dialect of middle Tang. Following the same reasoning, we have to say that, when Rule (3) took effect in the "colloquial dialect", wherever it was spoken, the words in question were not yet affected by Rule (2′). Naturally, we want to know when and where the change represented by Rule (3) first started. Since it is such a prominent and prevailing feature for Mandarin Chinese, one might be tempted to say that perhaps it also started in the Loyang-Kaifeng area, but that would force us to say

that this change spread out faster than, and hence overtook, the change symbolized by Rule (2′), reaching the "colloquial dialect" area before the latter did, a possible but not probable situation. It more likely started in the "colloquial dialect" before the wave of influence of Rule (2′) reached there and its own wave of influence reached the Loyang-Kaifeng area after Rule (2′) had taken effect there. We cannot say for sure where the "colloquial dialect" was spoken at that time, except that it must have been somewhere to the north of Loyang and Kaifeng. Peking is a good candidate, but places like Zhengding and Baoding are also possible. Lu Zhiwei, quoted by Shao Rongfen (1981:93), once speculated that the *Zhongyuan Yinyun* was based upon a dialect of the central Hebei area. I do not quite agree with him on that, but it is certainly not illogical to speculate that the Pekingese of the Yuan dynasty, which Zhou Deqing happened to use as the basis for his book, originally came from somewhere to the south of Peking. One thing we know for sure is that Rule (3), which started in the "colloquial dialect", spread in all directions. In the north (all the way to north Manchuria), it was always one step ahead of Rule (2′), but to the south (as far as the Nanking area), the reverse is true.

4.2.   Words of the *Jiang-she* all belong to the second division. Those under velar initials obviously went through the change represented by Rule (3) in almost all Mandarin dialects. For example, 江 /kaŋ/ "river" now reads *jiang* /kyaŋ/ and 角 /kak/ "horn" now reads *jue* /kywə/ or *jiao* /kyaw/ . (These two different readings also represent an example of the literary/colloquial contrast, but they are the result of a different type of sound change which will be discussed in Section 5.) This seemingly straightforward matter has nevertheless one important implication. As we have pointed out, the vowel of the *Jiang-she* rhymes shifted from the central low position to the back low position and thus joined the *Dang-she* rhymes as early as the middle of the Tang dynasty (see the discussion in Section 3 and 3.1). Clearly, the change represented by Rule (3) occurred quite early in the history of the Chinese language. When it spread into the Loyang-Kaifeng area, the change represented by

Rule (1) obviously had not yet occurred. Therefore, the chronology of the changes discussed so far should be:

Rule (2') -- Rule (3) -- Rule (1)

for the Loyang-Kaifeng area, or "Central Mandarin". Their order of occurrence in the Peking area, or "Northern Mandarin", should be:

Rule (3) -- Rule (2') -- Rule (1)

5. The sound changes that generated the largest number of cases of literary /colloquial contrast are those that affected two types of entering-tone words, namely, those of the *Geng-Zeng* rhyme-classes and those of the *Tong-Jiang-Dang* rhyme-classes. (Entering-tone words of other rhyme-classes were not involved ; see Hsueh 1978). Following are some examples of two types of such contrast:

A) 色 /srok̂/ "color" now reads *se* /sə/ or *shai* /sray/ ;

白 /pɦak̂/ "white" now reads *bo* /pə/ or *bai* /pay/ ;

客 /khak̂/ "guest" now reads *ke* /khə/ or *qie* /khyə/ (*/khyay/)

B) 熟 /srɦywɨk/ "cooked" now reads *shu* /srwɨ/ or *shou* /srɨw/ ;

角 /kak/ "horn" now reads *jue* /kywə/ or *jiao* /kyaw/ ;

藥 /yok/ "drug" now reads *yue* /ywə/ or *yao* /yaw/ .

Note that, in Group (A), the contrast is between syllables with a zero ending (the literary readings) and syllables with a /y/ ending (the colloquial readings), while in Group (B), the contrast is between those with a zero ending (the literary readings) and those with a /w/ ending (the colloquial readings). Furthermore, words in Group (A) are from the *Geng-Zeng* rhymes, while those in Group (B) are from the *Tong-Jiang-Dang* rhymes. My phonemicization of the *Dengyun* sound system makes it possible for us to propose the two following rules as the simplest and most logical explanation for the readings of these words in the "colloquial dialect". The rules mean that, at a certain point of time, the palatal ending /k̂/ was replaced by, or changed to, the front semivowel /y/, and the velar ending

Frank F. S. Hsueh

/k/ was replaced by, or changed to, the back semivowel /w/. (Of course, this is also one of the major reasons why we believe that words of the *Geng-Zeng* rhymes had a palatal ending and words of the *Tong-Jiang-Dang* rhymes had a velar ending at the *Dengyun* time. This makes good sense phonetically, and also makes it possible for us to define a simple vowel system within the frame of the traditional Chinese syllable segmentation.)

$$\hat{k} \longrightarrow y/V\rule{2em}{0.4pt} \tag{4}$$

$$k \longrightarrow w/V\rule{2em}{0.4pt} \tag{5}$$

The most straightforward explanation for the literary readings of these words is, of course, that they simply lost their ending at a certain time. However, the situation is not really that simple, as we shall see later (see 5.3).

5.1 One question that may be asked about the two rules just proposed: When did the changes they represent take place? Since we know that the loss of the entering tone in the history of the Chinese language is a relatively late event, we might speculate that these changes could not have occurred too early. But internal evidence implies that Rule (4) must have been enforced in Northern Mandarin at least before the change represented by Rule (2′) affected that dialect, because words like 白 /pɦak̂/ "white, 宅 /crɦak̂/ "residence", and 麥 /mak̂/ "wheat" couldn't possibly have acquired their present readings of *bai, zhai,* and *mai* respectively, if their nuclear vowel had been changed from /a/ to /e/ by Rule (2′) earlier. On the other hand, the reading of /srok̂ / "color" as *shai* suggests that Rule (4) could only have taken place after a minor rule had changed its vowel from back to central (o--> a/r\rule{2em}{0.4pt}k̂), because otherwise the form */sroy/ would have generated a modern reading like *shei* */sriy/ for this dialect, just as the word 黑 /hok̂/ "black" has become *hei* /hɨy/ . It could be that the change represented by Rule (4) did not happen very early in Northern Mandarin, but that the influence of the change represented by Rule (2′) reached the area rather late. This speculation would imply that the area must be quite far from Loyang and Kaifeng, making Peking an even more attractive candidate.

5.2 Another question may be asked: Did the two changes occur at the same time? There is no clear internal evidence for us to answer this question either way, but external evidence seems to suggest that the answer should be negative. In practically the whole broad area with Loyang and Kaifeng at the center, including ancient cities such as Xi'an, Xuzhou, Qufu, and Jinan, which can be called the "Central Mandarin" area, words like *bai* "white", *ke* "guest", *mai* "wheat", and *se* "color" are pronounced *bei, kei, mei,* and *shei* respectively (Cf. Beida 1962 for some examples). This means that, when the change represented by Rule (4)spread out from the north into this central area, Rule (2') had already been enforced there. On the other hand, former entering-tone words from the *Tong-Jiang-Dang* rhyme-classes, with a few exceptions like 肉 (/rywɨk/) *rou* /rɨw/ "meat" and 六(/lywɨk/) *liu* /lyɨw/ "six", are pronounced as syllables with zero ending (i.e., in the "literary" way) in this area. This seems to indicate that Rule (4) occurred much earlier in time, and spread much farther to the south, than Rule (5) did. [2]

5.3 As we have said, though the most straightforward explanation for the literary readings of the types of words discussed above seems to be that they simply lost their consonant ending, the real situation is far more complex. This form of reading originally came from the speech of the Loyang-Kaifeng area, or Central Mandarin, which was the most prestigious form of Chinese up to the end of the Song dynasty or the Jin kingdom. Most of the major sound innovations started from this area and spread out to other areas. One change that caused the third division rhymes to merge into those of the fourth division (a-----> e/y(w)_____) must have occurred quite early. In fact, it must have been before the change effected by Rule (3). Another change that caused most of the first division unrounded words to merge with those of the second division (o-----> a/C_____E ,

---

2   Though no documented information is available, my visit to the city of Bangpu a few years ago makes me believe that this form of Mandarin is spoken there, that is, the sound change under discussion has reached that area by now. But it is doubtful that the change had spread that far by the beginning of the Ming dynasty, because otherwise the founder of the Ming dynasty, a native of Fengyang close to Bangpu, might have made Central Mandarin the standard speech.

where E=[-back]) must have occurred fairly late, and definitely occurred after the change effected by Rule (3). (See Hsueh 1975:56-58 for arguments on the order of the rules presented here.) Both changes must have also started from the central area and later spread to all Mandarin areas, creating no cases for the literary/colloquial contrast. The changes represented by Rule (2′) and Rule (1) in effect constitute a restructuring of the sound system, in that they jointly eliminate the phonemic contrast between the palatal and the velar endings (because, as a result of these changes, the former occurs only after the front low vowel, and the latter occurs only after the back low vowel). Phonetically, the palatal endings must have remained for a while and triggered the rising of the front low vowel to join the high vowel, causing the coalescence of some rhymes. (Interestingly, after the *Zhongyuan Yinyun,* the merging of the *Gengqing* rhyme was with the 東鍾 *Dongzhong* rhyme in the north, as every Pekingese speaker can verify, but with the 眞文 *Zhenwen* rhyme in the south, as is reflected in the rhyming practice of the so-called ' Peking Opera ' which we all know originated from eastern Hubei and southern Anhui (see Yu 1972:11). (This can perhaps be taken as a piece of evidence for the argument that the syllable ending of the *Geng-Zeng* rhymes was something between the alveolar and the velar, i.e., the palatal, because when merging with another nasal, it went in either direction.) The rising of the front low vowel before the palatal / $\hat{k}$/ at first occurred in palatalized syllables only (e-

---> i/y(w)_____ $\hat{k}$, see Hsueh 1978), for only these types of words were included in the 齊微 *Qiwei* rhyme, while their counterparts in the 山攝 *Shan-she* and the 咸攝 *Xian-she* were included in the 車遮 *Chezhe* rhyme, of the *Zhongyuan Yinyun.* After havi.g served as a conditioning factor for the above change, /$\hat{k}$/ changed to /y/ in Central Mandarin, obviously under the influence of Northern Mandarin, but, in Southern Mandarin, it joined the other three endings /p, t, k/ in becoming a glottal stop (p, t, $\hat{k}$, k ----> q/V_____), which basically served as a marker for the entering tone. Thus, roughly by the end of the Song dynasty, there existed three major types of Mandarin: Northern Mandarin of the Peking area which was distinctly marked by the features called ″colloquial ″ by later

generations, Southern Mandarin of the Nanking-Yangzhou area which was distinguished by its retention of the entering tone and many of the "literary" features, as the later generations called them, and Central Mandarin of the greater Loyang-Kaifeng area which possessed most of the "literary" features and, for a while, maintained the entering tone for those words from the 臻*Zhen* , 深*Shen, Tong, Shan, Xian,* and *Jiang-Dang* rhyme-classes (i.e., those syllables originally with /p, t/ or /k/ as ending), but changed those entering-tone words of the *Geng-Zeng* rhymes into syllables with /y/ as ending (see 5.2). Resulting from the split of the standard speech of the Tang dynasty of the Loyang area, the three Mandarin dialects shared the same syllable pattern, the same vowel system, and roughly the same inventory of initials. Therefore, mutual borrowing among them could easily occur and was very common. New innovations, of course, continued to occur within each of them, and they have become perhaps a little more distinct from each other now than they were before. Their differences can perhaps be best illustrated by the following tables to show how the groups of crucial example words in Appendix One have acquired their present readings.

Order of the sound changes in Northern Mandarin that eventually led to the 'colloquial' readings in Modern Pekingese.

演化律 ＼ 例字	木 mwik	六 lywɨk	提 crak	角 kak	各 kok	藥 yok	黑 xok	色 srok	敕 trhyok	力 lyok	麥 mak	客 khak	摘 trak	尺 crhyak	錫 syek	耕 kan	江 kaŋ
o→a/{ɪ/ɣy}_k̂								srak̂	trhyak̂	lyak̂							
a→e/y(w)__									trhyck̂	lyck̂				crhyek̂			
(3) ∅→y/G_a				kyak								khyak					kyaŋ
(4) k̂→y/V__							xoy	sray	trhycy	lycy	may	khyay	tray	crhyey	syey		
(2') a→e/_n																kyen	
(1) a→o/_{k/ŋ}			crok	kyok												(kyeŋ)	kyoŋ
(5) k→w/V__	mwɨw	lywɨw	crow	kyow	kow	yow											
t→c/_r									crhyɨy				cray	crhyɨy			
w→∅/y_ɨw		lyɨw															
w→∅/wɨ__	m'wɨ																
{o/e}→ɨi/_y							xɨy			lyɨy					syɨy		
y→∅/yɨ__									cryhyi	lyɨ				crhyi	syɨ		
y→∅/r__									crhi					crhi			
ay→e/y__												khye					(kyaŋ)
中原音韻	魚模	尤侯	遙條	蕭豪	蕭豪	蕭豪	灰堆	懷來	齊微	齊微	懷來	皆來	懷來	齊微	齊微	庚青	江陽
十三轍	姑蘇	油求	遙條	遙條	遙條	遙條	灰堆	懷來	一七	一七	懷來	乜斜	懷來	一七	一七	東中	江陽
拼音	mu	liu	zhao	jiao	gao	yao	hei	shai	chi	li	mai	qie	zhai	chi	xi	jing	jiang
注音符號	ㄇㄨ	ㄌㄧㄡ	ㄓㄠ	ㄐㄧㄠ	ㄍㄠ	ㄧㄠ	ㄏㄟ	ㄕㄞ	ㄔ	ㄌㄧ	ㄇㄞ	ㄑㄧㄝ	ㄓㄞ	ㄔ	ㄒㄧ	ㄐㄧㄥ	ㄐㄧㄤ

（Table One）

Order of the sound changes in Southern Mandarin that eventually led to the formation of the "literary" readings in Pekingese. Rules above the double line may be those that occurred in the Nanking dialect before the Ming dynasty, but those under the double line are clearly new innovations that occurred after that variation of Southern Mandarin had been incorporated into Northern Mandarin, possibly under the influence of Central Mandarin.

演化律 \ 字例	木	六	捉	角	各	藥	黑	色	敕	力	麥	客	摘	尺	錫	耕	江
(reading)	mwik̂	lywik̂	crak̂	kak̂	kok̂	yok̂	xok̂	srok̂	trhyok̂	lyok̂	mak̂	khak̂	trak̂	crhyak̂	syek̂	kaŋ	kaŋ
o→a/[r/rʸ]__k̂								srak̂	trhyak̂	lyak̂							
(2') a→e/__k̂								srek̂	trhyek̂	lyek̂	mek̂	khek̂	trek̂	crhyek̂		ken	
(3) φ→y/G__a				kyak													kyaŋ
(1) a→o/__k̂				kyok												(keŋ)	kyoŋ
e→ɨ/y(w)__k̂									trhyɨk̂	lyɨk̂				crhyɨk̂	syɨk̂		
t→c/__r									crhyɨk̂				crek	(crhyɨk)	(syɨk)		
p,t,k→q/V__	mwɨq	lywɨq	croq	kyoq	koq	yoq	xoq		crhyɨq	lyɨq	meq	kheq	creq	crhyɨq	syɨq		
r→φ/__eq								seq					ceq				
φ→w/[u/o]__o(q) C≃G			crwoq	kywoq		ywoq											
q→φ/V__	mwi	(lwɨ) lywɨ	crwo	kywo	ko	ywo	xo	se			me	khe	ce				
y→φ/r__									crhɨ	lyɨ				crhɨ	syɨ		
[ə]→e				kywe	ek	ywe	ex									(kɨŋ)	(kyaŋ)
拼音音標	mu	(liu) lu	zhuo	jue	ge	yue	he	sɛ	chi	li	mo	ke	ze	chi	xi	geng	jiang
注音符號	ㄨ	ㄌㄨ	ㄓㄨㄛ	ㄐㄩㄝ	ㄍㄜ	ㄩㄝ	ㄏㄜ	ㄙㄜ	ㄔ	ㄌㄧ	ㄇㄛ	ㄎㄜ	ㄗㄜ	ㄔ	ㄒㄧ	ㄍㄥ	ㄐㄧㄤ

Annotations (vertical, right side of table):
- 相當於洪武正韻時代
- 相當於十三轍時代

（Table Two）

Order of the sound changes in Central Mandarin that led to its present-day Xuzou version. Note that this order is identical to that of Southern Mandarin in its earlier stage, showing that Southern Mandarin was a relatively late off-shoot of Central Mandarin.

演化律 \ 例字	木	六	捉	角	各	藥	黑	色	數	力	麥	客	摘	尺	錫	耕	江	備註
	mwɨk	lywɨk	crak	kak	kok	yok	x̂ok	srok	trhyok	lyok	mâk	khâk	trâk	crhyâk	syek	kaɲ	kaŋ	
(2) o→a/[ʔ/ly]__k̂								srak	trhyak	lyak								
(3) a→e/__k̂								srek	trhyek	lyek	mêk	khêk	trêk	crhyêk		keɲ		
(1) ∅→y/G__a				kyak													kyaŋ	
(4) a→o/__k̂			crok	kyok		yok										(keŋ)	kyoŋ	
k̂→y/V__							xoy	srey	trhyey	lyey	mey	khey	trey	crhyey	syey			
t→c/__r									crhyey				crey					
[ʔ]→ɨ/__y							xɨy	sriy	crhyɨy	lyɨy	miy	khiy	criy	crhyɨy	syɨy			
p,t,k→q/V__	mwɨq	lywɨq	croq	kyoq	koq	yoq												相當於中原音韻時代
∅→w/[ʔ]__o(q) C≒G			crwoq	kywoq		ywoq												
y→∅/yɨ__									crhyɨ	lyɨ				crhyɨ	syɨ			
q→∅/V__	mwi	(lywɨw) lywi	crwo	kywo	ko	ywo												
y→∅/r__									crhɨ					crhɨ				徐州十三韻 滕縣十三韻
e→[ʔ]																(kiŋ)	(kyaŋ)	
拼音音標	mu	liu	zhuo	jue	ke	yue	hei	shei	chi	li	mei	kei	zhei	chi	xi	geng	jiang	
注音符號	ㄇㄨ	ㄌㄧㄡ	ㄓㄨㄛ	ㄐㄩㄝ	ㄎㄜ	ㄩㄝ	ㄏㄟ	ㄕㄟ	ㄔ	ㄌㄧ	ㄇㄟ	ㄎㄟ	ㄓㄟ	ㄔ	ㄒㄧ	ㄍㄥ	ㄐㄧㄤ	

(Table Three)

These tables are adopted from Hsueh 1978, but have been drastically revised to show my present view. For discussions on minor and post- *Zhongyuan Yinyun* changes, please see Hsueh 1975, 1978, 1982, and 1986. A map is included at the end of this paper (Appendix Two) to show roughly the area where Central Mandarin is spoken. More careful field work will have to be done before the border lines can be drawn with any precision.[3] It seems to me that, together with the eastward movement of the political and economical centers, Mandarin Chinese also began to fan out from Loyang eastwards and then spread out both northwards and southwards.

6.   If Chinese history had developed along a somewhat more regular course, Central Mandarin, we can imagine, would have remained as *the* standard form of the Chinese language. But life has never been that simple. After the Song dynasty and for the first time, China was completely conquered and ruled by a non-Chinese speaking people who did not care much about intellectual life in general, and even less about the Chinese linguistic tradition (at least in the beginning). Kublai Khan chose Peking as his capital, away from the heartland of the Chinese civilization. The new government suspended the civil examinations for many years, to the dismay of the Chinese literati, and even proclaimed that Mongolian was the "National Language". All these factors made it very difficult to sustain the old norms or standards. Meanwhile, Peking, the capital of this new large empire, naturally began to flourish and became the new cultural center. A new vernacular type of poetry, 元曲 *Yuan Qu,* appeared and became popular in this area in the form of the 雜劇 *Zaju* "theatrical plays". It was naturally based upon the local dialect, namely, Northern Mandarin as described above, which helped make it the unofficial but de facto standard Chinese speech which was very carefully recorded by Zhou Deqing in his *Zhongyuan*

---

3   Admittedly, what I did here is merely guesswork based on my own observation but supplemented by Beida 1962. It is unfortunate that Beida 1962 does not include more key locations in this area, not even Loyang and Kaifeng. (It seems the book merely chooses some big cities at random, without considering their historical and, hence, linguistical significance.)

Yinyun. The always tradition-minded literati did not, of course, give up easily. This is reflected by the many questions they raised about the book, concerning the appropriateness in its classification of the words and rhymes, and the location of its dialect base, as well as by the sometimes self-contradicting concessions Zhou Deqing made to his critics about the language he recorded. (For more information on the book and related issues, see Stimson 1966, 1977, 1978, Hsueh 1975, Yang Naisi 1981, Li 1983, Ning 1985, etc.). It seems that although for a while during the Yuan dynasty, Northern Mandarin almost replaced Central Mandarin as the standard form of Chinese speech, it was never really fully established as such.

6.1. Central Mandarin never regained its status as the standard form of speech, either, even after the Mongols had been driven out. The founder of the Ming dynasty and most of his followers were from the Nanking area and, hence, speakers of Southern Mandarin. Nanking was chosen to be the capital of the new empire and, naturally, Southern Mandarin became the new standard speech form. By the order of the emperor, a new rhyme dictionary, the 洪武正韻 *Hongwu Zhengyun* (1375), was compiled to be the official standard reference (Cf. Ch'oe 1975 and Chou 1989). Even after the capital was moved to Peking about thirty years later, this form of speech continued to be the official standard. Thus, when Matteo Ricci and other missionaries from Europe tried to learn spoken Chinese, even during the later years of the Ming dynasty, they often chose to study it with a native speaker of the Nanking dialect (Cf. Lu 1985 and Yang 1986). Similarly, the Korean textbooks and reference works on the Chinese language of that period of time paid meticulous attention to the *Hongwu Zhengyun*, and only later began to include some Northern Mandarin features (Cf. Kang 1985, Ting 1987 and Kim 1989). It seems to me that, when this form of speech was transplanted to Peking, it inevitably had to adjust to the local pronunciation and drop its entering tone marker /q/.

6.2. The transplanted and modified form of the Nanking dialect as the standard must have been well received by the educated class, and hence well established, in later Ming, so much so that even the Manchus, who were already speakers of Northen Mandarin before they moved into Peking (Cf. Lin 1987), couldn't, or did not bother to, change that situation. If anything, this Ming practice was further reinforced during the Qing dynasty through the government's emphasis on classical education and civil examination. The readings that originated from Southern Mandarin were considered to be more elegant and 'literary', and they increasingly replaced or obscured their Northern Mandarin counterparts. For example, even the " banner people", the most typical of native Pekingese speakers now, rarely pronounce 竹 *zhu* "bamboo" , 錯 *cuo* "incorrect", 國 *guo* "state" and 策 *ce* "policy" as *zhou, cao, gui,* and *chai,* respectively, though sound change rules in Northern Mandarin did generate such readings, and they were recorded as such in the *Zhongyuan Yinyun.*

6.3. What makes this large scale of incorporation of Southern Mandarin readings into Northern Mandarin so easy and smooth is, as we said before, that the two dialects basically share the same sound system, except for the retention of the entering tone by the former. Consequently, the different readings for a certain word generated in the former is often merely an already existing syllable embedded well within the phonological system of the latter, rather than a new phonemic form. In the case of the entering-tone readings in the former, the ending was simply dropped, sometimes with a minor vowel adjustment , when such readings were adapted into the latter. There are, however, quite a few sociolinguistic reasons why the southern forms were preferred. The first was political, at least in the beginning. When the *Hongwu Zhengyun* was decreed by the first emperor as the standard for the Ming dynasty, no rulers or ministers after him would even dare to suggest otherwise. Second, aside from the moving of a large number of aristocrats and other officials from Nanking to Peking during the early Ming dynasty, there were also several later occasions

of forced population movement from the Central and Southern Mandarin areas to the Peking area (Cf. Chou 1989), in addition to spontaneous migration. This demographical change must have greatly altered the composition of the population in the Peking area, making the Southern or Central way of speaking more acceptable. Third, and perhaps most importantly, the inertia of the tradition was just too powerful. On the surface, it might seem that "standard speech" can change from time to time, and has changed two times after the Song dynasty. But note that these changes were made within the Mandarin Chinese area only. To replace it with the Yue, Min, or even Wu dialect as the standard would definitely be impossible. On the other hand, the entering tone was a most prominent feature in Chinese poetics. Literary scholars simply could not bear the thought that their language no longer had that tone. Some scholars from areas where the entering tone had definitely disappeared insisted nevertheless that they still had it and that their dialect was not 'inferior' to any other for that matter. (See Geng 1988 for many funny examples of this kind.) Among the three Mandarin dialects we discussed above, clearly, only Southern Mandarin had the potential to accomodate this problem. Blessed by the first emperor's decree, scholars earnestly advocated the superiority of that form of speech and forcefully promoted it.

6.4 The phenomenon described above may serve as an example of dialectal overlapping. Southern Mandarin was totally put on top of Northern and Central Mandarin to form an "idealized" literary language. This "artificial" language, as some people might call it, adopted the phonemic forms generated in Southern Mandarin for most of the words by which the three dialects are differentiated, but it allowed alternative readings for many of these words and thus created many cases of literary/colloquial contrast. This was the language that has been taught in school since the Ming dynasty, exerting so great an influence that many of the colloquial readings have been forgotten even by many typical native speakers of Northern Mandarin. In terms of phonetical realization, however, it eventually

went along with Pekingese, though, technically, it could have been just about any other Mandarin dialect. Still, this is not the type of language one is likely to hear spoken by " the man on the street" in Peking. More recently, perhaps under the influence of American anthropological linguists who often insist on studying any language (except English, perhaps) the way they did the languages of American Indian or African tribes, questions are occasionally raised about this form of Chinese as to whether it can be considered a "real and living" language. Some Chinese scholars seem to have also begun to feel that they must study the "real" Pekingese and thus regard the language the "banner people" speak as *the* standard, though it used to be despised even very recently (Cf. Dong 1974). This new trend may possibly lead to a reassertion of the colloquial forms, many of which might be revived and reestablished as, indeed, *the* standard readings.[4]

REFERENCES

Beida

1962　北京大學中文系：《漢語方音字匯》，文字改革出版社，北京。

Chang, Kun: "Phonological Aspects of Chinese Dialectology," 《清華學報》 n.s. 9.1, 2
        (1971), 192–215.

Ch' oe

1975　崔玲愛：《洪武正韻研究》，國立臺灣大學中文研究所博士論文。

Chou, Fa-Kao

" On the Structure of Rime Tables in the *Yun-ching* ," 《中央研究院歷史語言研究所專

4　Personally, I feel the literary form of Modern Chinese is a very real one which continues to be, and should be, the standard form of *Guoyu* or *Putonghua*. Therefore, I call it "Modern Standard Chinese", while using the term "Pekingese" for the local speech of Peking. In a paper I presented less than two years ago (Hsueh 1988), I quoted Professors Lu Guoyao (Lu 1985) and Paul Yang (Yang 1986) as saying that Modern Standard Pekingese originated from Nanking. Professor Yang recently told me in a letter that he means only that the Nanking dialect was the standard form of speech during the Ming dynasty, not that Modern Pekingese came from Nanking. I would like to apologize here to Professor Yang for the misquote, but I also wish to see that he will soon come around to see the corollary I have drawn from his discovery.

Frank F. S. Hsueh

　刊》54.1 (1983), 169-186.

Chou, Shizhen

　Hongwu Zhengyun: Its Relation to the Nanjing Dialect and its Impact on Standard Mandarin, Ph. D. dissertation (1989), The Ohio State University, Columbus, Ohio.

Dong

　1974　董同龢："國語與北平話"，丁邦新編：董同龢先生語言學論文選集，台北，1974，367-369

Geng

　1988　耿振生：《近代漢語等韻學研究》，北京大學博士研究生學位論文。

Hashimoto, Mantaro: *Phonology of Ancient Chinese,* Tokyo, 1978-79.

Hsueh, F. S.: *Phonology of Old Mandarin,* The Hague, Mouton, 1975.

　1978　薛鳳生："論入聲字之演化規律"，屈萬里先生七秩榮慶論文集，台北聯經出版社，1978, 407-433

　1980a　"The Phonemic Structure of Pekingese Finals and their R-Suffixation," 《中央研究院歷史語言研究所集刊》51. 3 (1980), 491-514.

　1980b　"論支思韻的形成與演進"，中國書目季刊第十四卷第二期 (1980), 53-75.

　1982　"論音變與音位結構的關係"，語言研究, 1982年第2期, 11-17.

　1985　"試論等韻學之原理與內外轉之含義"，語言研究，1985年第1期, 38-56.

　1986　國語音系解析，台北，1986.

　1988　《什麼是"標準國語"？》第二屆世界華文教學研討會，台北，December, 1988.

Kang

　1985　康寔鎮：《老乞大、朴通事研究》，國立臺灣師範大學國文研究所博士論文。

Kim, Youngman: *Middle Mandarin Phonology: A Study Based on Korean Data,* Ph. D. dissertation (1989), The Ohio State University, Columbus, Ohio.

Li

1983 李新魁《〈中原音韻〉音系研究》，中州書畫社，1983.

Lin

1987 林燾："北京官話溯源"，中國語文，1987年第3期，161-169.

Lu

1985 魯國堯："明代官話及其基礎方言問題"，南京大學學報1985年第4期

Ning

1985 寧繼福：《中原音韻表稿》，吉林文史出版社出版

Pulleyblank, E. G: *Middle Chinese: A Study in Historical Phonology*, UBC Press, Van-
  couver, 1984.

Shao

1981 邵榮芬：《中原雅音研究》，人民出版社，山東。

Stimson, Hugh: *The Jongyuan In Yunn: A Guide to Old Mandarin Pronunciation*, Yale

Far Eastern Publications, New Haven, 1966

"Review of F. S. Hsueh's *Phonology of Old Mandarin*," *Language* 53 (1977),

940-944.

"Old Mandarin Dialects, Old Mandarin, Old Pekingese, and the Rhymes of the

Zhongyuan Yinyun," *Proceedings of Symposium on Chinese Linguistics, 1977*

Linguistic Institute of the Linguistic Society of America, Student Book Co.,

Taipei, 1978, 221-232.

Ting

1982 丁邦新：〈漢語方言區分的條件，慶祝李方桂先生八十歲論文集〉，《清華
  學報》新十四卷一·二期：257-273。

1987 〈論官話方言研究中的幾個問題〉，《史語所集刊》58.4, 809-841.

Wang, William S-Y: "Competing Changes as Cause of Residue," *Language* 45 (1969), 9-
  25.

Frank F. S. Hsueh

Yang Naisi

 1981 楊耐思：《中原音韻音系》，中國社會科學出版社，北京。

Yang, Paul："A Southern Mandarin Dialect of the Ming Dynasty as Reflected in Matteo Ricci's Portuguese-Chinese Dictionary," paper presented at the 19th International Conference on Sino-Tibetan Languages and Linguistics, Columbus, Ohio, 1986.

Yuan

 1960 袁家驊：《漢語方言概要》，文字改革出版社，北京。

Yu

 1972 余濱生：《國劇音韻及唱念法研究》，台北中華書局

Zhan

 1981 詹伯慧：《現代漢語方言》，人民出版社，湖北。

Zhou

 1943 周祖謨：〈宋代汴洛語音考〉，《輔仁學誌》12：221-285；又見《問學集》581-655.

APPENDIX ONE

Seventeen types of words that have been differently affected by the 'literary' and the 'colloquial' developments.

木：莫卜切；代表通一入聲如「獨、哭、速、祿」等。

六：力竹切；代表通三入聲如「粥、熟、肉、竹」等。

角：古岳切；代表江喉牙入聲如「岳、覺、學、確」等。

捉：側角切；代表江非喉牙入聲如「濁、剝、朔、犖」等。

各：古落切；代表宕一入聲如「莫、鐸、錯、落」等。

藥：以灼切；代表宕三入聲如「著、腳、杓、弱」等。

黑：呼北切；代表曾一入聲如「北、得、賊、國」等。

色：所力切；代表曾照二入聲如「測、仄、嗇、骰」等。

敕：恥力切；代表曾三知照系入聲如「直、陟、食、織」等。

力：林直切；代表曾三其他入聲如「逼、殛、息、憶」等。

摘：陟革切；代表梗二知照系入聲如「窄、宅、策、擇」等。

客：苦格切；代表梗二喉牙入聲如「革、隔、嚇、額」等。

麥：莫獲切；代表梗二其他入聲如「白、百、擘、脈」等。

尺：昌石切；代表梗三知照系入聲如「擲、石、隻、釋」等。

錫：先積切；代表梗三其他及梗四入聲如「狄、覓、昔、績」等。

耕：古莖切；代表梗二喉牙非入聲如「更、行、坑、幸」等。

江：古雙切；代表江喉牙入非聲如「虹、腔、講、巷」等。

APPENDIX TWO

Shady portion in the center represents roughly the area where Central Mandarin is spoken
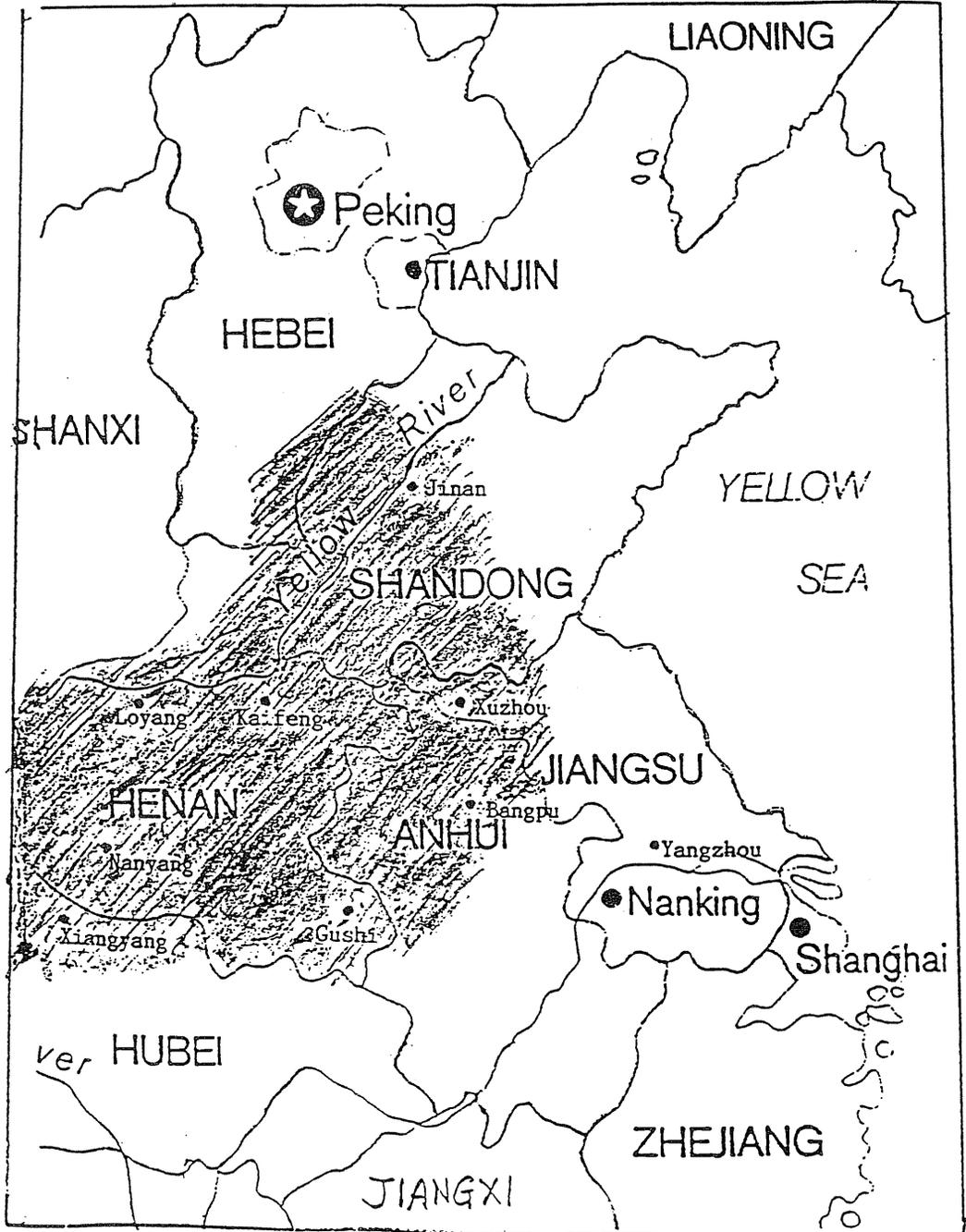
國音中的文白異讀與方言重疊之關係（提要）

薛鳳生

美國俄亥俄州立大學

　　本文首先說明國音中的文白異讀，與一般方言中的文白異讀，性質迥異。基本上乃由三個關係密切的官話方言相互影響與重疊而形成，故僅涉及數類特定的字彙。文中指出，唐代標準語（以等韻音系爲代表）東漸以後，分裂爲三，一爲汴洛地區的中原官話，是宋代的標準語，一爲幽燕地區的北區官話，在元代最受重視，一爲江淮地區的南區官話，爲明代官定的標準語。三區皆曾產生特定的音變，然一區之音變往往波及其他兩區，復因其產生與波及之時序有別，故使部分有關之字彙分爲二讀或三讀。本文擇要討論了相關的五條音變及其在各該方言中之順序，說明南音北移之後，由於環境使然，終與北音重疊，形成一種大致以南京話辨音以北京話發音的上層文化用語，歷明清迄今而不衰，成爲當代中國人之“通語”。

Adjectival Reduplication in Southern Min
A Study of Morpholexical Rules with Syntactic Effects

Chu–Ren Huang
Academia Sinica

ABSTRACT

This paper studies the reduplication of monosyllabic adjectives in Southern Min as morphological rules with syntactic consequences. Monosyllabic Southern–Min adjectives are reduplicated to form di- or tri-syllabic words. The traditional term of vivification suggests that these reduplicated forms offer a more vivid semantic description with no categorial change.

It is shown, however, that the distribution and grammatical functions of the reduplicated forms are different from the monosyllabic forms. First, neither kind of reduplicated form can occur in attributive positions. Second, when occurring in predicative positions, the reduplicated forms do not allow the co–occurrence of degree adverbs.

Even more surprising is the fact that di–syllabic and tri–syllabic reduplicated forms have different syntactic distributions. First, di–syllabic reduplicated forms occur as preverbal adverbials while tri–syllabic reduplicated forms do not. Second, disyllabic reduplicated forms are more restricted in their occurrences as predicates.

Based on the above observations, this paper will first show that vivid reduplication is a lexical property. Secondly, it will be argued that double and triple reduplications involve two separate morpholexical rules. The distributional facts and co–occurrence restrictions will be accounted for in terms of the changes in syntax which are marked by these two forms of reduplication. The account supports the position that argument and categorial changes are often lexically encoded and morphologically marked.

I. INTRODUCTION

Vivid reduplication (Chao 1986) occurs in many Chinese dialects.[1] Chao (1968) regards vivid reduplication as a morphological process in Mandarin Chinese and describes its syntax and semantics. Vivid reduplication in Southern Min is discussed in S. Cheng (1981), R. Cheng (1987 & 1988), and Yang (1991).

S. Cheng (1981.86) classifies three types of vivid reduplication for a monosyllabic Taiwanese adjective: 1) Moderate vivification: XX, 2) Intensified vivification: XXX, and 3) Particularized vivification: XSS. The following examples of the three types are taken from S. Cheng (1981):

(1) a.   Moderate

            âng-âng   red-red   'rather red'

      b.   Intensified

            âng-âng-âng   red-red-red   'very very red'

      c.   Particularized

            âng-kòng-kòng   red-?-?   'red, deeper red'

S. Cheng observes that the XSS type is not productive. As a matter of fact, it could be shown that the meaning of each three-syllable adjective of this type is different and that none of the 'reduplicated' disyllabic endings can ever be affixed to another stem. Hence they constitute a set of 'cranberry morphemes'.

(2) a.   *âng-kòng-kòng*   red-?-?   'red, deeper red'

      b.   *âng-kî-kî*   red-?-?   'red (face, cloth)'

      c.   *âng-phà-phà*   red-?-?   'cardinal red'

(3) a.   * *cẽ-kòng-kòng*   green-?-?

      b.   * *n̂g-kòng-kòng*   yellow-?-?

      c.   * *o͘-kòng-kòng*   black-?-?

---

1   S. Cheng (1981) refers to the phenomenon in Taiwanese as 'vivification'.

From (2), we see that each tri-syllabic XSS adjective differs from one another in its meaning. From (3), we see that the 'reduplicated' two-syllable endings of the XSS adjectives can only co-occur with one specific adjectival stem, in this case the color red. In other words, these 'reduplicated' syllables are totally unproductive. Following the line of S. Cheng's (1981) claim that they have to be learned individually, I will simply treat all XSS type adjectives as lexical entries involving no morphological processes. In addition, since I follow Chao (1968) in treating vivid reduplication as a morphological rule, and since the XSS type adjectives involve no morphological rules, they will not be included in this study of reduplication as a morphological process.

This article will argue that the two types of Southern Min reduplications XX and XXX both involve morpholexical rules (Bresnan and Kanerva 1989, Bresnan 1989, and Huang 1991). It will be shown that the XX and XXX reduplication rules not only differ from each other in meaning, but also entail very different syntactic and semantic effects. As I am mainly concerned with the contrasts between XX and XXX reduplication, the scope of this study will be limited to monosyllabic adjectives. [2]

II. REDUPLICATION AS LEXICAL RULES

In this section, I will first show that reduplication is a lexical rule in the grammar of Southern Min and second, that there are indeed two distinct reduplication rules responsible for the XX and XXX reduplicated forms respectively.

First, as observed in R. Cheng (1987 and 1988), reduplication can occur either in syntax or in morphology with different effects. Since the reduplication in Southern Min that we are discussing here all involve monosyllabic Southern Min adjectives, it is important to demonstrate that the process does occur in morphology instead of syntax. We can prove that reduplication of monosyllabic adjectives in Southern Min is really governed by a lexical rule based on the fact that there are random gaps in the reduplicated forms and

---

2   An interesting question which does not concern monosyllabic reduplication involves how the phonological rules realize the reduplicated forms of multi-syllabic adjectives.

that the XXX reduplicates require a separate tone sandhi rule (Yang 1991).

Former studies of reduplicated forms of adjectives in Southern Min and other Chinese dialects have observed that these forms are productive, without mentioning whether or not there are any random gaps of vivid reduplicates. However, morphological (or lexical) rules are expected to show random gaps, while syntactic rules, whose applicability is usually complete, should not. Thus the fact that there are random gaps needs to be established to prove that vivid reduplication involves lexical rules. Among S. Cheng's (1981) comprehensive list of 254 monosyllabic Southern Min adjectives, I observe that the following ones, listed in (4), can have neither types of reduplicated form. [3]

(4) Non-reduplicatable Southern Min Monosyllabic Adjectives

a.	*gâu*	'able'	*gâu–gâu,*	*gâu–gâu–gâu*
b.	*tiòh*	'right, correct'	*tiòh–tiòh,*	*tiòh–tiòh–tiòh*
c.	*tò*	'upside-down'	*tò–tò*	*tò–tò–tò*
d.	*thong*	'o.k.'	*thong–thong*	*thong–thong–thong*

(5)

a.	*gâu*	'able'	*gâu–gâu,*	*gâu–gâu–gâu*
b.	*khiau*	'able, smart'	*khiau–khiau,*	*khiau–khiau–khiau*

The gaps of vivid reduplicates in (4) suggest that reduplication is a lexical process. Furthermore, with the pair of near synonyms in (5), it is shown that the gaps are random and can only be lexically encoded. The minimal pair of *gâu* 'able' and *khiau* 'able, smart' are given identical values on all four classifying features based on co-occurrence restrictions in S. Cheng (1981.148-159). [4] In other words, they are not expected to have different grammatical behaviors since they are shown to belong to the same syntactic class and to have similar meanings. The contrast between (5a) and (5b) can only be attributed to lexical properties, not to either syntax or semantics. The above idiosyncracies can only be

---

3   This list contains only the most uncontroversial examples.
4   The four classifying features S. Cheng (1981) uses involve the acceptability of a Southern Min adjective when co-occurring with two negative adverbials and their intensified forms *bô, bē, chin bô,* and *chin bē* respectively.

individually encoded on lexical items.

A second argument for vivid reduplication's being governed by a morpholexical rule can be constructed based on tone sandhi phenomena. Yang (1991) describes the general rules for di-syllabic and tri-syllabic Southern Min phrases. [5] She observes that XXX reduplicates, as a group, are exceptional to the proposed general sandhi rules. Take two phrases with identical three high-level tones for example:

(6) a.   t̃i   gong s̃i   ˥˥˥===> ˩˩˥

heaven elder birth   'the birthday of the God of Heaven'

b.   kui kui kui   ˥˥˥==> ˥˩˥

open-open-open   'wide open'

(6a) represents the result of Southern Min tone sandhi rule applied to a tri-syllabic phrase with three high-level tones. (6b), however, shows the idiosyncratic sandhi results involving XXX reduplicates. The above fact is captured by Yang (1991), in terms of the following descriptive sandhi rule for XXX reduplicates. [6]

(7) Tone sandhi rule for XXX reduplicates

a.   If the sandhi tone of the first syllable is predicted to be low-level by the general sandhi rule, then its real sandhi tone is high-rise.

b.   Otherwise, the sandhi tones follow form the general sandhi rule.

Recall that tone sandhi concerns only supra-segmental features. That is, a sandhi should not be sensitive to the internal syllabic structures of the segments involved. The fact that the XXX reduplicates have three phonemically identical syllables should not af-

---

5   By 'phrases', I am referring to the phonological domain of a tone sandhi rule, and not to syntactic phrases such as NP or VP.

6   The translation from the Chinese original is mine. Another sandhi variation reduces the first two syllables to one and assigns a rise-fall contour tone to that syllable. Since there is neither rise-fall lexical tones, nor any other rise-fall sandhi tones, one could reasonably assume that the resultant rise-fall tone represents two supra-segments. In other words, the tri-part supra-segmental structure is preserved to record the morpholexical rule of XXX reduplication (compare Yang's functional description of this fact). The fact that this 'contour' sandhi tone is restricted to the class of XXX reduplicates supports our claim that XXX reduplication involves an independent morpholexical rule. The phonological rule accounting for the sandhi facts, however, is beyond the scope of this article. beyond the scope of this article.

fect its sandhi behaviors. As far as sandhi rules are concerned, phrases in (6a) and (6b) should be the same. To account for the contrast, we must have either (1) two sets of sandhi rules, with one of them marked to apply to the XXX reduplicates only, or (2) one general sandhi rule, but with the sandhi tones of the XXX reduplicates exceptionally marked in the lexicon. In either case, a lexical operation on XXX reduplicates is required. Thus the sandhi facts involving XXX reduplicates suggest that they involve a lexical rule. This further supports our position that vivid reduplication should be accounted for in terms of morpholexical rules.

The natural issue that follows is whether there are one or two reduplication rules. In addition to the neutral representation of XX and XXX, S. Cheng (1981.28) also describes the formation of the tri-syllabic reduplicates as syntactically and semantically composed of two elements: an adjectival head and a degree expression:

(8)   Reduplication + A

     example : *súi-súi-súi*   'very beautiful'

Even though S. Cheng (1981.27) regards a reduplicate as 'an adjectival phrase undividable by a potential phrase', the above formalization also allows a two-step lexical rule interpretation. In other words, the intensified adjective of tri-syllabic reduplicates could be treated as a di-syllabic reduplicate prefixed to an identical adjective head.[7] With this approach, there will be only one reduplication rule, that is, the tri-syllabic XXX will be derived from the disyllabic XX.[8] This will also predict that the meaning and syntactic functions of XXX reduplicates are derived from XX reduplicates. Such a derivational ap-

---

7   Since all three syllables are identical, the other two possible derivations are that a reduplicate is suffixed to a head or that the reduplicate wraps around a head. Since the tri-syllabic reduplicates are derived from the disyllabic redup-licates, they all have the same theoretical implications and will not be discussed separately. It is also interesting to observe that there are facts in Southern Min which seem to favor a suffixation account among the affixation accounts. A disyllabic vivid reduplicate is always suffixed to an non-identical head, as in *âng-kòng-kòng* red-?-? 'red, deeper red'. This is contrary to the generalization, pointed out to me by a BIHP reviewer, that reduplicates are observed to be prefixed rather then being suffixed to the stem in other languages, such as some Austronesian languages.

8   A compatible approach is to treat XX reduplication as an identical X affixed to an adjectival head, based on S. Cheng's claim that reduplicates syntactically consist of both a degree expression and an adjective, and that the di-syllabic XX 'rather X' also forms a type of degree expression.

proach, despite its elegance, is counterexemplified by the following gap in Southern Min vivid reduplication.

(9) a.   *lêng*   'spiritually powerful'

     b.   *lêng–lêng*

     c.   *lêng–lêng–lêng*   'spiritually very powerful'

The intensified form of the adjective *lêng* does occur and its meaning is as predicted. But the XX reduplicated form shows an unexpected gap. We would wrongly predict that the XXX reduplicate does not exist if we consider it as derived from the XX reduplicate. Thus, the idiosyncratic gap of (7b) not only supports the position that reduplication involves lexical rules in Southern Min, but also suggests that XX and XXX reduplicates are derived through two separate morphological rules. [9]

This position is also supported by the tone sandhi facts discussed above. The XXX reduplicates are exceptional to the general sandhi rules while the XX reduplicates are not. The constrast suggests that they belong to two different lexical classes. The following discussion on the two morpho–lexical rules for XX and XXX reduplications respectively will also subtantiate the above claim. [10]

---

9   Evidence from Fuzhou, a Northern Min dialect, offers an interesting comparison. Zheng (1988) observed that the XX reduplication forms dominate in the dialect. Ahrens (p.c.) pointed out to me that the XXX and XX reduplicates Zheng (1988) listed are in complementary distribution, with only one exception. A plausible explanation of this fact, parallel to my analysis of Southern Min, is that XXX and XX reduplications involve two distinct lexical rules with different application domains.

10 An IsCLL I participant observed that one could also derive XXX reduplicates from the X–*a*–XX form, which consists of a monosyllabic adjective and its XX reduplicates connected by a filler –*a*–. The filler syllable would be dropped to derive the XXX form. This hypothesis could be supported by the observation that the X–*a*–XX form does occur in dialects of Southern Min and has similar intensified meaning of the XXX reduplicates. While this is a plausible diachronical account, it fails to explain several important facts as a synchronical account. First, as observed in this article, any account deriving XXX reduplicates from XX reduplicates cannot account for the fact that there is at least one XXX reduplicate without a corresponding XX reduplicate. Second, the most likely motivation for the insertion of a filler syllable is to maintain a favored syllabic structure. We can observe the tendency towards di–syllabic structures in modern Chinese. This can be partially supported by Yang's (1991) observation that XXX reduplicates can be realized as di–syllabic words with two supra–segments (tones) carried by the first syllable. Reduction from X–*a*–XX to XXX not only runs against the observed tendency but also excludes a possible explanation for the introduction of –*a*–. Finally, such a hypothesis will force an abstract underlying form for dialects where the X–*a*–XX form never occurs. It seems to me that it is more likely that the X–*a*–XX form is derived from XXX reduplicates.

III. THE MORPHOSYNTAX OF XX REDUPLICATION

To account for the morpholexical rule of XX reduplication, it is crucial to identify its grammatical function. It is generally observed that XX reduplicates express the moderate degree meaning and XXX reduplicates express intensified meaning. The above description together with the X-XX-XXX paradigm as three possible forms of an adjective suggests a possible iconic system. In other words, a possible *a priori* assumption is that they correspond to the absolute-comparative-superlative paradigm of comparison. The adoption of the translations of 'rather X', and 'very, very X' for XX and XXX reduplicates respectively in both S. Cheng (1981) and R. Cheng (1987) is not incompatible with such an assumption. However, it can be shown that XX is not a comparative adjective and that the grammatical functions of XX and XXX reduplication are so different that they should not be considered part of the same inflectional paradigm.

Let us first consider the contrast between a bare monosyllabic adjective and its corresponding XX reduplicate. Chao's study (1968), as well as many subsequent studies on Chinese grammar have observed that adjectives can function as predicates in Chinese. Moreover, when occurring alone without modification, a predicative adjective in Chinese has the comparative rather than the absolute interpretation, as demonstrated by the following Mandarin Chinese example.

(10)   a.   Q: *nayiben   shu   nan*?

        which-one-CLASS book difficult

       '(Of these books,) which one is (the most/more) difficult?'

   b.   A: *zheyiben   shu   nan*

        this-one-CLASS book difficult

       'This book is the (most/more) difficult one.'

The pair of sentenees in (10) show that a bare adjective predicate has the comparative reading. This also seems to hold for Southern Min, as in (11).

(11) a. Q: (*zit-niá   sã   ga   hit-niá   sã*)   *tó   zit-niá   khah súi*?

        this-CLASS dress and that-CLASS dress which one-CLASS more beautiful

        'Which of the two dresses is more beautiful?'

    b. A: *zit-niá   sã   (khah)   súi*

        this-CLASS   dress   more   beautiful

        'This dress is more beautiful.'

    c. *A: *zit-niá   sã   (khah)   súi-súi*

        this-CLASS   dress   more   beautiful

The fact that the non-reduplicated adjectives in Southern Min have the comparative meaning suggests that XX reduplicates do not necessarily mark comparison. That (9c) cannot be an acceptable answer to the comparison question of (9a) shows that a XX reduplicate does not have a comparative meaning. This can be further supported with another comparison construction involving *pi*.

(12) a. *zit-niá   sã   pí   hit-niá   sã   súi*

        this-CLASS   dress compare that-CLASS   dress beautiful

        'This dress is more beautiful than that dress.'

    b. **zit-niá   sã   pí   hit-niá   sã   súi-súi*

        this-CLASS   dress compare that-CLASS   dress beautiful

Another contrast between non-reduplicated adjectives and XX reduplicates is that non-reduplicated adjectives do not occur as predicates without predicative adverbs such as the degree adverbs *siũ* 'excessively', and *chin* 'really, very' etc., while XX reduplicates do occur alone as predicates (Yang 1991).[11] This is another fact which cannot be explained if XX reduplication only marks comparison. Thus, based on its distribution, I conclude that XX reduplication does not represent a comparative comparison construction.[12]

---

11 S. Cheng (1981.54) observes that XX reduplicates cannot occur alone as a direct answer to a 'how' question. However, it is also observed that this co-occurrence restriction does not seem to affect the predicative function of the XX reduplicates.

12 S. Cheng (1981) regards Southern Min reduplicates as containing degree expressions and therefore cannot co-occur with other degree expressions. Similarly, Y. Sheu (p.c.) suggests that reduplication and degree adverbs share the same semantic function of intensification.

An alternative account shows that XX reduplication is only the morphological mark of a morpholexical process which changes grammatical behaviors. As a matter of fact, there is a grammatical contrast between non-reduplicated adjectives and XX reduplicates in addition to the latter's predicative uses. There is a derivational suffix -*á* in Southern Min which marks the categorial change from an adjective to an adverb. It is observed that -*á* can only be affixed to a XX reduplicate but not to a non-reduplicated adjective. [13]

(13) a. *koai-koai-á*   'obediently'

      b. **koai-á*

(14) a. *gōng-gōng-á*   'stupidly, unknowingly'

      b. **gōng-á*

Thus, it has been shown that XX reduplicates do not have the comparative comparison interpretation, and that they differ from non-reduplicated adjectives in being predicative and feeding the morphological adverb-formation rule of -*á* suffixation. Since there is no reason to doubt that the corresponding non-reduplicated adjectives and XX reduplicates differ in their semantic meanings, I assume that the two sets of adjectives are derivationally related. Since XX reduplication feeds an attested morpholexical rule, it has to be . another morpholexical rule. [14]

The following morpholexical rule is based on the account that XX reduplicates form a subclass of adjectives derived from the non-reduplicated adjectives. The rule is posited in the spirit of the Lexical Mapping Theory of Lexical-Functional Grammar (LFG). It specifies both that the derived subclass is predicative and that its form is XX.

---

13 As expected, this derivational rule applies only to a subclass of reduplicated adjectives and exhibits random gaps such as **tāng-tāng-a* 'heavy-heavy-A', as opposed to *khin-khin-á* light-light-A 'lightly'.

14 Another possibility, as observed by Sheu (p.c.), is that both XX reduplication and -*á* affixation are morphological marks of an adverbialization rule from mono-syllabic adjectives, as in Mandarin. However, a one-step account is supported by the following two facts in Mandarin: first, both reduplicated adjectives with or without -*de* suffix can be used as adverbs; second, multi-syllabic adjectives can be turned into an adverb directly with -*de* suffixation without reduplication. Neither supporting evidence is available in Southern Min.

(15)   XX reduplication morpholexical rule

    condition   phonology   semantics

    X [V +, N +,   /X–X/   moderately 'X'

    redupli 1,   [predicative +,

    syl 1]   redupli 2]

Rule (15) applies to non-reduplicated mono-syllabic adjectives, as stipluated by both the major features V and N, the feature 'redupli', and the feature 'syl'. I am leaving unspecified the syntactic and semantic features which define this subclass of adjectives. Instead, the mnemonic feature 'redupli', assigned the value 2 to describe the reduplication morphology of two concatenated identical syllables, is used to define the subclass. This feature-value pair will be used to ensure that only XX reduplicates will undergo the *-á* attachment rule to form adverbs.

(16)   *-á* Adverbialization Rule

    condition   phonology   semantics

    X [V +, N +, redupli 2]   /X–*á*/   in a 'X' manner

Rule (16) forms adverbs from adjectives. The domain of its application, however, is limited to XX reduplicates.

IV. XXX REDUPLICATION

The idiosyncratic gaps given in (5) show that the XXX reduplication belongs to the lexical domain. The fact that there are mono-syllabic adjectives with corresponding XXX reduplicates but no corresponding XX reduplicates, as in (9), suggests that XX and XXX reduplications should involve two independent rules.

To account for the morpholexical rule deriving XXX reduplicates, I first will clarify the semantic meaning of XXX reduplicates. Parallel to the above discussion on XX reduplicates, XXX reduplicates entail vivid description instead of superlative comparison, which is marked by *siōng* 'most' in Southern Min.

(17) a. *i   bé   ê   sã   zit-niá   siōng   súi*

       s/he buy REL dress this-CLASS most beautiful

       'Of the dresses s/he bought, this is the most beautiful one.'

   b. *?i   bé   ê   sã   zit-niá   súi-súi-súi*

       s/he buy REL dress this-CLASS   beautiful

       ? 'Of the dresses s/he bought, this is a very, very beautiful one.'

That (17b) is at best awkward with a discourse calling for a superlative comparison interpretation shows that XXX reduplicates do not have such an interpretation.

The semantic meaning of XXX reduplicates, as described in Yang (1991) and S. Cheng (1981), can be exemplified by the following sentences.

(18) a. *zit-niá   sã   súi-súi-súi*

       this-CLASS dress beautiful

       'This dress is very, very beautiful.'

   b. *zit-niá   sã   *siũ/*chin   súi-súi-súi*

       this-CLASS dress excessively/very   beautiful

The sentences in (18) demonstrate that XXX reduplicates are interpreted as an intensified level of description. (16) also shows that XXX predicates cannot co-occur with predicative adverbs such as degree adverbs in (18). Thus, XXX reduplicates belong to the same adjectival category as their non-reduplicated counterparts but have a different distribution, which is similar to that of XX reduplicates.

Next, it will be shown that XXX reduplicates differ from XX reduplicates. XX reduplicates undergo the adverb-formation rule of *-á* suffixation, but XXX reduplicates do not.

(19) a. *koai-koai-á*   'obediently'

   b. **koai-koai-koai-á*

(20) a. *gōng-gōng-á*   'stupidly, unknowingly'

   b. **gōng-gōng-gōng-á*

Thus, morphologically, XX reduplicates and XXX reduplicates belong to separate sub-classes.

Based on the fact that XXX reduplicates and XX reduplicates form two different subclasses of adjectives, and that there are idiosyncratic gaps between both forms as in (9), two separate rules are proposed to account for them.

(21)   XXX Reduplication Morpholexical Rule

        condition   phonology   semantics

        X [V +, N +,   /X–X–X/   intensely 'X'

        redupli 1,   [predicative +,

        syl 1]   redupli 3]

Rule (21) derives XXX reduplicates from a non–reduplicated mono–syllabic adjective.

V. CONCLUDING REMARKS

The current schematic study of reduplication of Southern Min monosyllabic adjectives has confirmed the intuitive description that it involves a morpholexical process with idiosyncratic gaps in the lexicon. As for the syntactic and semantic functions of XX and XXX reduplications, this study argues that they do not iconically correlate to the comparative and superlative inflections of comparison. Instead, it is suggested that the traditional description of 'vivification' (S. Cheng 1981, and R. Cheng 1987) seems to be an apt term. A XX reduplicate implies a moderate degree of the property denoted by the adjective X, and a XXX reduplicate implies a high degree of the property denoted by the adjective X. Syntactically, it is suggested that reduplication, just like the modification of degree adverbs, is a strategy to mark the predicative use of an adjective. This account, together with Sheu's (p.c.) observation that mono–syllabic Southern Min adjectives do not occur freely in attributive positions, suggests that mono–syllabic adjectives be treated as a stem in Southern Min. As predicates, adjectival reduplicates cannot co–occur with most degree expressions (S. Cheng 1981 and R. Cheng 1987), and their occurrences as elliptical answers

without subjects are also restricted (S. Cheng 1981). Both facts suggest that reduplication is used to subclassify the category of adjectives. The exact nature of this classification, however, was not discussed in this short paper. Finally, based on the fact that XX reduplicates are the only adjectives allowed to undergo adverbialization with the suffix -*á* and the fact that not every lexical adjective has both XX and XXX reduplicates, I have suggested that XX and XXX reduplication rules are independent from each other. Preliminary versions of the morpholexical rules accounting for both XX and XXX reduplications, based on the Lexical Mapping Theory (Bresnan 1989, Bresnan and Kanerva 1989, and Huang 1991) have been proposed.

The preliminary results reported here suggest that reduplication in Southern Min is a morpholexical process marking grammatical subclassifications. The exact nature of these classifications, however, need to be defined by further in–depth studies. The phonological process involved in the morpholexical rule of reduplication also calls for further study. I will only mention two of the theoretically important issues here. First, is binary reduplication the only kind allowed in phonology or are multiple reduplications allowed as phonological rules? In this article, I have argued against deriving XXX reduplicates from XX reduplicates. The arguments are based on the fact that the grammatical functions of XXX reduplicates do not seem to be directly derivable from XX reduplicates and that there seem to be XXX reduplicates without corresponding XX reduplicates. It is still possible, however, that only binary reduplication is allowed in phonology. Second, Yang (1991) observes that a whole segment (syllable) can be dropped from XXX reduplicates with the supra–segmental information of tone retained. It would be interesting to examine how the morphological process of reduplication interacts with the phonological process of reduplication, especially when the reduplicated syllable is no longer present.

In conclusion, Southern Min adjectival reduplications offer a good case study for how morpholexical rules affect syntactic and semantic classification and how phonological processes interact with morpholexical rules. This paper studies the first interface with

encouraging preliminary results. These results support Huang's (1991) position that argument and categorial changes are best represented as morphologically marked lexical rules, even in languages thought to have impoverished morphology. It is anticipated that future research on this topic will shed light on both interfaces of these linguistic modules.

ACKNOWLEDGEMENT

REFERENCES

Bresnan, Joan.

    1989   The Syntactic Projection Problem and the Comparative Syntax of Locative Inversion. In Keh-jiann Chen and Chu-Ren Huang, eds. *Journal of Information Science and Engineering*. Vol 5. No. 4. Special Issue on Computational Linguistics. pp. 287–303.

Bresnan, Joan and Jonni M. Kanerva.

    1989   Locative Inversion in Chicheŵa: A Case Study of Factorization in Grammar. *Linguistic Inquiry* 20. 1. 1–50. Also to appear in E. Wehrli and T. Stowell, eds. *Syntax and Semantics* 24: *Syntax and the Lexicon*. New York: Academic Press.

Chao, Yuen Ren.

    1968   *A Grammar of Spoken Chinese*. Berkeley: University of California Press.

Cheng, Robert L.

    1987   Vivid Reduplication in Mandarin and Taiwanese. In A. Bramkamp, Yi-chin

Fu, A. Sprenger, and P. Venne, eds. *Chinese–Western Encounter: Studies in Linguistics and Literature.* Asian Library Series No. 44. Chinese Materials Center.

1988 *Taiwanhua dongci congdiashi de yuyi he yufa tedian.* 'The Syntactic and Semantic Characteristics of Verb Reduplication in Chinese.' Paper presented at the Symposium on Min Dialects. Xiamen.

Cheng, Susie S.

1981 *A Study of Taiwanese Adjectives.* Taipei: Student Publishing Co.

Huang, Chu–Ren.

1989 Towards a Morphosyntactic Account of Taiwanese Question Particle *kam.* *Bulletin of the Institute of History and Philology* Vol. 59. No. 2. pp. 425–447.

1991 Mandarin Chinese and the Lexical Mapping Theory--a study of the interaction of morphology and argument changing. To appear in *Bulletin of the Institute of History and Philology* Vol. 62. No. 2.

Yang, Hsiou–Fang.

1991 *Taiwan Minnanyu Yufa Gao* 'An Overview of the Grammar of Taiwan Southern–Min.' Taipei: Da–an Publishing Co.

Zheng, Yide.

1988 *Fuzhou Fangyan Xingrongci Chongdieshi.* 'The Reduplication of the Adjectives in the Fuzhou Dialect.' *Fangyan* 1988. No. 4. pp. 301–311.

閩 南 語 的 鼻 音 問 題

李壬癸

中央研究院

一、前 言

本文所要探討的是閩南語鼻音、鼻化元音、鼻聲母去鼻化的現象及其問題。

以一種新的理論和觀念來重新看一個問題，常會發掘新的現象或找到更能令人滿意的解釋。

近二十年來音韻學理論的發展趨勢，和1968年以杭士基、哈理合著的「英語的語音形式」(Chomsky and Halle 1968)一書為主導，已有相當大的不同。在觀點上已有幾個重大的改變，包括：

㈠承認音節的重要性：

因為英語的音節並不明顯，建構在英語現象之上的理論體系如Chomsky和Halle一書也就完全忽視了音節的重要性，不承認音節在理論上有什麼地位。十多年前音韻學家如Joan Hoopers (1972)就舉出了多種語言的例證來說明音節的重要性。最近幾年學者更明白地指出：非有音節這一觀念就不足以解釋許多語言的現象，只用「音節性」（〔±syllabic〕）並無濟於事。音節對漢語的重要性，更不用說了。

㈡音韻的現象是多層次的：

正如句法結構是多層次的(multi-layered)，音韻的結構也是多層次的，稱之為tiers。音韻的現象不再是單純的單層直線排列(sequential)的現象可以解釋得通。例如上加成素和音段並不同層次。有的語言，如阿拉伯語，元音和輔音並不同層次。甚至輔音可能也要分成若干層次。

閩南語的鼻音是一個很有趣的現象。我們不妨嘗試以新的觀點來探討閩南語的鼻

音問題。以廈門音爲例，前人如羅常培(1930)已經指出，現代的b-、l-（部分）、g-聲母分別由鼻音m-、n-、ŋ-演變而來，而b-和m-，l-和n-，g-和ŋ-分別是同一音位的變體。更有趣的是，在同一個音節裡，口部音或鼻音前後大都一致：聲母是鼻輔音m-、n-、ŋ-時，韻母也一定是鼻化元音，如麭mĩㄏ，娘nĩũㄱ，癢ŋĩãũㄏ；聲母是口部輔音(如p-、t-、k-、b-、l-、g-)的話，韻母卻可以是口部元音，如脾piㄱ，池tiㄱ，奇kiㄱ，米biㄐ，你liㄐ，語giㄐ，也可以是鼻化元音，如（佔便宜）p'ĩㄱ，天tĩㄱ，鹹kĩㄱ。此外，口部聲母接口部元音後頭還可以接鼻輔音尾，如心simㄱ，金kimㄱ，飲limㄱ，但請注意：鼻輔音尾前面的元音一定不鼻化。我們如何解釋這種現象？

二、元音的鼻化

從當代最新的音韻學理論的觀點而言，平面的(synchronic)閩南語鼻化現象並非都如過去一般所認爲的同化作用(assimilation)可以解釋得通，而是一種擴展作用(spreading)。閩南語的鼻音擴展方向只是由左向右，而不是由右向左。因此，閩南語音節只有

1.命　mĩãㄐ，　　貓 nĩãũㄱ，　　（狗叫聲）ŋãㄐ
2.甜　tĩㄱ，　　　鼎 tĩãㄐ，　　　寒 kũãㄱ
3.金　kimㄱ,　　　籤 tinㄱ，　　　經kiŋㄱ，面 binㄐ

以上三類不同只是鼻音擴展的起點(現稱「連結點」(linking))的不同：1類連結點起自聲母m-、n-或ŋ-，2類起自韻母(包括介音)，3類起自輔音尾-m、-n或-ŋ。圖示鼻化向右擴展作用如下：
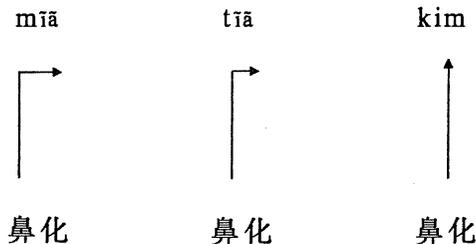
閩南語何以沒有類似*kĩm, *mĩn的音節？這是因爲鼻化並不向左擴展之故。

誠然，閩南語元音的鼻化歷史上有兩種不同的來源：

㈠來自鼻音聲母的整個音節都鼻化，如麻mũã٦，呢nĩ٦，艾ŋãi٢；

㈡來自鼻輔音尾的只韻母鼻化，如邊pĩ٦，鼎tĩã٢，寒kũã٢。

㈠類的演變現象可說是閩南語的特點，用擴展作用來解釋最恰當。㈡類的演變現象卻很普遍，不僅很多漢語方言如此，世界上有不少語言也都如此。吳語蘇州方言（袁1983：63）元音後頭有鼻輔音時就會鼻化，這就是一般所謂的同化作用（元音被後接的鼻輔音同化）。元音受後頭的鼻輔音同化而變成鼻化元音是很多語言常見的現象，包括法語、英語、漢語的部分方言：閩南、濟南、西安、太原等地各方言。

從鼻音尾而來的鼻化作用僅及於前頭的元音，這尚可說是道地的同化作用。若說由右向左擴展，卻僅及於元音部分，並未擴及其前頭的聲母。

因此，我們認爲：擴展作用比同化作用更能解釋現階段閩南語鼻音的現象，尤其上面所說的第㈠類。另外一個理由是：若爲同化作用，就沒有理由排除鼻音尾前元音之鼻化，如*kĩm。

元音鼻化(nasalization)與鼻聲母去鼻化(de-nasalization)可說是方向相反的兩種演變，卻在同一閩南語方言發生。在時間上應該有先有後，我們可以推斷：元音鼻化發生在前，而鼻聲母去鼻化在後，因爲這種先後次序較自然。

閩南語元音有的受前頭鼻聲母的影響而鼻化，也有的受後頭鼻音尾的影響而鼻化，可以下式表示：

$$V \longrightarrow \widetilde{V} \Big/ {\diagup [+ \text{nasal}]\underline{\quad} \atop \underline{\quad} [+ \text{nasal}]}$$

有的仍然保留鼻音尾，元音卻沒有鼻化。這兩種分化的條件是什麼？

大致說來，保留有鼻音尾的元音而沒有鼻化的大都是讀書音，而元音鼻化的都是白話音。可是仍然有部分陽聲韻字白話音並沒有鼻化，主要是收-ŋ尾的韻字，少數是收-n尾的韻字，也有收-m尾的韻字。白話音保留收-ŋ尾的包括東、唐、陽、江、鍾等各韻的字，來自少數的山、先、仙、桓等韻的字；保留收-n尾的只包括少數先、仙、登、清、青等韻的字，而保留收-m尾的只有包括覃、侵、咸等韻的字。（參見袁等1983：250-251,楊1982：254）。

三、鼻聲母的去鼻化

　　閩南語並没有以鼻輔音起首和結尾的音節，如*min 或*miŋ。原來鼻聲母陽聲韻字在今日閩南語其聲母都已異化爲濁塞音，鼻音尾則保持不變，如明biŋ1，慢ban┤，難lan1，南lam1。從上古(李1971)到閩南語這一類音節的演變都是如此(聲母去鼻化)：

$$
\begin{array}{llll}
民 & *mjiən & > & bin1 （文） \\
名 & *mjiŋ & > & biŋ1 （文）（比較白讀 miā1） \\
蒙 & *muŋ & > & bɔŋ1 （文） \\
南 & *nəm & > & lam1 （文、白） \\
念 & *niəmh & > & liam┤ （文） \\
難 & *nan & > & lan1 （文） \\
巖 & *ŋram & > & gam1 （文） \\
言 & *ŋjan & > & gian1（文） \\
凝 & *ŋjəŋ & > & giŋ1 （文）
\end{array}
$$

　　其實不止有鼻音尾的鼻聲母異化，連有其他輔音尾（包括清、濁塞音尾，即入聲字與陰聲字）的鼻聲母也一樣變爲非鼻化（唇音與舌根音變爲濁塞音，舌尖鼻音*n-（三等除外）變爲l-）：

$$
\begin{array}{llll}
馬 & *mragx & > & be┤（白）（比較 mā┤（文）） \\
木 & *muk & > & bɔk┤（文），bak┤（白） \\
眉 & *mjid & > & bai1 （白） \\
奴 & *nag & > & lɔ1（文、白） \\
納 & *nəp & > & lap┤（文） \\
逆 & *ŋjak & > & gik┤（文） \\
牙 & *ŋrag & > & ga1 （文），ge1（白）
\end{array}
$$

上古 *nj-(中古日母)的到閩南語漳系的文讀音變爲dz-(泉系的變爲l-，即與來母混)：

弱 *njakw　　>　dziak ｜

如 *njag　　　>　dzi ｜

日 *njit　　　>　dzit ｜

戎 *njəŋw　　>　dziɔŋ ｜

上面去鼻化的例字包括文讀音和白話音；"南"、"木"、"奴"、"牙"等字，文、白兩讀都去鼻化。這些聲母包括各部位：唇音、舌尖音、顎化音、舌根音。

鼻聲母沒有去鼻化的例字包括：

毛 *magw　　>　mɔ̃ ｜

脈 *mrik　　　>　mẽ ｜（文讀，比較白讀 beʔ ｜）

冒 *məgwh　　>　mɔ̃ ｜

妹 *mədh　　　>　mũãĩ ｜（龍溪），be ｜（廈門白讀）

問 *mjənh　　　>　mŋ ｜（白讀，廈門），mũĩ ｜（龍溪，比較文讀 bun ）

麻 *mrar　　　>　mũã ｜（文讀）

罵　　　　　　>　mẽ ｜

讓 *njaŋ　　　>　nĩũ ｜（白讀，比較文讀 dziaŋ ｜）

泥 *nid　　　　>　nĩ ｜

年 *nin　　　　>　nĩ ｜（白讀，比較文讀 lian ｜）

艾 *ŋjadh　　　>　ŋãĩ ｜

誤 *ŋwagh　　>　ŋɔ̃ ｜（文讀，比較白讀 gɔ ｜）

由上可見保持鼻聲母的有文讀也有白讀，而且聲母包括各部位的發音，韻尾也包括陽聲韻、陰聲韻、入聲韻三種都有。

　　與中古音比較，去鼻化的情況也是如此。

　　有些字閩南語（以台灣宜蘭方言爲例）鼻聲母在白話音都已去鼻化，而在文讀音就保持鼻聲母不變；如下面的例字（參見楊1982：55-60）：

古聲母	例字	白讀	文讀（調值大都與白讀相同）
1.明母	馬	be˧	ma˥
	買	bue˧	ma˥i
	磨	bua˧	mɔ˥
2.泥，娘	尿	lio˧	nĩãũ
	惱	lo˧	nau
3.來母	老	lau˧	nɔ˥
4.疑母	五	gɔ˧	ŋɔ˧
	午	gɔ˧	ŋɔ˥
	我	gua˧	ŋɔ˥

反過來，也有些例字文讀音已去鼻化，而白話音卻保留鼻聲母：

古聲母	例字	白讀	文讀（調值大都與白讀相同）
1.明母	命	mĩã˧	biŋ
	名	mĩã˥	biŋ
	棉	mĩ˥	bian
	麵	mĩ˧	bian
	滿	mũã˧	buan
	脈	mē˧	bik˧
2.泥，娘	年	nĩ˥	lian
	拈	nĩ˥	liam
	娘	nĩũ˥	liɔŋ
3.來母	連	nĩ˥	lian
	領	nĩã˧	liŋ
	懶	nũã˧	lan
4.日母	讓	nĩũ˧	dziɔŋ
	染	nĩ˧	dzam
	軟	nŋ˧	dzuan
5.疑母	迎	ŋĩã˥	giŋ
	硬	ŋē˧	giŋ

由以上各例字，可見明、泥、娘、來、日、疑各聲母大都有白讀去鼻化、文讀保持鼻音，也都有白讀保持鼻音，而文讀去鼻化。這裡所舉的例字文讀去鼻化的都是陽聲韻字，而白讀去鼻化的都是陰聲韻字。實際上各類輔音尾文、白兩讀都有去鼻化的例字（參見上文）。只有日母稍微特別，只見白讀保持鼻音，未見有文讀保持鼻音的例子。來母與泥、娘混，因此其變化現象與泥、娘完全相同。

總而言之，文、白兩讀都不是保持鼻聲母與否的條件。聲母的發音部位也不是演變的條件。只有韻尾看來像是影響去鼻化的條件。

各閩南方言鼻音演變的速度並不同。就聲母去鼻化這一演變而言，廈門、晉江演變最快，龍溪其次，潮汕（揭陽）最慢。各詞彙演變的速度也頗不一致，即使在同一閩南方言，有的詞彙保持鼻聲母不變，而有的卻已去鼻化[1]。

以下是*m- 各閩南方言都保持鼻音未變的例字（（白）表示白讀，略去調號）：

例字[2]	廈 門	晉 江	龍 溪	揭 陽
棉（白）	mĩ	mĩ	mĩ	mĩ
[冥]（白）	mĩ	mĩ	mē	mē
(瞎)（白）	mi (ts'i-)	mĩ (ts'i-)	mē (ts'i-)	mē (ts'e-)
麵	mi	mĩ	mĩ	mĩ
(什麼)（白）	mi (siʔ-)	miʔ (siaʔ-)	mēʔ (siʔ)	meʔ (siʔ-)
物（白）	miʔ (-kĩã)	mŋ (-kĩã)	mĩʔ (-kĩã)	mueʔ (-kĩã)
罵（白）	mē	mā	mē	mē
「嬤」（白）	mã	mã	mã	mã
名（白）	mĩã	--	mĩã	mĩã
命（白）	mĩã	mĩã	mĩã	mĩã
滿（白）	mũã	mũã	mũã	mũã
門（白）	mŋ	mŋ	mũĩ	mŋ
問（白）	mŋ	mŋ	mũĩ	mŋ
（毛）	mŋ	mŋ	mɔ	mõ

1　部分例字董（1960）未記錄的保留空白，但部分例字根據《漢語方音字匯》（1989）補入，以潮州方言補入揭陽。
2　仿照董（1960）的辦法，漢字加括弧表示他們不是恰好用來寫原文的字。

以下是*m- 在廈門、晉江已去鼻化，而龍溪、揭陽則保持不變的例字：

例字	廈門	晉江	龍溪	揭陽
妹	be	bə	māĩ	mūē
脈	beʔ	beʔ	mẽʔ	mẽʔ
明（？）	bin	bin	mẽ	mẽ
[糜]	be	bə	māĩ	mūē

以下是*m- 只在揭陽保持不變，其他三方言都已去鼻化：

例字	廈門	晉江	龍溪	揭陽
面	bin	bin	biŋ	meŋ
眠	bin	bin	biŋ	meŋ
明（聰—）	biŋ	biŋ	biŋ	meŋ
(蚊)（白）	biŋ	biŋ	baŋ	maŋ
木（白）	bak	bak	bak	mak
目（白）	bak	bak	bak	mak

各閩南方言的*m- 都去鼻化的例字很多：

例字	廈門	晉江	龍溪	揭陽
米	bi	bi	bi	bi
尾	be	bə	bue	bue
馬	be	be	be	be
問	beʔ	bəʔ	bueʔ	bueʔ
麥	beʔ	beʔ	beʔ	beʔ
賣	bue	bue	be	boi
(妻)	bɔ	bɔ	bɔ	bou
磨	bo	bo	bo	bo
廟	bio	bio	bio	bio
母	bu	bu	bo	bo
霧	bu	bu	bu	bu

眉	bai	bai	bai	bai
蜜	bit	bit	bik	bek
墨	bak	bak	bak	bak
萬	ban	ban	baŋ	buaŋ
慢	ban	ban	baŋ	baŋ
網	ban	ban	baŋ	baŋ
夢	baŋ	baŋ	baŋ	baŋ

以下是*n-或*nj-各方言都保持鼻聲母不變的例字：

例 字	廈 門	晉 江	龍 溪	揭 陽
年（白）	nĩ	nĩ	nĩ	nĩ
（口水）（白）	nũã	nũã	nũã	nũã
（揉）（白）	nũã	nũã	nũã	--
尼，泥	nĩ			nĩ
娘（白）	nĩũ	nĩũ	nĩ	nĩ
（貓）（白）	nĩãũ	nĩãũ	nĩãũ	nĩãũ
奴，怒	nɔ̃			nõũ

也有若干字其聲母原爲來母與泥、娘合併也變成n，未列入上面的例字。

以下是*n-只有揭陽保持鼻聲母不變，其他三方言大都去鼻化：

例 字	廈 門	晉 江	龍 溪	揭 陽
（奶）	lin, liŋ	lin	liŋ, nē	nĩ, nē
南	lam	lam	lam	nam
念	liam	liam	liam	niam
（你們）	lin	lin	liŋ	neŋ
（咱們）	lan	lan	laŋ	naŋ

各閩南方言的*n-或*nj-都去鼻化的例字如下：

例 字	廈 門	晉 江	龍 溪	揭 陽
鈕	liu	liu	liu	liu
二	li	li	dzi	dzi
熱	luaʔ	luaʔ	dzuaʔ	dzuaʔ
尿	lio	lio	dzio	dzio
入	lip	lip	dzip	dzip
日	lit	lit	dzik	dzek
仁	lin	lin	dziŋ	dzeŋ
然	lien	lian	dziaŋ	dziaŋ

以下是*ŋ四個閩南方言都保持不變的例字：

例 字	廈 門	晉 江	龍 溪	揭 陽
硬	ŋĩ	ŋĩ	ŋẽ	ŋẽ
（搔）（－癢）（白）	ŋĩãũ	ŋĩãũ	ŋĩãũ	
（挑）（－出）	ŋĩãũ	ŋĩãũ	ŋĩãũ	
藕，肴	ŋãũ	ŋãũ	ŋãũ	
雅	ŋã		ŋẽ, ŋã	ŋĩã
（迎）（－佛）	ŋĩã（-put）		ŋĩã	
悟	ŋɔ̃			ŋɔ̃

以下是*ŋ- 只在揭陽保持鼻聲母，其他三方言都已去鼻化的例子：

例 字	廈 門	晉 江	龍 溪	揭 陽
銀	gun	gun	giŋ	ŋeŋ
冷			gan(?)[3]	ŋaŋ
雁	gan		gan(?)	ŋeŋ
鱷	gok		gɔk(?)	ŋek
驗	giam		giam	ŋiam

各閩南方言的*ŋ- 都已去鼻化的例字如下：

---

3 董（1960）未記錄，由作者根據近似龍溪方言的宜蘭方言補入的三個例字後加（？）號。

例 字	廈 門	晉 江	龍 溪	揭 陽
芽（白）	ge	ge	ge	ge
月（白）	geʔ	gəʔ	gueʔ	gueʔ
外（白）	gua	gua	gua	gua
五（白）	gɔ	gɔ	gɔ	gou
牛（白）	gu	gu	gu	gu

四、結　語

從以上的討論和例字看來，閩南方言的鼻音是錯綜複雜的問題。平面的現象較容易解釋，但歷史的演變條件卻難以界定，因爲各閩南方言的演變都參差不齊。

大致說來，保持有鼻音尾的元音而沒有鼻化的大都是文讀音，而元音鼻化的大都是白話音。可是仍然有部分陽聲韻字白話音並沒有鼻化，包括收-m、-n、-ŋ尾的韻字，其中以收-ŋ尾的居多數。

鼻聲母去鼻化的例字包括文讀和白話，聲母包括各部位。反過來，保持鼻聲母的有文讀也有白話音，而且聲母包括各部位的發音，韻尾也包括陽聲韻、陰聲韻、入聲韻三種都有。拿現代閩南方言和上古或中古比較，去鼻化的情況都如此，條件並不清楚。[4] 各方言演變的速度顯然不同；廈門、晉江演變最快，龍溪其次，潮汕最慢。各詞彙演變的速度也頗不一致，有的保持鼻音，而有的已去鼻化，其分化的條件都有待進一步的探討。[5]

參考書目

李方桂

1971　上古音研究，《清華學報》，新九卷一、二期合刊，1-61。

---

[4]　王旭先生指出，元音鼻化、鼻聲母去鼻化的現象也與是否快讀或語音縮減(contraction)有關，例如，什麼sia mā縮減成爲sīã,明天bin a tsai縮減成爲mīã tsai。

[5]　董昭輝先生指示，日語中許多漢語借字，如：美、貿、女、努、疑、義等等，都已去鼻化，而在日語語音演變史上並未有去鼻化的演變，所以應該是本來漢語借入日語時就已去鼻化。因此，董先生認爲閩南語這些音的去鼻化也大有可能是固有而非變化的結果。作者卻認爲這只是顯示去鼻化的時代相當早，也就是在日語大量借漢語（大約公世第七至第九世紀）之前。

李壬癸

李壬癸

　1989　　閩南語喉塞音尾性質的檢討，《中央研究院歷史語言研究所集刊》，60.3：
　　　　　197–202。

何大安

　1981　　澄邁方言的文白異讀，《中央研究院歷史語言研究所集刊》，52.1：101–
　　　　　152。

　〔　　〕　閩南方言鼻音聲母與濁音聲母的互補問題。稿件。

姚榮松

　1987　　廈門話文白異讀中鼻化韻母的探討，《台灣師範大學國文學報》16：271–
　　　　　288。

袁家驊等

　1983　　《漢語方言概要》(第二版)。北京：文字改革出版社。

徐金松

　1980　　《中國閩南廈門音字典》。台北：南天書局。

《普通話閩南方言詞典》

　1982　　廈門大學中國語言文學研究所漢語方言研究室。

董同龢

　1960　　四個閩南方言，《中央研究院歷史語言研究所集刊》，30：729–1042。

楊秀芳

　1982　　《閩南語文白系統的研究》。台灣大學中文研究所博士論文。

《漢語方音字匯》

　1989　　（第二版）。北京大學中國語言文學系語言學教研室。

藍清漢

　1980　　《中國語宜蘭方言語彙集》。東京：國立共同利用研，アジア・アフリカ
　　　　　言語文化研究所。

羅常培

　1930　　《廈門音系》。中央研究院歷史語言研究所單刊甲種之四。北平。

Chen, Matthew.

    1975   An areal study of nasalization in Chinese. Journal of Chinese Linguistics 3.1 ：

          16–59.

Chomsky, Noam and Morris Halle.

    1968   The sound pattern of English. New York: Harper & Row.

Clumeck, Harold.

    1975   A cross-linguistic investigation of vowel nasalization: an instrumental study. In

          C. Ferguson et al (eds.), 133–152.

Ferguson, Charles A., Hyman, Larry M., Ohala, John J., eds.

    1975   Nasalfest: Papers from a symposium on nasals and nasalization. Stanford: Lan-

          guage Universals Project.

Hess, Susan.

    1990   Universals of nasalization: Development of nasal endings in Wenling. Journal

          of Chinese Linguistics 18.1 ： 44–94.

Hoopers, Joan

    1972   The syllable in phonological theory. Language 48.3 ： 525–540.

Norman, Jerry.

    1973   Tonal development in Min. Journal of Chinese Linguistics 1.2 ： 222–238.

    1974   The initials of Proto-Min. Journal of Chinese Linguistics 2.1 ： 27–36.

Aspects of Comparative Syntax Between Mandarin and Taiwanese: Use of Negatives in Questions

Li, Ying-che
University of Hawaii

1. Introduction

This study aims at comparing uses and functions of various negative (NEG) elements in certain questions found in Taiwanese (T) and Mandarin (M). The focus is on questions of A–not–A type, general disjunctive type, tag type, question particles, and rhetorical type. NEG's in questions in M and T include more than those used in questions negated. Both verb and noun phrases with NEG elements in the designated types of questions are included in the scope of discussion. The main objective of this paper is to explore diachronic implications through syntactic comparison of T and M in the areas delineated.

This paper studies Archaic Chinese (AC) reflexes of NEG's still utilized in M and T questions, of which there are seven remaining in T and only two in M. All choice questions in T are basically disjunctive in nature, using 無bo, 未bue, 否bo, 呣m̩, 勿愛buai, 勿會be, mai as one of the NEG's. M has reduced its stock of NEG's into 没mei, 不bu in questions, in the forms of 有没有, 要不要, 是不是, 是嗎, besides 没, 不+V/A and V/A+没,不+ V/A (A stands for any other verbals). Similar question forms in T appear more eleborate using various T NEG's such as 有抑無, 有抑未, 是否, 是呣是, 欲抑勿愛, 會抑勿會, 愛抑mai. The following sections discuss and compare uses of NEG's in both M and T questions and demonstrate their synchronic differences, from which certain diachronic observations on lexical neutralization and syntactic compression (Li 1986) can be made evident, after initial discussions of AC NEG's in questions.

2. Archaic Chinese Negatives

AC utilized about twenty NEG morphemes in various syntactic and semantic contexts (Chou 1961, Dobson 1966, Kennedy 1964 under T. Y. Li). The fact is clear that most of these AC NEG's have disappeared in Modern Chinese (MC) dialects such as T and M, whether in questions or other types of sentences. It is observed that different sets of NEG's were used in conjunction with distinct types of sentences such as declarative, imperative, interrogative, and assertive (equative), and with lexical categories such as verbs and nouns in AC, and, to a lesser degree, in MC. For instance, it is known that 勿,毋 were used in commands, 否 in questions, and 非 in equatives in AC. In T 唔好 m(h)o, are used in commands, and 否 is only used in questions. That certain NEG's are only used in certain kinds of sentences does not exclude the possibility of other NEG's occurring in the same sentences. Even though the NEG 否 is only used in questions, other NEG's can also occur in questions whether in AC or MC.

The fact that twenty NEG's in AC have been reduced to a few in MC (in any context) is sufficient to demonstrate the case of NEG neutralization in most modern dialects. This study selects questions as one type of sentence to make an observation of the fact that seven NEG's in T and two NEG's in M are now used in these questions. By similarities in the members of T NEG's and in the kinds of T questions to those of AC, a supposition will be made to the effect that T use of NEG's in questions represents an intermediate stage in its linguistic development between the time of AC and that of M, in contrast to the use of two NEG's in M which apparently demonstrates further development by its reduction and neutralization of NEG's.

My hypothesis of lexical neutralization and syntactic compression was posited in Li 1986 with regard to certain major sentence structures (other than questions) found in M with respect to its diachronic development. In this study of syntactic comparison of M and T questions with NEG's, I feel that a similar observation may also be made for M. No less significant is another observation made by Wang 1969 that competing changes occur in

the course of linguistic development, which are lexically gradual, so that different morphemes may reside in different dialects.

3. Archaic Chinese questions

The AC sources of various MC question types were basically of three kinds: question-words, question particles, and choice questions. Any one of the three major kinds of AC questions may also be rhetorical in nature as will be discussed. The following are examples of various AC questions with NEG elements which, as may be seen, tend to have a dominant disjunctive structure:

1. 害澣害否？歸寧父母。	詩經
2. 招招舟子，人涉卬否？	詩經
3. 太后獨有帝，今哭而不悲，君知其解未？	漢書
4. 晚來天欲雪，能飲一杯無？	白居易詩
5. 無父何怙？無母何恃？	詩經
6. 能無及此乎？	左傳
7. 精言之而不明，勿言之而不成，精言乎？勿言乎？	呂氏春秋
8. 父邪？母邪？天乎？人乎？	莊子
9. 敢問天道乎？抑人故也？	國語
10. 而不克此，可乎？	公羊傳
11. 晉爲盟主，其或者未之祀也乎？	左傳
12. 王故尚未之知邪？	呂氏春秋
13. 王未之樂也，亦未之不樂也。	莊子
14. 倘所謂天道，是邪？非邪？	史記
15. 吾末如之何也已矣？	論語
16. 汝曷弗告朕？	書經
17. 子盍(何不)爲我請乎？	左傳
18. 莫我知也夫？	論語

19. 至于莫之是，莫之非而已矣？   老子

20. 爾時罔敢易法〔定〕，矧(況)今天降戾〔定〕于周邦？   書經

21. 神罔時怨，神罔時恫！   詩經

A dozen NEG's can be found in the above AC questions and other similar sentences from various classical texts. It is entirely possible to discover more NEG's in similar AC sources time permitting. Sentences 1 and 2 demonstrate the use of *fou* 否 in the *Book of Poetry*, where *fou* functions as a negative verb indicating "did not" contrasting with *huan* 澣 "washed" in 1 and *she* 涉 "crossed" in 2. 1 also shows two perfectly symmetrical disjunctive verb phrases, affirmatively in *he huan* 害澣 "what washed" and negatively in *he fou* 害否 "what did not." It can be seen that *fou* is also a disjunctive negative verb and a counterpart to the main verb *she* in 2, where 人涉 states "others crossed" and 卬否 states "I did not."

Sentences 3 and 4 are from later materials during Han and Tang dynasties. The use of *wei* 未 "did not yet" and *wu* 無 "(have) not" at the end of the sentence demonstrates at least two points: First, their disjunctive structure still patterns after *fou* in AC sentences such as 1 and 2; second, *wei* in 3 is a likely source of *wu* in 4, and later may have further developed first into 没 *mei*, then *me* 麼 or *ma* 嗎 (Pan 1982, Shi 1986), the main question particle in M. T still has both *bue* 未 and *bo* 無, and, in addition has an unstressed form of *bo* 無 represented as 否 in character (not intended to be the same classical 否). It is these kinds of examples that compel one to hypothesize that T represents an intermediate stage in its linguistic development when compared to M and AC.

Sentences 5 and 6 illustrate another use of the NEG *wu* 無 "have not" in AC contexts, where it does not occur as a disjunctive NEG. Sentence 5 is reminiscent of MC choice-type questions. Sentences 6 to 10 also introduce a new sentence particle *hu* 乎 which was rarely seen before the late AC period and sometimes added to early AC sentences when they were quoted at a later date. For instance, 我生不有命在天 (*Book of Documents*) was appended with *hu* 乎 when quoted in *Shiji* (*The Grand Historian's Record*, Pan 1982).

Sentence 7 demonstrates another disjunctive question in late AC, where the affirmative and negative parts are actually separated into two questions by repeated use of *hu* . A different NEG *wu* 勿 is also used in the negative portions. An apparent difference here is that the main verb *yan* 言 "speak" is also duplicated, obviously due to repeated questions on forms. This may be an earlier form of the MC disjunctive questions, which was further simplified into A-not-A type in M, but not in T. Sentence 8 repeats the use of *hu* 乎, ye 邪 after each of the four nouns, turning them into multiple choice questions, which are no longer disjunctive. Sentence 9 adds a new word *yi* 抑 "or" into the choice-type questions, which makes the choices more apparent. The choices can be regarded semantically disjunctive but not syntactically, therefore having no need to use a NEG. Sentence 10 is still a *hu* question, but neither a disjunctive nor a choice question. A NEG *bu* 不 "do not" is used. The last phrase *ke hu* 可乎 "is it allowed?" almost looks like a MC tag question such as *keyi ma* 可以嗎 "is it permitted?"; *xing buxing ne* 行不行呢 " is it O.K.?" Hu 乎 thus appears as a predecessor of M question particle *ma* 嗎 or *ne* 呢 , although they are not etymologically related.

Sentences 11 to 13 illustrate the use of another AC NEG *wei* 未 "did not yet," occuring with *hu* 乎 in 11, *ye* 邪 in 12, and *ye* 也 in 13. *Ye* 邪 seems to be a later question particle, whereas *ye* 也 is not necessarily a question particle but can also occur at the end of a question. 13 is not meant to be a question, but syntactically appears like a regular disjunctive question.

Sentence 14 is a late AC example of disjunctive question where *ye* 邪 is duplicated again in the form *shi ye* 是邪 "is it correct?" *fei ye* 非邪 "is it incorrect?", and the use of *fei* 非 clearly functions as a negative verb.

Sentence 15 shows a rare instance of the use of NEG *mo* 末 "did not yet", which in many cases functions like *wei* 未 "did not yet" in other sentences. Sentence 16 is an example of the use of *fu* 弗 "do not " in a sentence which is a combination of a rhetorical question and a command "How come you do not tell me?". Sentence 17 illustrates a special fused

word *he* 盍, supposedly the combinatory result of *he bu* 何不 "why not".

Sentences 18 and 19 give examples of the NEG *mo* 莫 "no one", and sentences 20 and 21 the NEG *wang* 罔, also meaning "no one"; all in AC materials. There are at least two other similar NEG's *wang* 亡 and *mi* 靡 which also tend to indicate "no one", that can be found in additional AC texts given time. These NEG's, sometimes called indefinite pronouns, are the only AC NEG's which are nominal in nature, whereas the rest of NEG's can be regarded NEG verbs during AC. The nominal NEG's have been neutralized into *bo lang* 無人 "no body" in T and *mei ren* 沒人 "no body" in M. The next sections will discuss how most of the AC NEG's have disappeared, and only seven remained in T and two in M. We will also see how the various question forms have been syntactically further compressed in M.

4. Taiwanese and Mandarin Questions with Negatives

Following the general patterns of certain AC questions in 1-21, similar (and different questions) in M and T can be made:

T1. 有洗衫(抑)無? / 否? / (抑)未? / 未?　　洗無(了).(猶)無洗/ 未洗.

M1. 洗衣服了沒有? / 嗎?　　沒洗著.(還)沒洗.

T2. *洗ṃ洗衫? 衫洗(抑)ṃ洗?　　衫欲洗無? / 抑ṃ? / 抑�困? / 否?

M2. 洗不洗衣服? 衣服洗不洗?　　衣服要不要洗? / 要洗嗎?

T3. 你知影伊了解抑未? / 未? / 抑無? / 否?　　伊猶未/ 無了解。

M3. 你知道他了解了沒有? / 嗎?　　他(還)沒了解。

T4. 會飲一杯否? / 燴?　　一杯也燴飲。

M4. 能喝一杯不? / 嗎?　　一杯也不(能)喝。

T5. 無父母欲靠甚麼人?　　甚人攏燴/ �困/ mai靠。

M5. 沒父母要靠甚麼人?　　甚麼人都不要/ 不會/ 別靠。

T6. 去看電影，欲抑�困? / 抑ṃ?　　好(抑)ṃ好? / 好否? / *欲�困去看?

M6. 去看電影，要不要? / 好不好? / 好嗎?　　要不要去看?

T7. 欲說明抑嬒? / 否?　　　　　　欲說明抑是嬒/ m̩/ mai說明?

M7. 要說明不要? / 嗎?　　　　　　要說明還是不要? / 還是別說明好?

T8. 有天理抑無? / 否? 有人情抑無? / 否?　　*有無天理人情?

M8. 有天理沒有? / 嗎? 有人情沒有? / 嗎?　　有沒有天理人情?

T9. 伊是眞有理解的人，是否? / 是 m̩ 是? / *m̩ 是?

M9. 他是很通情達理的人，是嗎? / 是不是? / 不是嗎?

T1 illustrates use of three possible T NEG's 無否未 in a common disjunctive question, whereas its M1 counterpart only utilizes one M NEG 沒. Notice that a possible T1 answer is 洗無(contrasting with 洗有) where 無 clearly indicates its syntactic status of a verb. T2 demonstrates that A-not-A pattern is under a very tight restriction in T , and cannot be used like M2, where it has already undergone syntactic compression in the form of A-not-A + V + 0 (A may or may not be the V). T must topicalize the 0 in order to utilize the A-not-A pattern (A must also be V). That is there is no* 去嗎去洗 in T. In T2, two additional T NEG's are used: 嗎 m and 嬒 buai , besides 無 and 未, whereas only M NEG 不 is used in M2.

Three T NEG's 未無否 are used in T3 in contrast to one M NEG 沒 in M3. Two T NEG's 否嬒 are used in T4 in contrast to one M NEG 不 in M4. T NEG 嬒 be may have been the result of fusing 無 bo and 會 e , but a further study is necessary. T5 uses four T NEG's 無 嬒 嬒 mai , and M5 uses two M NEG's 沒不. Like 嬒，嬒 buai may have been combined from 無 bo and 愛 ai, and mai from 嗎 m and 愛 ai. T6 to M9 demonstrate two main points: further differences in the use of NEG's between T and M, and in their patterns in employing A-not-A-type questions.

T9 and M9 also illustrate differences in the use of tag questions between M and T. Whereas M employs two tags 是嗎 and 不是嗎, T only has 是否 but no 嗎是 . Seven T NEG's are used in the above sentences. Even if one analyzes 嬒 buai as 無 bo 愛 ai, bue 嬒 as 無 bo and 會 e, mai as 嗎 m and 愛 ai, there are still at least four T NEG's in these sentences. In most cases two or three T NEG's are employed in T as against one in M.

5. Patterns of Disjunctive in AC, T, and M.

It is now clear that, compared to M, T questions with negation involve more NEG elements as shown between T1 and M9, and more disjunctive patterns.

AC involves essentially three major disjunctive patterns: (1) 〔 V/N + NEG 〕, (2) 〔 V/N + QP 〕〔 NEG + V/N + QP 〕, and (3) 〔 V/N + QP 〕 + yi ('or') + 〔 NEG + V/N + QP 〕. (1) appears to be an older pattern, simply showing the verb contrasting with one of the NEG verbs 無否未. (2) seems to have become slightly more elaborate, where the main predicate (VP or NP) is duplicated, the second one being preceded by NEG; and at the same time, a question particle (QP) 乎邪哉 is repeated at the end of the predicate. The third pattern (3) added a more explicit morpheme 抑 yi 'or' clearly indicating a choice. Examples for these patterns are already cited in sentences 1 to 21.

The evolution of these AC patterns as reflected later in M and T warrants careful scrutiny. First of all, the cited data will bear witness to the fact that in pattern (1), the earlier sentence final NEG 否 was postdated by the use of 未 and 無, and they all survived the AC period and enjoyed existence in most classical writings. This is believed to be an instance of "competing changes." These particular competing elements were later neutralized into 無, then phonologically transformed into 麼 and 嗎 by the time of Early Mandarin (EM), and continued to be used in M, whereas 未 and 無 remained separately utilized in pattern (1) in T. However, as can be seen in examples T1 to M9, T 未 leads a more restricted existence, and can be taken over by T 無 and T 否 in most contexts. It is possible that T sentence final NEG's may be neutralized by 無否 eventually, since the use of T 未 seems to have become even more restricted as indicated by examples like: 吃未了, 吃無了, *吃未, 吃無.

Another set of competing elements in AC is its QP's 乎邪哉. QP's were rarely seen occurring with any interrogatives, even though a few instances of 乎 were seen in early AC. QP's 邪哉, etc., appeared later, and enjoyed a competing existence with 乎 during most classical period. Although various QP's appeared to have contextual differences, 乎 seemed

to be the dominant one in most writings. All these AC QP's disappeared, and QP's such as 嗎呢 took over in M. T still does not have any QP's such as 嗎呢, having relied upon sentence final NEG's 無未否呣 even today.

Pattern (3) is also a popular structure in T, which is different from (2) essentially by the explicit choice morpheme 抑"or." Examples T1 to M9 illustrate that T disjunctive sentences mostly adhere to the use of 抑 whereas M has opted to avoid it and further compressed (2) into M (2): V + NEG + V (except that V may now also be adverbs or auxiliaries).

With regard to questions with NEG's, M is different from T in several aspects: one, M no longer utilizes pattern (1) with competing choices of NEG's because they have been neutralized into 嗎in M. In other words, M has changed (1) V + NEG to M (1) VP+ QP (嗎, 呢), similar to the fact that it has modified (2) into M (2) as mentioned above. In (1), M has taken an affirmative predicate and a negative one in AC and compressed them into one sentence, just like its compression of two separate questions in AC (2) into one M (2).

6. "Universal" Syntax After Dialectal Comparison

As was discussed, T has neither neutralized nor compressed to the extent that M has. Maintaining the AC pattern (1) VP + NEG, T still utilizes four NEG's 無, 未, 否, 呣 at the end of a simple disjunctive question, where those NEG's can still be regarded as under competing changes, with the favorite 否 possibly emerging as a winner. T has also kept the disjunctive characteristic of many T questions apparent by keeping the affirmative and the negative parts syntactically separate, and also by its consistent use of the choice morpheme 抑.

The basic differences evident between M and T in a syntactic structure such as disjunctive questions throws great doubt on the assumption of a "universal" syntax for major Chinese dialects. It is clear from our diachronic and synchronic comparisons of AC, T, and M that M has further distanced itself from its remote association AC, and that the notion of a "universal" syntax at least for M and T cannot reconcile with major

discrepancies in the face of diverse structural differences. From a historical perspective, T and M are very different with respect to disjunctive questions and other phenomena, mainly because T has maintained a close affinity with AC and has not developed as far as M has.

Viewing the structural discrepancies in the data and other facts, M has fewer NEG's and less variety in structural choices in forming questions (especially of the disjunctive type) and answers with NEG's. Its more compressed A-not-A questions exhibit a more complexed structure which represents innovations that are still absent in T.

In general, the linguistic criteria that govern the use of T NEG's in questions are synchronically both syntactic and semantic. As discussed, T 否 occurs only in questions, *mai* in imperative (and other restricted contexts), and 呣*m* in equative (and other specific contexts). T 否does not function elsewhere, even though T 無未etc. can also occur in sentence-final position. Mai is used in the same context as other NEG phrases in commands such as in 你mai/免/未使/呣通去. However, T 無, 未, 否, 呣, etc. are either not used at all or not by themselves in commands. 呣 can be used in contexts other than equative, but the equative context must requires its presence and no other NEG's

Semantically, it is also clear that T 無 means "have not" 未 "did not yet," 否 "do not," 呣"do not want," 艙 "not be able," 嬈 "do not want," *mai* "best not to," and so their appropriate use is obviously governed by their meanings.

More importantly both the syntactic and semantic functions of all the T NEG's are also a consequence of the historical evolution that has left them in their present circumstances. No one can explain why T has kept half a dozen of the twenty AC NEG's, while M has discarded all but two of those different from T NEG's. No one can explain either why competing changes and subsequent choices will result in such discrepant elements and structures. Why did M has further neutralized lexically in NEG's and also compressed syntactically in disjunctive questions? The only statement we can make as a linguistic observation at this point is that various degrees of neutralization and compression seem to

have happened in the development of Chinese dialects, and that these phenomena may be viewed as part of linguistic simplification that occurred in language changes. Only study of other languages can substantiate or refute this observation.

REFERENCES

Chao, Yuen-Ren.

    1968   A Grammar of Spoken Chinese. University of California Press. Berkeley.

Chen, Zi-Zhan.

    1983   Shijing Zhijie. Fudan University Press. Shanghai.

Chou, Fa-kao.

    1961   Zhongguo Gudai Yufa. Academia Sinica. Taipei.

Dobson, W.A.C.H.

    1966   Negation in Archaic Chinese. Language 42:278-84.

    1968   The Language of the Book of Songs. University of Toronto Press. Toronto.

Huang, James C-T.

    1988   Hanyu Zhengfanju de Mozu Yufa. Zhongguo Yuwen 4.

Huang, Jing-Xin.

    1958   Qin Han Yiqian Gu Hanyuzhong de Foudingci *Fu Bu* Yanjiu. Yuyan Yanjiu. 3:1-23.

Li, Jen-Kuei.

    1971   Two Negative Markers in Taiwanese. Bulletin of the Institute of History and Philology. Academic Sinica XLIII: 201-20.

Li, Tien-Yi.

    1964   Selected Works of George A.Kennedy. New Haven. 119-34.

Li, Ying-che.

    1980   "The Historical Development of the Coverb and the Coverbial Phrase in Chinese," *Journal of Chinese Linguistics*, 8:2:273-93.

Li, Ying-che

   1986   "Historical Significance of Certain Distinct Grammatical Features in
          Taiwanese, " *Contributions to Sino-Tibetan Studies,* Cornell Linguistics Con-
          tributions. E. J. Brill, Leiden. 393-415.

   1988   "A Comparative Study of Certain Verb Phrase Constructions in Mandarin and
          Hokkien, " *The Structure of Taiwanese: A Modern Synthesis* (Ed. Robert L.
          Cheng and Shuanfan Huang). Crane Publishing Co. Ltd. Taipei. 147-60.

   1989   "Aspects of Historical and Comparative Syntax between Madarin and
          Taiwanese," *Proceedings of the Second International Conference on
          Sinology,* Academia Sinica. Taipei. 719-54.

Ma, Zhong.

   1983   Gudai Hanyu Yufa. Shandong Jiaoyu Chuban She. Shandong.

Pan, Yun-zhong.

   1982   Hanyu Yufashi Gaiyao. Zhongzhou Shuhua She. Henan.

Shi, Cun-Zhi.

   1986   Hanyu Yufashi Gangyao. Huadong Normal University Press. Shanghai.

Teng, Shou-hsin.

   1974   Negation in Chinese. Journal of Chinese Linguistics. 2:125-40

Wang, Li.

   1958   Hanyu Shi Gao. Science Publisher. Beijing.

Wang, William S.Y.

   1969   Competing Changes as a Cause of Residue. Language. 45:9-25.

   1967   Conjoining and Deletion in Mandarin Syntax. Monumenta Serica 26.

Yang, Bo-Jun.

   1963   Shanggu Wuzhidaici, *Wang, Wang, Mo.* Zhongguo Yuwen. Beijing 6:473-74.

Zhou, Guang-wu.

   1959   Xian Qin Fouding Ju Daici Binyu Weizhi Wenti. Yufa Lunji. Commercial Press.
          Beijing. 3:128-67.

Zhu, Dexi.

   1985   Two Types of V-not-V Questions in the Chinese Dialects. Zhongguo Yuwen.

論閩方言的開合口[*]

連 金 發

清 華 大 學

　　本文主要是從諧聲字和現代音的系聯並參照韻書的聲類求出閩方言開合口的類型和發展的脈絡，並論及閩方言與其他方言的歷史發展關係。本文共分六章：一、前言。二、開合口的演變和方音的分歧：我們提出八項開合口演變的類型，著重討論閩方言合口的存古特性。三、諧聲和開合口的演變：本章結合諧聲，古書的音註，現代方音掌握上古韻母特徵及其流變的軌跡。四、切韻和廣韻韻目的排列：本章從中古韻書的韻次的檢討爲韻類的音質提供佐證。五、詞匯擴散和開合口的演變：從諧聲系列的現代音反映可以看出開合口的轉變不是一蹴而就的，音類的轉換是透過音類裏的詞匯逐漸過渡而成的。六、結語：末尾我們著重指出本文以上古韻部作間架探討閩方言開合口的演變，主要著眼於音韻系統中聲類的對立性和平行性；向來上古韻母系統的構擬甚少注意開合口的區分。閩方言是漢語的一支，它在開合口發展的特異性應該得到合理的解釋。從這個意義來看，本文提出了一個重要的課題，給將來有志修訂上古音系者參考。

一、前　　言

　　閩方言不論在語言的橫斷面或縱斷面上都顯出其獨特性。[1]一個很重要但不太受

1 閩方言包括閩北（如建甌）、閩東（福州）、閩南（廈門）等。不過請參閱 Norman (1988：228-239)。有關閩方言討論頗多。最近對閩方言作比較的有張 (1984，待刊)、張 (1990) 等。本文著重討論廈門話。語料取自北京大學 (1989)、Douglas (1899)、董 (1959)、董等 (1967)、廈門大學 (1982)，其他方言語料如未特別說明也參考北京大學 (1989)。
　　本文討論主要是依據閩南語，也許有人會認爲題目取得過寬，可是閩南語的白讀層所體現出的開合口特性很具有閩方言的代表性。本文的標題旨在突顯閩方言這方面的特點。衆所周知，語言可以作共時的研究，也可以歷時的探討。可以從現代方音的細部歸納入手，也可以以簡馭繁的方式提出假設再加論證。講閩方言的開合口除了中古音不可不論上古音。我們假定閩方言保存了上古音系的特性，開合口就是一個重要的例證。

注意的特性是開合口的分佈：閩方言跟現代其他方音和中古音的開合口有很多地方不一致。閩方言和中古音開合不一致的現象可以有兩種情況：一種情況是閩方言不一致之處是後來的發展，另一種情況是不一致之處是代表切韻或廣韻以外的方言音韻系統。第二種情況通常出現於白讀層次，而白讀一般反映較早的語音，再者中國幅員廣大，古代漢語已經有方言的存在殆無疑問，[2] 可以想見韻書所記載的音韻系統並不能涵蓋所有的方音，現代方音不可能在韻書裡找到所有的源頭。第一種情況也出現於白讀層，代表後起的演變，屬於閩方言固有的系統，有別於外來文讀的系統。

韻書中被切字的音韻特性是由反切上字和反切下字界定的。學者已經指出被切字和反切上字或下字之間或反切上下字之間開合口常有不協調的現象。唇音開合不對立，開合口不協調不構成解釋上的困難，可是唇音以外的聲類有開合的對立，反切不一致應該得到解釋。[3]

閩方言白讀層有一部分是超越廣韻所記錄的中古音。這個說法有以下的証據。1.一般來說，中古音有開合之分的韻類從閩方言現代音的反映上看不出什麼區別：有些中古開口的韻類，如山攝白讀念爲合口音，和中古合口的韻類的讀音沒有區別，2.有些中古開口字閩方言念合口可斷言是反映中古以前的現象，如‘山’（山開二平山生）念成 suã，山《說文》音釋爲‘宣’（合口字），《廣雅》音釋爲‘產’（閩方言白讀音suã），3.諧聲字的開合口有的現代方音的讀音一致有的不一致。如果假定諧聲字原來一致後來才產生分歧，則閩方言有不少地方保存較古的讀音，如‘泉’和‘線’兩個諧聲字中古音前字爲合口後字爲開口，但閩方言都念爲合口tsuã、suã，4.中古開口的字閩方言白讀念合口，如氣 k'ui、衣 ui、契 k'ue、幾 kui、雞 kue 等，在漢語方言中是相當罕見的現象，爲中古音系之外的系統殆無疑問。

當然閩方言的讀音也有保存中古音的地方：1.有些中古合口的字，如雷、累、淚

2　參閱 Chang (1975) 和張 (1987：35-57)。

3　有關古音開合口的研究已多篇論文發表，專著也常提及，如李 (1984)、羅 (1986)、邵 (1982)、王 (1941，1948)。這些論述其少觸及現代方言，不過請參閱高 (1948)、李 (1982)。方言中開合口的分歧應該是自古有之，至少中古末期就有蛛絲馬跡可循，南宋詩人陸游 (西元1125-1210) 已經注意到漢語方言開合口讀音不一致之處，他在《老學庵筆記》(陸 1982：77-78) 中指出："…蜀人訛‘登’字，則一韻皆合口；吳人訛‘魚’字，則一韻皆開口；他放此。中原惟洛陽得天地之中，語音最正，然謂‘絃’爲‘玄’，謂‘玄’爲‘絃’，謂‘犬’爲‘遣’，謂‘遣’爲‘犬’，謂‘遣’爲‘犬’之類，亦自不少。"
按中古音的分類，引文中的登、絃、遣爲開口韻，魚、玄、犬爲合口韻。

、類、內等，閩方言仍舊念成合口，國語則已變爲開口。2.縣、懸都是中古合口的諧聲字，閩方言都念合口，而北方方言縣已轉入開口，3.有些中古音的韻類在很多現代方音已經合流，但在閩方言還保存局部的開合對立，如閩方言中古開口的泰韻和咍韻唇喉牙 (grave) 音已漸趨合併，而非喉牙 (acute) 音則涇渭分明：泰韻白讀念合口咍韻念開口，4.中古唇音合口字北方方言合口成份已消失，但仍保存於閩方言中，如般、半、盤、凡等；唇音與合口韻並存是閩方言的特色。

本文將循以上的分析手法對閩方言的開合口做初步的考察，主要是從諧聲字和現代音的系聯並參照韻書的聲類求出閩方言開合口的類型和發展的脈絡，並論及閩方言與其他方言的歷史發展關係，比如我們發現湘語雙峰方言有些韻類的字和閩方言一樣念成合口，這種相似性應該不是偶然的，可能表示古代某個時期有共通的發展階段。

除了前言和結語本文還包括以下幾章：二、開合口的演變和方音的分歧（我們提出八項開合口演變的類型，著重討論閩方言合口的存古特性）。三、諧聲和開合口的演變（本章結合諧聲，古書的音註，現代方音掌握上古韻母特徵及其流變的軌跡）。四、切韻和廣韻韻目的排列（本章從中古韻書的韻次的檢討爲韻類的音質提供佐證）。五、詞匯擴散和開合口的演變（從諧聲系列的現代音反映可以看出開合口的轉變不是一蹴而就的，音類的轉換是透過音類裏的詞匯逐漸過渡而成的）。[4]

二、開合口的演變和方音的分歧

在構擬上古音首先必須面對的問題就是決定上古音韻系統是不是有等的區分和開合口的對立。上古音韻系統孕育著後來音韻流變的因子，因此必須假設上古音有等的區分和開合口的對立，否則就無法解釋以後的語音發展。雖然我們無法確定上古時代是四等俱全，但是從反切可以看出三等和一二四等對立的格局；三等的介音可以解釋上古音系的合口何以變成開口。如果我們假定同聲符的諧聲字開合口一致，那麼同聲符的諧聲字現代方音反映出的開合口不一致的現象一定是後來的發展。漢語的歷史源遠流長，通行的地域相當的遼闊，方言的歧異很大。有血緣關係的語言同中有異，異

4 本文上古音的諧聲系列和韻部是根據：陳 何 (1987)、董 (1975)、郭 (1986)、何 陳 (1987)、李 (1971)、羅 周 (1958)、唐 (1982)、沈 (1985)、王 (1958，1980 ac，1982b)。中古音的音類參考丁 (1981)、李 (1952)、余 (1970)。

中有同。各個方言有存古的特性，也有創新的特性。從現代方音的反映我們可以重建歷史音韻演變的歷程。如下表所示，拿中古音投射到現代南北方音（廈門話和北京話）我們歸納出八項開合口演化的類型，其中六項(1－6)不一致，兩項一致(7－8)：

	中古	廈門	北京
1.	合口	合口	開口
2.	合口	開口	合口
3.	合口	開口	開口
4.	開口	合口	開口
5.	開口	合口	合口
6.	開口	開口	合口
7.	開口	開口	開口
8.	合口	合口	合口

　　後兩項開合口一致可以不論，前六項之中有的類型開合口分歧是中古以後的現象，有的可能反映中古以前的現象。要決定是中古以前或中古以後的現象首先要掌握到上古音系的特性。

　　反切的一般運作規律是，反切上字定聲母，反切下字定韻調。可是反切是制定於某個時代，古今讀音因語音變化而有不同，因此拿古代制定的反切來切今音，難免遇到困難(殷 1962)。反切下字定被切字的韻母，韻母包含開合口介音。被切字的介音的開合口理應由反切下字決定，但是有些情況被切字的開合並非全由反切下字的開合決定的，如牙喉音聲母的合口字，其反切下字可以是開口，而其合口成份取自反切上字：

爲（止合三支云）蔿支切　　蔿（止合三支云）支（止開三支章）

往（宕合三陽云）于兩切　　于（遇合三虞云）兩（宕開三陽來）

橫（梗合二庚匣）戶盲切　　戶（遇合一模匣）盲（梗開二庚明）

役（梗合三清以）營隻切　　營（梗合三清以）隻（梗開三清章）

反之，牙喉音開口字可切以唇音合口字：

建（山開三元見）居萬切　　居（遇合三魚見）萬（山合三元微）

唇音聲母＋合口介音，合口音成份不明顯，而喉牙舌音聲母＋合口介音，合口音成份較明顯(周1981：541－545)。可能由於唇音聲母和合口介音有音響的共通性，同一個唇音字可以作開口字和合口字的反切下字。反過來說，同一個唇音字可以用開口字切也可以用合口字切(李1952：97－103，邵1982：110－122，李1984)。在作語音歸類時聲韻調可以分開來，可是從聲學觀點來看，聲韻調交融在一起，三者互相影響。討論聲母不可不顧及韻母；討論韻母，不可不顧及聲母。聲調亦然。如果接受這個觀點，那麼被切字的開合口決不能光由反切下字決定。研究聲韻的交互作用和開合口的關係可以構成一個專題，本文將不作這方面的探討。

　　本章以上表所列出的開合口演變類型爲經，以韻部爲緯，討論各個演變類型，並舉廈門，北京方言和其他方言的反映作例證。如有古文獻的證據也儘量加以引申。

1. 中古合口　　廈門合口　　北京開口

微部

微1　遺

　　遺（止合三脂）廈門潮州念 ui，廈門新起的語音爲 i，與北京無異，顯然已向普通話靠攏。保留合口成份的其他方言有溫州 vu，梅縣 vi，廣州陽江 wei。遺從貴得聲。貴屬物部。其他諧聲字，如貴，匱／櫃，潰，饋，簣也都屬物部。遺可能是從物部分化出來的。物部和微部可以互通，必定是發音部位相近，即 -t 與 -i 的轉換關係。

微2　雷末壘累

　　中古合口的字雷末壘累，北京武漢長沙溫州合肥蘇州等方言念開口，濟南西安太原成都揚州雙峰南昌梅縣廣州陽江廈門潮州福州建甌等方言念合口，保存中古的合口成分。其他韻部也有類似的現象，如淚（質部），類（物部），贏（歌部），戀（元部）。微質物元的韻尾發音部位都相同，歌部可能也一樣。

　　唇音聲母（幫滂並明非敷奉微）的字北方方言不能和 -u- 介音連用，但閩語沒有這個限制，如般 puã，潘 p'uã，盤 puã，滿 muã，反 huan，番 huan，攀 huan，晚 buan。因此唇音和 -u- 介音的排斥現象只能算是方言的殊性，非普遍的音段結合

連金發

限制性。

元部　縣懸

　　縣懸（山合四先）廈門念 uãi（白）/ien（文），白讀保留中古和上古合口的特性，文讀變開口，北京縣轉入開口 ien，懸保留合口 yan。縣還保存合口成份的其他方言有雙峰 uĩ 廣州 yn 潮州 ũi 温州 y 建甌 yiŋ，縣懸是同音詞（其實是同源詞），但是在方言裡演變的步調並不一致。

質部　季

　　季（止合三脂）念合口的方言有温州 y 廣州陽江 uai 廈門潮州 ui 建甌 y。很多方言（包括北京話）已由中古的合口轉入開口。上古質物開合對立。季的中古的合口音是怎麼發展出來的呢？

2. 中古合口　廈門開口　北京合口

眞部　玄

　　玄（山合四先）的現代讀音有兩派：念合口方言（北京 yan 濟南西安 yæ 太原 ye 武漢 uan 成都 yɛn 合肥 yĩ 雙峰 uĩ 南昌 yɔn 建甌 yiŋ 廣州 yn）；念開口方言（蘇州 iØ 長沙 iẽ 梅縣 ian 陽江 in 廈門 iɛn 潮州福州 ieŋ）。念合口南北方言都有，念開口的只有南方方言。上古眞文是開合對立的兩個韻部。玄是眞部，中古歸合口可能是後起的演變。玄的諧聲字弦中古開口，廈門開口，北京開口，算第七類。

元部

元1　緣

　　緣（山合三仙）廈門念開口 ien，北京念合口 yan。緣由彖得聲，彖也是合口。彖的諧聲字篆喙墜上古中古都含合口介音。彖緣屬元部，喙屬月部，墜屬物部。元月陽(-n)入(-t)對轉，物也含合口和入聲(-t)韻尾。值得注意的是濟南西安太原白讀介音開口，文讀介音合口。

元2　院

　　院（山合三仙）廈門念開口 ĩ，北京念合口 yan。院從元得聲。元的諧聲字幾乎沒有例外的念合口。

元3　絹　捐

絹（山合三仙）廈門念 in（白）/uan（文），北京念合口 yan。念開口的方言還有梅縣 ian 陽江 in 潮州 ieŋ。捐梅縣陽江潮州仍念開口，廈門已轉入合口。

文部　圓

圓（山合三仙）廈門念開口 ĩ，北京念合口 yan。諧聲字員（山合三仙）廈門北京都念合口。

陽部　兄

兄（梗合三庚）廈門念 iã（白）/iŋ（文），北京念合口 iuŋ。我們不能確定上古陽部是含開口還是合口主元音。從南方方言的文白異讀可以看出低元音是較早的形式。比較南昌 iaŋ（白）/iuŋ（文）福州 iaŋ（白）/iŋ（文）。

東部　凶　重　公

凶兇胸（通合三鍾）廈門念 ioŋ，北京念 iuŋ，都含合口主元音。可是胸廈門白讀念開口 iŋ。這三個字合肥長沙雙峰都念開口：iŋ、in、iɛn。從東（通合一東）得聲的諧聲字，廈門念 aŋ（白）/ɔŋ（文），北京念合口 uŋ，如東凍童董（通合一東），或廈門念 iŋ（白）/ioŋ（文），北京念合口 uŋ，如重種龍鐘（通合三鍾）。白讀重（重複）念 iŋ，重（重量）念 aŋ；後一個念法表示一三等不分。從公（通合一東）得聲的諧聲字，廈門念 aŋ（白）/ɔŋ（文），北京念合口 uŋ，如公蚣翁（通合一東）鬆（通合三鍾）或廈門念 iŋ（白）/ioŋ（文），如松（通合三鍾）。雙峰東凍童董重種龍鐘公蚣翁松都念開口低元音 an，也許與閩南話白讀層有關。

耕部　榮

榮（梗合三平庚）念合口的方言有北京濟南 uŋ 西安溫州 yoŋ 長沙成都 yn 雙峰 yɛn 太原 yuŋ 武漢揚州蘇州潮州 ioŋ 南昌梅縣 iuŋ 廣州陽江 wiŋ 建甌 œyŋ，念開口的方言有合肥廈門福州 iŋ。如果假定支錫耕三部含前高不圓唇元音，侯屋東三部含後高圓唇元音，那麼榮上古可能念開口，有的方言在中古轉入合口。榮的諧聲字營塋螢縈瑩廈門北京都念開口。《釋名·釋言語》第十二榮猶熒 (劉 1967)，表示榮讀如熒。熒廈門念開口。耕部廈門除了少數幾個字如莖念合口其餘都念開口 iŋ 或 iã。

3. 中古合口　廈門開口　北京開口

元部　沿鉛

連金發

沿（山合三仙）念合口的方言有成都 yen，雙峰 uĩ，長沙 yẽ，福州 yɔŋ，溫州 yoŋ 建甌 yiŋ 廣州 yn，念開口的方言有梅縣 ian 廈門北京武漢 ien 潮州 iŋ 蘇州 ɛ 溫州 i 合肥 iĩ 濟南西安 iɛ̃ 揚州 iɛ̃ 太原 ie 陽江 in。鉛（山合三仙）念合口的方言有武漢成都 yen，長沙 yẽ，雙峰 uĩ，南昌 nɔy，福州 yɔŋ 建甌 yiŋ 廣州 yn，念開口的方言有梅縣 ian 廈門北京武漢 ien 潮州 iŋ 蘇州 ɛ 溫州 i 合肥 iĩ 濟南西安 iɛ̃ 揚州 ɛ̃ 太原 ie 陽江 in。其他諧聲字船（元部），兌蛻悅閱（月部）廈門北京都念合口。沿鉛上古應讀合口，念入開口可能是受 i 介音的影響。兗亦同。

耕部

耕1 營塋螢縈瑩

營（梗合三清）念合口的方言有溫州 yoŋ 潮州 ioŋ 長沙成都 yn 雙峰 yɛn 陽江 wiŋ 建甌 œyŋ，念開口的方言有溫州梅縣福州建甌 iaŋ 廈門潮州 iã 武漢揚州蘇州長沙成都南昌梅縣 in 廣州福州廈門北京濟南西安太原 iŋ。營的諧聲字廈門都念開口，如營塋 iã/iŋ 縈 iŋ（梗合三清），螢 iŋ/iã（梗合四青又梗合三庚），瑩 iŋ（梗合三庚），北京也念開口，不過縈字已轉入合口。[5]

耕2 頃傾穎

傾（梗合三清）念合口的方言有濟南 iuŋ 西安 yoŋ 武漢成都合肥 yn 溫州 yoŋ 長沙 yun/uan 雙峰 uan 潮州 ueiŋ，念開口的方言有北京太原揚州 iŋ 蘇州南昌 in 梅縣 ɛn 濟南西安太原 əŋ 武漢 ən 南昌 iɛn 廣州陽江廈門福州 iŋ 建甌 eiŋ。頃的分佈大略相同。穎（梗合三清）只有粵語保留中古合口音：廣州 wiŋ 陽江 wiŋ。

錫部　疫役

疫（梗合三清）念合口的方言有武漢長沙雙峰溫州 y 成都 yo 合肥 yəʔ 揚州 yeʔ 蘇州 yɤʔ 陽江 wik 潮州 uk，念開口的方言有北京濟南西安建甌 i 太原 ieʔ 南昌梅縣廣州 ik 廈門 ik/iaʔ 福州 iʔ。役（梗合三清）念合口的方言有武漢長沙雙峰溫州 y 成都 yo 合肥 yəʔ 揚州 yeʔ 蘇州 yɤʔ 陽江 wik，念開口的方言有北京濟南西安 i 太原 ieʔ 南昌梅縣廣州 ik 廈門 ik/iaʔ 潮州 iaʔ 福州 iʔ 建甌 ia。

---

5 《爾雅》作齊曰青州，是營即青矣。(郝 1983：810)

4. 中古開口　廈門合口　北京開口

微部

微1　開

　　開（蟹開一咍）廈門白讀念合口 ui，北京念開口 ai。其他閩方言白讀也念合口：潮州 ui 福州 uei 建甌 yɛ。雙峰念 ue 王 (1958：82)。開作微部，但 (1980a：22，1982b) 改為脂部。

微2　衣依哀

　　衣（止開三微）廈門潮州還保留合口音 ui，北京和其他方言一樣已轉入開口。脂眞質和微文物乃開合對立，衣屬微部，上古也應讀合口，開口是後來的發展。《白虎通》衣隱陰陽對轉也可以證明衣上古念合口，[6] 隱廈門念合口音 un。

　　依（止開三微）現代方言都念開口 i，可是《說文解字》："依 倚也" (許 1979：164)，依倚微歌旁轉 (王 1982b：392)。倚廈門白讀 ua，可間接證明依上古為合口。哀雙峰白讀念 ue，建甌念 ue。

微3　幾機

　　幾機（止開三微）只有廈門話保存合口音 ui。古書的音訓說明幾的諧聲字念合口。幾 近也 (王 1982b：393)，饑饉 (王 1982b：393)。兩例都是微文對轉。近廈門音 un。堇的諧聲字古讀合口。

文部

文1　艮

　　從艮（臻開一痕）得聲的字墾根恨痕齦銀廈門念合口 un，北京念開口 ən。古書裡的異讀可以證明這些字上古念合口。[7] 艱（山開二山）上古讀合口也有音證。[8]

文2　堇

6　《白虎通》衣者隱也 (楊 1973：144)。
7　恨　悔　（文之通轉）　（王 1982b：509）
　　懇　款　（文元旁轉）　（王 1982b：504）
　　墾　悃　（疊韻）　（王 1982b：504）
　　恨　狠　（疊韻）　（王 1982b：507）
　　限　�　（疊韻）　（王 1982b：511）
8　艱　墾　（疊韻）　（王 1982b：502）
　　徐灝曰："段謂艱即墾字，其說甚精……古音艱讀若根" (王 1982b：502-503)。

從堇（臻開三眞）得聲的字勤謹堇瑾饉廈門話只有勤字念合口音 un。[9]

文3 斤

廈門話從斤（臻開三殷）得聲的字芹近斤念 un 欣念 im 掀念 ien，北京芹近斤欣念 in，掀念 ien。欣梅縣 iun 福州 yɔŋ。掀念合口的方言有武漢 yɛn/uan 長沙 yẽ 南昌 yɔn 福州 ŋɔy 建甌 yiŋ。斤的諧聲字有的已失掉了鼻音韻尾，如圻祈旂蘄頎沂（止開三微），與原來的諧聲字形成微文對轉的格局。

物部　氣愾

氣（止開三微）還保留白合口文開口的對立：廈門潮州 ui/i，福州 uei/ei 建甌 yɛ/i。北京和其他方言氣已轉入開口韻念 i。不過即使北京話裏頭還有一個喟字，念作 ui。《說文》："喟，大息也"。氣喟疊韻 (王 1982b：453)。氣喟儘管文字不同，以音義的貼合而論，其實是同源詞。愾閩南北京都讀開口韻 ai，保留 i 的韻尾。

元部

元1 山汕

山（山開二山）廈門念 uã（白）/an（文），北京念 an。汕（山開二刪）亦同。《說文》："山，宣也" (許 1979：190)。山巒疊韻，都是合口韻；《爾雅義疏·釋山》："巒，山墮" 謂山形長狹者 (郝 1983：879)。合肥仙念合口韻 yĩ。[10]

元2 干

廈門話以干（山開一寒）作聲符的諧聲字甲組白讀念合口 uã，乙組念開口（奸刊 an 軒 ien），北京話只有軒字念合口：

甲．干汗罕肝竿桿稈趕旱悍岸（山開一寒）

乙．刊（山開一寒）奸（山開二刪）軒（山開三元）

旱古讀與干同，乾字從干，古音相同 (楊 1971d：7)。廈門話干旱白讀都念合口 uã，兩者疊韻。假定合口介音的存在可以解釋岸垠音轉關係；岸垠元文旁轉 (王 1982b：557)。雙峰話溫州話源自元部的寒韻字白讀也念合口。北京話軒念合口音可能是干的

9　勤倦　（文元旁轉）　（王 1982b：506)。

10　湖南江永方言音系(黃 1988)山開一寒念合口，如單蘭單彈散慢斬販萬橫 uoɯ。梗攝咸咸中古開口也念合口，如生杏（梗開二庚）耕（梗開二耕）uoɯ，餡斬（咸開二咸）減監（咸開二銜）uoɯ。這個方言或許早期跟閩語有瓜葛。

諧聲字念合口韻的殘留。

元3　看

　　看（山開一寒）廈門念 uã（白）/an（文），北京念 an。看觀疊韻（王 1982b：550）。如假定看上古含合口介音，看觀的韻母更爲密合。

元4　鮮　癬

　　鮮（山開三仙）念合口的方言有雙峰 uĩ 合肥 yĩ 成都 yen，念開口的方言有成都廈門北京武漢梅縣南昌 ien 長沙 iɛ̃ 福州潮州 ieŋ 溫州 i 廈門潮州 ĩ 建甌 iIŋ 廣州陽江 in 蘇州 iI 濟南西安 iæ̃ 揚州 iɛ̃ 太原 ie。癬（山開三仙）念合口的方言有北京 yan 雙峰 uĩ 合肥 yĩ 成都 yen 廈門 uã 建甌 yiŋ 濟南 yæ̃ 揚州 yɛ̃，念開口的方言有成都廈門北京武漢梅縣南昌 ien 長沙 iɛ̃ 福州潮州 ieŋ 溫州 i 福州 iaŋ 建甌 iIŋ 廣州陽江 in 蘇州 iI 西安 iæ̃ 太原 ie。可以看出癬比鮮保留合口的方言多。《爾雅義疏·釋詁下》："宣蓋鮮之通借…鮮宣聲同"（郝 1983：231）。可知'鮮'古屬元部含合口介音，而'鮮'和'癬'現代方音念合口正是保存上古韻母的特性。廈門話念陽平的 tsua 可能是'癬'字鼻化音消失的結果。

元5　前　箭　煎

　　前（山開四先）廈門白讀爲 un (Douglas 1899：595)，煎（山開三仙）爲 uã，而箭（山開三仙）已轉入開口 ĩ。北京都念開口韻 ien。

元6　雚單

　　以下兩組字有相同的聲符，其基本聲符應該是合口。廈門甲組念合口 uan，乙組除蟬禪戰外其他字白讀都念作合口 uã。北京甲組念 uan，乙組念 an。

　　　　甲、雚患鸛灌觀勸歡患權（中古合口）

　　　　乙、單蟬禪彈戰（中古開口）

蟬長沙 yɛ̃ 廈門 ien/e 漳州晉州 un (Douglas 1899：431)。

元7　言

　　言（山開三元）有的閩方言還保留合口韻：福州 ŋуɔŋ 建甌 ŋyiŋ。比較日吳音 on。《釋名·釋言語》："言，宣也"（劉熙 1967），可以斷言言本爲合口。詩經裡頭

言指第一人稱的我。俞敏(1983)指出 ' 言 ' 是 ' 我 ' + ' 焉 '。閩南語第一人稱單數爲 gua 複數爲 guan。guan 或許與 ' 言 ' 有關。

元8 羨

羨（山開三仙）廈門念 uan 合肥 yĩ，北京念 ien。

元9 泉

泉（山合三仙）和線腺（山開三仙）中古一合一開，廈門都念 uã，反映諧聲合口一致的現象。北京泉念 uan，線腺念 ien，反映等韻開合之分。線建甌也念合口韻 yiŋ。

元10 戔

從戔得聲的字廈門的讀音如下：殘（山開一寒）an，棧（山開二刪）an，盞（山開二山） uã，錢 î 踐 un 賤濺 uã 淺 ien（山開三仙），箋（山開四先）ien。其中有若干個字帶合口介音。北京都念開口韻 an/ien。

5. 中古開口　廈門合口　北京合口

陽部

創瘡床莊裝妝霜爽（宕開三陽）廈門念 ŋ（白）/ɔŋ（文）。這些字聲母都是莊系中古陽韻北京變入合口念 uaŋ (李 1982：84)。

東部

雙窗（江開二江）廈門念 aŋ/iaŋ/ŋ（白）/ɔŋ（文），文讀念合口。北京念合口韻 uaŋ，中古開口江韻逢莊系也念合口韻 uaŋ。

歌部

多舵左羅蘿（果開一歌）廈門念 o，舵另有白讀音 ua/ai，北京一律念 uo。歌祭元月四部閩語白讀很多字都含合口介音，歌部中古開口韻廈門念合口就是一個例子。

6. 中古開口　廈門開口　北京合口

以下的字廈門話念開口：

宵部　爪 iau（效開二肴）

沃部　削 iaʔ 雀 iaʔ/ok（宕開三陽）濯 ak（江開二江）

覺部　學 ak/oʔ 覺 ak（江開二江）

侯部　狗猴透 au（流開一侯）

屋部　獄岳 ak（江開二江）

鐸部　碩 ik（梗開三清）

月部　薛 iɛt/iʔ（山開三仙）

北京文讀念合口：爪 ua/au 削雀學覺 ye/iau 獄岳 ye 薛 ue 狗猴透 ou 碩濯 uo。

7. 中古開口　廈門開口　北京開口

這一類的例子很多，不勝枚舉。這裏只舉一個諧聲或上古時期念合口，中古以後念開口的例子。頎蘄祈旂（止開三微）和斤芹近（臻開三殷）都是從斤得聲的諧聲字，屬文部。可是詩經時代前者可能已入微部。《詩經》頎（微部）妻（脂部）通押(周 1988：150)。頎蘄祈旂可能很早就轉入開口韻了。現代方言沒有念合口的痕跡。

8. 中古合口　廈門合口　北京合口

例子很多，從略。

三、諧聲和開合口的演變

假定諧聲字開合口原來是一致的，不一致是後來演變的結果。現代方音開合口的不一致反映語音演變的各個階段。切韻廣韻並沒依開合口作爲劃分韻類的標準。開合口是宋代等韻學依反切或當時的語音定出來的。等韻裡的開合口不可能完全反映中古音或上古音的開合口面貌。雖然等韻學裡的開合口不足以完全代表中古音的開合口，我們討論閩方言的開合口還是以等韻學家替切韻或廣韻所歸納出來的開合口作依據。不過我們需要提醒讀者體察上面所提出的問題。

根據反切下字所歸納出來的韻母是‘音類’不是‘音質’。反切下字的現代方音質可能有開合口不一致之處。廣韻寒韻字等韻作開口，一般方言也讀作開口。但閩南語白讀作合口。反切下字干寒安旱旦旰案割，白讀作合口。白讀一般代表一個方言的

固有音，文讀是移借的音。因此從文讀開口白讀合口的區別我們可以推測白讀是早期的讀音，文讀是晚起的讀音。

　　確定上古音的方法除了結合韻書的反切和現代方音外，還可以從諧聲，詩韻，古書的音注異讀入手，推定古音的系統。這方面前人已經耕耘了很久，成果豐碩。

　　上古韻部主要以諧聲和詩韻建立起來的。以諧聲為根據的最基本的假定是諧聲字語音相同或極為相近，諧聲字讀音不同是後起的演變。古書的音釋可以透露出更早的音韻特性，被註釋的詞一定是語音變了，才需要加以音釋。有的方音保存較早的語音特性，比較現代方音可以歸納出古音的面貌。

　　本節嘗試結合諧聲，古韻部，古書的音注異讀和現代閩方音推測上古音的韻母特徵及其演變的軌跡。

　　上古微（陰聲韻），文（陽聲韻），物（入聲韻）三個平行的韻部都是合口韻，與開口韻脂（陰聲韻），真（陽聲韻），質（入聲韻）三部相對。文部念合口從閩方言的現代讀音可以得到佐證。以艮為聲符的諧聲字屬文部，廈門話臻攝念合口山攝轉入開口，北京話都變為開口韻。山攝字本來也應念合口，古書的異讀支持這個說法。[11]

例字	廈門	北京	上古	中古
艮	un	ən	文	（臻開一痕）
根	un	ən	文	（臻開一痕）
痕	un	ən	文	（臻開一痕）
跟	un	ən	文	（臻開一痕）
很	un	ən	文	（臻開一痕）
狠	un	ən	文	（臻開一痕）
墾	un	ən	文	（臻開一痕）
懇	un	ən	文	（臻開一痕）

11　《書》奏庶艱食，馬融本作根食 (孔 1983：7)。《釋名・釋言語》第十二：艱根也。可以看出從艮得聲的艱上古本來念合口音以後才轉入開口。(劉 1967)

恨	un	ən	文	（臻開一痕）
銀	un	in	文	（臻開三眞）
齦	un	in	文	（臻開三殷）
艱	an	ien	文	（山開二山）
眼	an	ien	文	（山開二山）
限	an	ien	文	（山開二山）

按傳統韻部的劃分堇的諧聲字歸入文部，難的諧聲字歸入元部 (陳何 1987：122，113)，但是沈 (1985：195-197) 認爲兩者有諧聲的關係。閩南話堇的諧聲字只剩下勤字念合口，其餘已變爲開口。不過古書的聲訓還可透露出古音的一些端倪，如謹字古讀爲合口。[12] 其他堇的諧聲字亦可作如是觀。

難的諧聲字閩南話白讀爲合口，古聲訓證明這一點。[13]

例字	廈門	北京	上古	中古
堇	in	in	文	（臻開三眞）
僅	in	in	文	（臻開三眞）
瑾	in	in	文	（臻開三眞）
饉	in	in	文	（臻開三眞）
覲	in	in	文	（臻開三眞）
謹	in	in	文	（臻開三眞）
勤	un	in	文	（臻開三殷）
難	an	an	元	（山開一寒）
攤	uã/an	an	元	（山開一寒）
灘	uã/an	an	元	（山開一寒）
漢	an	an	元	（山開一寒）
嘆	an	an	元	（山開一寒）

---

12 《釋名‧釋首飾》第十五：巾謹也。巾廈門話念 un 可間接証明瑾上古念合口。(劉 1967)
13 《釋名‧釋言語》第十二：難憚也。聲符單閩南話白讀爲合口。(劉 1967)

連金發

以斤爲聲符的諧聲字一部份仍爲陽聲韻，另一部份已轉入陰聲韻，形成陰陽對轉的例子。陽聲韻變陰聲韻（即文部轉微部）可能先鼻化，鼻音韻尾消失，最後鼻化成份消失。至於合口變開口和鼻化鼻音的消失的順序很難決定。漢語第一階段的鼻化在上古時代就發生了(林 1968：83-87)。現代方音的鼻化現象可算是第二階段的鼻化。不過閩南方言的鼻化韻母也可能還含有第一階段鼻化的殘餘，如跛 pãi（比較皮番，歌元部對轉）。[14]

保留鼻音韻尾的字廈門話還有幾個字念合口，北京話全都念開口，變入陰聲韻的字也都念開口。古書的註解可證明斤的諧聲字念合口。[15]《小畜》云："月幾望"，《釋文》云："幾子夏傳作近"(楊 1971b：101)。幾微部，廈門白讀爲 ui，近文部，廈門音爲 un。兩者都是念合口。

例字	廈門	北京	上古	中古
斤	un	in	文	（臻開三殷）
近	un	in	文	（臻開三殷）
芹	un	in	文	（臻開三殷）
掀	ien	ien	文	（山開三元）
欣	im/in	in	文	（臻開三殷）
祈	i	i	文	（止開三微）
旂	i	i	文	（止開三微）
頎	i	i	文	（止開三微）
蘄	i	i	文	（止開三之）

中古止攝支韻有一部份來自上古歌部，歌部前賢已論證過古讀爲低元音，閩方言的白讀歌部字部份保留上古低元音的特性。上古音裡有歌部和寒元部對轉的現象。元部閩南音白讀韻母爲鼻化的合口介音+低元音。歌部白讀念法相同，只不過沒有鼻化成份。

14 但有些閩南語又向前推進一步，使鼻化成份消失，上古時期曾發生的鼻化音失落的音變又重演了，如雷州半島遂溪方言 (Yue-Hashimoto 1985) 和海南島閩南語 (雲 1987) 中相當於廈門話的鼻化韻母鼻音已消失和陰聲韻合流了，不過丁 (1986) 所記錄的海南儋州村話並沒鼻化韻母。
15 欣廈門白讀爲 im 可能另有來源。旂和旗都見於《說文解字》(許 1979：140)。兩者意指不同種類的旗子。後來旗變成通名，旂逐漸廢棄不用。

以皮爲聲符的諧聲字屬歌部廈門話白讀含合口介音。古書有歌元對轉的例子，可作合口介音的旁證。[16]

皮	ue/e	（止開三支）
疲	i	（止開三支）
被	ue/e	（果合一戈）
波	o	（果合一戈）
跛	ãi	（果合一戈）[17]
坡	o	（果合一戈）
破	ua/o	（果合一戈）
彼	i	（止開三支）
披	ua/a/i	（止開三支）
頗	o	（果合一戈）

從也得聲的諧聲字閩南語白讀也含 u 介音：

也	ia	（假開三麻）
地	ue/e/i	（止開三脂）[18]
迤	i	（止開三支）
施	ua/i	（止開三支）　比較世 ua/e/i（月部）
弛	i	（止開三支）
它	a	（果開一歌）[19]
蛇	ua/ia	（假開三麻）（羊者切；食遮切）
		（止開三支）（弋支切；（蜲蛇））
舵	ua/ia/o	（果開一歌）
拖	ua	（果開一歌）
池	i	（止開三支）

從奇得聲的諧聲字閩南語白讀只有倚字含 u 介音。《老子》禍倚押韻。（朱1980：151-153）兩字都屬歌部，潮州話都念 ua。禍（果合一戈），倚（止開三支

16　皮或作繁，披或做藩，番或作皮(楊 1971b：112-114)。
17　跛含鼻化音，可能是元部變歌部的殘餘。不過閩南語的有些鼻化音原來聲母不是鼻音韻母也沒有鼻音韻尾，如他 tã，醛 kã，怕 p'ã，否 p'ãi，廝 sã(李 1989：279)，可能是類推作用的結果。
18　地籀文作墜，墜（止合三脂）從豕（山合一桓）得聲。(楊 1971b：111)
19　也古音它，也和它相通。(楊 1971b：111)

）。倚中古屬支韻表示已從歌部分出與支部合流。這些諧聲字都是三等韻。多數字轉入開口韻，可能是受到 i 介音的影響。這是閩方言文讀的特性。

奇	ia/i	（止開三支）
寄	ia/i	（止開三支）
騎	ia/i	（止開三支）
徛	ia/i	（止開三支）
倚	ua/i	（止開三支）
椅	i	（止開三支）

從我得聲的諧聲字閩南語白讀只有我字含 u 介音。我和言應是同源詞，兩者都含合口介音。言福州建甌方言還帶合口介音。

我	ua/o	（果開一歌）[20]
鵝	ia/o	（果開一歌）
餓	o	（果開一歌）
俄	o	（果開一歌）
蛾	o	（果開一歌）
蟻	ia	（止開三支）
義	i	（止開三支）
議	i	（止開三支）

從多得聲的諧聲字閩南語白讀都不含合口介音：

多	o	（果開一歌）
移	i	（止開三支）
黟	i	（止開三脂）
宜	i	（止開三支）
侈	i	（止開三支）
爹	ia	（假開三麻）
迻	i	（止開三支）

20　《爾雅·釋詁》云："言我也"。言我，元歌對轉。言與閩南語的複數第一人稱代名詞 guan 有關。

但從古書的音釋還可以推測出含有合口介音。《說文解字》："徙迻也"(許 1979：40)。徙支部，迻歌部。詩經歌支界限劃然，但到東漢韻文支歌互押的情形很普遍(羅周 1958：24-28)。徙閩南語白讀為 sua，迻上古也可能念 sua，迻的聲母是喻四以母，喻四閩語可以念 s-，如蠅 sin。此外，《爾雅·釋詁》下："遷，運徙也"(郝 1983：271)。我認為這不只是義訓，而且是音訓。《爾雅義疏》有這樣的註解："遷，徙也。移即徙也。遷或作還，還讀若旋。運徙也，運旋也。"(郝 1983：271-272)。請比較遷徙運移旋的廈門音和上古中古音類：

遷	ien	文部	（山開三仙清）
徙	ua	支部	（止開三支心）
運	un	文部	（臻合三文云）
移	i	歌部	（止開三支以）
旋	ŋ/uan	元部	（山合三仙邪）

這些字可能有同源的關係，韻母含有合口介音。

從垔得聲的諸聲字有一派（段玉裁，朱駿聲，王力）歸文部，有一派（董同龢）歸眞部（陳何1987：379）。如果接受前一派的歸類，可以解釋'煙'何以閩南語念 hun（一般寫作訓讀字'薰'），煙的文讀 ien 已轉入眞部，可是白讀仍保留文部合口的特性。不過把煙認定為 hun，必須解釋影母何以念做 h-。同理，'塵'也應歸入文部（陳何1987：379-380）。塵閩南語白讀為 t'un，反映文部的特性，文讀為 tin，表示已與眞部合流。如果以上的說法可以成立，那麼以下的字的韻母上古帶合口介音：

遷	ien	（山開三仙清）
僊	ien	（山開三仙心）（仙）（合肥　仙　yĩ）
煙	un/ien	（山開四先影）
甄	in	（臻開三眞章）

四、切韻和廣韻韻目的排列

切韻和廣韻並不按開合口分韻類。開合口的區分是等韻學家的概念。等韻學家劃分開合口可能是以宋代的語音爲基礎。切韻和廣韻所記錄的語音是隋唐或隋唐以前的語音。語言是隨時間而改變的，韻母的開合也因時間而推移。我們可以從切韻和廣韻韻目的排列推斷韻母開合的大勢。衆所周知，切韻和廣韻韻目的排列有若干差異，其中有一點經常提到的是，廣韻臻攝三等分眞諄，山攝一等分寒桓，果攝一等分歌戈；切韻只有眞寒歌三韻 (Chao 1941，方羅 1988：57，Karlgren 1988)。試比較切韻和廣韻臻山兩攝的韻次：

刊謬補缺切韻 (龍 1968)

眞　　臻　文　殷　元　魂　痕　寒　　刪　山　先　仙

廣韻

眞諄　臻　文　欣　元　魂　痕　寒桓　刪　山　先　仙

一般照等韻的歸類，眞寒歌爲開口，諄桓戈爲合口。切韻不分，表示眞寒歌三個韻都含開合口韻母。其實廣韻韻目也不完全按開合排列，比如羅常培曾指出眞韻還殘留有合口字 (劉 1936：81)。董同龢從切韻反切下字歸納出眞韻分三類：開口音一類，合口音分兩類。廣韻眞諄兩韻的反切下字似也都分兩類：(董 1974c：118-119)

反切下字表

切韻眞韻　　開口　　　鄰珍眞人賓旻

合口　a.　倫屯脣勻遵純春旬均

b.　筠囷

廣韻眞韻　　開口　a.　鄰人眞診賓

b.　銀巾

廣韻諄韻　　合口　a.　倫筠巾贇

b.　倫勻綸脣旬沌

從廈門音或泉州音看來,切韻中殷韻(即廣韻欣韻)有不少的字仍念合口,如芹殷勤齦近斤筋隱 un,與文韻無異。這多少可以從韻次看出,韻次似乎反映較早的語音格局。

唐代臻攝殷韻已變入眞韻,可是切韻中殷韻(或廣韻欣韻)還是放在文韻之後,反映出兩者語音很相近。[21]

現存切韻韻目的註解反映了方音的差異和切韻的綜合性質 (周 1981:434-473) (Chang 1979,張 1987:25-34)。唐寫全本《王仁煦刊謬補缺切韻》的韻目中殷韻按語說"陽杜與文同,夏侯與臻同,今並別" (周 1981:449)。這表示,和閩南語一樣,陽休之和杜台卿殷和文無別,夏侯詠則殷韻已轉入臻韻。殷(中古三等)變臻可能是受到前高介音的影響。

痕魂之分並無所本 (周 1981:455-456)。等韻痕作開口魂作合口。所以二分可能是有些方言痕韻已轉入開口。可是痕魂兩韻上古都是文部。痕白讀閩方言還保留合口音,與魂無別。

臻攝一等痕魂本無開合之分,三等殷文也沒開合之別。等韻學家把殷(或廣韻欣韻)當開口,文韻當合口。可是這兩個韻都是來自上古的文部,閩南語兩韻白讀都念合口,可以斷言殷韻念開口是後來演變的結果。

廣韻分寒桓,切韻不分,寒韻涵蓋寒桓兩韻。閩語白讀層寒桓韻都念合口音,可能表示寒桓(上古爲元部)古讀合口音。切韻殘卷《裴務齊正字本·刊謬補缺切韻》的韻次中寒魂痕放在一起,表示寒與魂痕語音相近:(周 1984)

 眞 臻 文 斤 登 寒 魂 痕 先 仙 刪 山 元

刊謬補缺切韻山攝元韻放在臻攝殷韻和魂痕之間,而不和山攝刪山先仙韻放在一起,也表示元韻接近兩旁臻攝的韻;元韻有按語道"陽夏侯杜與魂同…",元韻中古開口福州建甌話白讀還殘留合口音,如建憲獻 yoŋ(福州)/yiŋ(建甌)。軒也是中古開口元韻字,至今北京話還念合口。

蟹攝去聲韻次也反映了各韻之間的親疏關係。泰霽祭中古開口廈門話白讀都念合

---

21 《音韻闡微》裡頭說,按唐詩殷/欣多與眞同用(王 1958:97)。如杜甫的詩裡,欣與眞諄押韻(王 1980c:51)。

口。刊謬補缺切韻泰霽祭放在一起恐怕不是偶然的。廣韻把泰挪到霽祭和卦之間，可能表示泰已逐漸轉入開口。

切韻歌戈不分，一律作歌。歌置於麻之前，歌麻兩韻閩語白讀都念合口。

總之，臻攝三等殷文，山攝一等分寒桓，果攝一等分歌戈，蟹攝三等去聲泰韻各韻等韻都分開合，每對韻中古開口閩語白讀都念合口，跟相配的合口韻無別。可見切韻韻次和韻目有一定的語音基礎。

五、詞匯擴散和開合口的演變

傳統一般以為語音的演變是由一個音類一下子完全變為另一音類，没有例外。也就是說，一個音類不管有多少個字，那些字要變，就通通一霎那間變過去，毫不拖泥帶水的。約言之，語音演變，語音是漸變，詞匯是突變。可是深入的考查語音的演變，常常發現很多例外的現象，這種例外的現象向來用類推作用或方言混和來解釋。二十多年前王士元提出了詞匯擴散論，對語音演變作動態的解釋。[22] 詞匯擴散論的主要論點是在音變上加入時間的幅度，與傳統新語法學派看法相反，詞匯擴散論者認為語音是突變，詞匯是漸變。由一個音類變為另一音類需要一段時間才能完成，時間可長可短，音類的轉變是透過該音類裏頭的詞匯逐漸過渡過去。過渡的過程可以分成三個階段：同一音類的詞有的未變，有的未變和已變的形式並存，有的已經變走了。如果全都變了，就成了一般所謂的規律音變。但是音變常常變到一半，變的動力消耗盡了，中途夭折了，留下未變的殘餘。從這個觀點音變的例外，一點也不奇怪。例外是語音演變未完成的結果。漢語同音字很多，正可以提供詞匯擴散論的經驗證據。

美國結構學派忽視語言接觸所造成的結構變化。[23] 詞匯擴散論提出之時，學術界還籠罩在這種觀念下。從當時的結構學派的觀點來看，一個語言是一個單一的同質個體，不可能容許有兩個以上的音系並存。當時詞匯擴散論在這種觀念的影響下，其理論基礎建立在一個音系的內在演變上。內在結構的演變似與方言混合所帶來的並存音

22　Wang (1969) 提出詞匯擴散論之後其理論又陸續得到進一步的發展，如 Chen (1972)、Chen and Wang (1975)、Hsieh (1973)等。後來這一系列的論文收入 Wang (1977) (ed.)。有關詞匯擴散論的最近的發展請參閱 Labov (1981)、Shen (1990)、Wang (1979、1982、1989)。

23　但是也有少數的例外，如 Fries and Pike (1949)。近年來語言接觸所發生的語言內部結構的變化引起了學界廣泛注意和討論，如 Van Coetsem (1988)、何 (1988)、Wang (1989)等。

系相排斥。[24]

我認爲兩者並不相衝突，可以調和起來。漢語南方方言，尤其是閩方言，方言層次格外豐富。這是誰都無法否認的事實。我曾經提出音變的二階論來調合語言接觸和內在結構音變：(1) 語言接觸帶來並存的音系，(2) 音系並存一段時間後開始互相影響，從並存的音系逐漸整合爲單一的同質音系。[25]整合過程是通過詞匯擴散論達成的。舉個簡單的例子。松字爲上古東部。東部廈門話文讀韻母爲合口 ɔŋ/iɔŋ，白讀爲開口 aŋ/iŋ。廣韻松有兩個反切："思恭切"和"詳容切"。前者爲文讀音，屬北方音系，後者白讀，屬南方音系。松廈門話有兩個讀音 siɔŋ 1b（聲韻爲文，調爲白），tsiŋ 1b（聲韻調皆爲白）。從兩字的聲韻可以看出文白之分，可是反切明明顯出陰調爲文讀屬北方系統，陽調爲白讀屬南方系統。廈門話松的文讀音念陽平一定是受到白讀聲調的影響。

以下我們以源自上古文部的臻攝開口韻和兩個合口字的演變作例子，爲詞匯擴散論提供佐證。韻目、例字、例字的現代方音羅列如下：（一個字如有兩個讀音，前者爲白讀，後者爲文讀）[26]

（臻開一痕）　　　墾懇痕吞根恩恨
（臻開三殷）　　　殷勤隱芹近斤筋
（臻開三眞）　　　忍刃巾銀塵
（臻合一魂）　　　穩
（臻合三諄）　　　尹

24　Cheng and Wang (1972) 對潮州話中古濁去字讀入陽上陽去的現象作出詞匯擴散的解釋。Egerod 1976、1982 和 Ting 1978 分別從方言層次的觀點提出了批評。連 (1989) 提出音變二階論從雙向擴散的觀點指出方言層次和詞匯擴散論並無相悖之處。潮州話及其他方言的濁上變去是透過詞匯逐漸完成的。除了 Cheng and Wang (1972) 外，Sung (1973) 也從詞匯擴散論的觀點研究閩南話的文白異讀的現象。

25　參見 Lien (1989)。臺灣通俗道藏也可以看出土俗的固有系統和典雅的外來系統的整合現象。參見 Lien (1990b)。

26　表中漳州參考佚名 (1987：139-144)。我相信《渡江書十五音》所記錄的是漳州或近於漳州的音系。欣忍矜刃一般歸文部。可是閩南語文讀音 im，也許應歸侵部。是否代表方音的差異，值得深究。

連金發

例字	廈門	漳州	福州	建甌	梅縣	北京
吞	un	un	ouŋ	ɔŋ	un	un
恩	un	in	ouŋ	aiŋ	ɛn	ən
根	un	in	yŋ/ouŋ	yiŋ	ɛn	ən
跟	un	in	yŋ/ouŋ	aiŋ	ɛn	ən
恨	un	in	auŋ	aiŋ	ɛn	ən
痕	un	un	ouŋ	ɔŋ	ɛn	ən
墾	un	un	ouŋ	ɔŋ	ɛn	ən
懇	un	un	ouŋ	ɔŋ	ɛn	ən
斤	un	in	yŋ	œyŋ	in	in
芹	un	in	yŋ	eiŋ	iun	in
近	un	in	∅yŋ	yiŋ	iun	in
筋	un	in	yŋ	yiŋ	in	in
殷	un	un/in	yŋ	eiŋ	iun	in
勤	un	un/in	yŋ	eiŋ	iun	in
隱	un	un/in	yŋ	eiŋ	iun	in
塵	un	un/in	iŋ	eiŋ	ən	ən
巾	un	in	yŋ	œyŋ	in	in
銀	un	in	yŋ	œyŋ	iun	in
忍	un/im	un/im	uŋ/yŋ	eiŋ	iun	ən
刃	im	im	uŋ/yŋ	eiŋ	iun	ən
穩	un	un	uŋ	ɔŋ	un	un
尹	un	in	yŋ	eiŋ	iun	in

　　上古文部本來念合口，其中臻攝開口韻閩方言（閩北建甌方言、閩東福州方言和閩南廈門方言）和客家梅縣方言不同程度的保留合口韻，反映了上古的韻母特性，絕大多數的方言，這些個韻都已轉入開口。等韻學家以之爲開口，反映了中古某些方言的體系，至遲到唐代這個音變已經發生了。

　　福州，建甌，梅縣，北京的現代音反映臻攝開口一三等分立的格局。廈門，漳州

沒有一三等的對立。就合口韻過渡到開口韻的演變而言，廈門，福州，建甌基本上保存了上古合口的特性。漳州，梅縣變了一半，北京幾乎已完全轉入開口。一等韻的吞字在這六個方言中都還念合口，不過有一派方言，如西安太原武漢成都合肥揚州蘇州溫州長沙雙峰南昌廣州陽江，念爲開口。等韻把此字定爲開口，一定是根據這一派的方言。有兩個中古合口字：穩（一等），尹（三等）。穩還念合口，尹有的方言則已變爲開口，可能是中古以後的發展。穩和隱諧聲。穩合口一等，隱開口三等。兩者都是文部字，上古都念合口。隱念入開口是受到前高非圓唇介音影響。三等韻有-i-介音應該是沒有疑問的。如果假定三等合口變開口的過程是 iun ---> in，則客家話保存了變化前的階段。廈門話可能元音 u 較強，把介音蓋了過去。不過爲什麼漳州話一等也變成 in，是否也是介音的影響？這個問題值得進一步研究。

以上我們討論條件音變和沒有條件的音變。光看條件音變並不能給詞匯擴散論提供佐證。沒有語音條件且是音類相同才能算是確鑿的証據。這裏同一音類的參差發展正是詞匯擴散論所說的音變的過渡階段。前頭是未變的階段，後頭是已變的階段。

六、結　語

由於特殊的歷史地理因素閩方言長期以來演變成一個獨特的音韻體系。開合口和其他方言的分歧表現出閩方言的特色。作者不厭其煩的論證閩方言某些韻類的合口音保存了上古的合口特性。就總的趨勢來看，閩方言較能反映上古韻部開合對立的格局。音韻學家早已指出，脂質眞和微物文兩組韻部開合對立 (王1958：97，1980b，1982a)。閩南廈門話衣幾（微部）氣（物部）艮斤（文部）還保留上古的合口特性。閩方言歌祭月元白讀念合口，可能表示上古這一組合口韻多。以雙唇音作韻尾的韻部緝侵盍談與合口介音互相排斥，但是如果唇音韻尾已變入其他的發音部位就不在此限，如犯 uan 乏 uat。以軟顎音作韻尾的韻部支錫耕可算開口韻，在閩方言仍念開口，不過陰聲韻支部已開合互見。宵沃，幽覺冬，侯屋東三組閩方言白讀開口文讀合口，之職蒸，魚鐸陽開合參差。

我們以上古韻部作間架探討閩方言開合口的演變，主要著眼於音韻系統中聲類的

對立性和平行性，[27] 這種音韻結構的概念清代古韻學家已經發現了。他們把韻部歸納爲陰陽入三類；具有共通的元音的一組陰陽入韻母，其韻尾發音部位相同，因此可以互相轉換，這是同一組的陰陽入韻母的平行性。語音固然隨著時間的遷移而轉變，音類有分化也有融合，可是其基本的平行格局還是不容易破壞的。閩方言開合口的演變和其他類型的演變一樣表現了這個特性。

上文第三章已經指出等和開合口是宋代等韻學家對代表中古音的切韻或廣韻音系的分類，等韻的歸類可能是依據當時的方音，因此不可能完全反映中古音系的面貌。比較韻書和現代方音容易看出開合口不一致的現象。開合口不一致是語音演變的結果。各個方音反映各個歷史發展的階段，方音的比較可以重建語音的發展史。本文參酌諧聲，上古中古韻類，古書音註和現代方音論證了閩方言的開合口特性，尤其注意其合口的存古性。如果閩方言合口的存古性可以成立的話，那麼我們對一向被接受的四等劃分就有檢討的必要。例如第五章討論的文部臻攝中古開口韻的演變。我們發現北京話反映了中古一三等對立的格局，不過閩語漳州系中上古的合口韻雖也逐漸過渡到開口韻，可是一三等的反映都一樣。像這樣不遵循等的區分的演變在閩語俯拾皆是，值得深入的研究。判斷一個理論的優劣要看這個理論可以解釋多少的現象。我希望以後拿這裏所得的結論來解釋其他的音韻現象，看看行不行得通。

李 (1971) 的上古音系統沒有開合口的區分。如果閩方言和其它漢語方言一樣都是由同一個上古的音系演化而來，那麼閩方言開合口的特異性應該得到合理的解釋，除非我們假定閩方言的早期發展曾受過非漢語的底層影響。

參 考 文 獻

北京大學中國語言文學系，語言學教研室（編）

　1989　漢語方言字匯，文字改革出版社。

陳復華、何九盈

27　有關音類的對立性和平行性請參閱 Trubetzkoy (1939)。有關語音演變分化融合的各種類型請參閱 Jakobson (1931)。

1987　古韻通曉，中國社會科學出版社。

丁邦新

1986　儋州村話，中央研究院歷史語言研究所專刊之八十四。

丁聲樹（編）

1981　古今音對照手冊，李榮參訂，北京：中華書局。

董同龢

1959　四個閩南方言，中央研究院歷史語言研究所專刊 30：729-1042。

1974a　與高本漢商榷〔自由押韻說〕兼論上古楚方言特色，丁邦新（編）董同龢
先生語言學論文選集：1-12，食貨出版社。

1974b　廣韻重紐試釋，丁邦新（編）董同龢先生語言學論文選集：13-32，食貨出
版社。

1974c　全本王仁煦刊謬補缺切韻的反切下字，丁邦新（編）董同龢先生語言學論
文選集：101-112，食貨出版社。

1975　上古音韻表稿，中央研究院歷史語言研究所單刊甲種之二十一，台聯國風出
版社。

董同龢、趙榮琅、藍亞秀

1967　記臺灣的一種閩南話，中央研究院歷史語言研究所專刊甲種之二十四。

方孝岳、羅偉豪

1988　廣韻研究，中山大學出版社。

郭錫良

1986　漢字古音手冊，北京大學出版社。

郝懿行

1983　爾雅義疏，上下，上海古籍出版社。

何大安

1988　規律與方向：變遷中的音韻結構，中央研究院歷史語言研究所專刊之九十，
中央研究院歷史語言研究所。

連金發

何九盈、陳復華

1987　古韻三十部歸字總論，中國音韻學研究會（編）音韻學研究，第一輯：207-
　　　252，中華書局。

黃雪貞

1988　湖南江永方言音系，方言 3：161-176。

高本漢

1948　中國音韻學研究（趙元任　李方桂　羅常培合譯），台灣商務印書館。

孔廣森

1983　詩聲類，附詩聲分例，北京：中華書局。

李方桂

1971　上古音研究，清華學報 9.1-2：1-61。

1984　論開合口──古音研究之一，中央研究院歷史語言研究所集刊 55：1-7。

李　榮

1952　切韻音系，語言學專刊第四種，中國科學院。

1982　音韻存稿，北京：商務印書館。

李如龍

1989　閩南方言的"相"和"廝"，方言 4：277-280。

林語堂

?1968　語言學論叢，文星書局。

劉　復

1936　十韻彙編，1963　台北翻版。

劉　熙

1967　釋名，藝文印書館。

陸　游

1982　老學庵筆記，台北：木鐸出版社。

羅常培、周祖謨

1958　漢魏晉南北朝韻部演變研究，科學出版社。

羅季光

    1986   廣韻開合口分韻說質疑，音韻學研究，第二輯：83-87，中華書局。

龍宇純

    1968   唐寫全本王仁昫刊謬補缺切韻校箋，香港中文大學出版社。

邵榮芬

    1982   切韻研究，中國社會科學出版社。

沈兼士

    1985   廣韻聲系，全二冊，中華書局。

唐作藩

    1982   上古音手冊，江蘇人民出版社。

王靜如

    1941   論開合口，燕京學報 29：143-192。

    1948   論古漢語之顎介音，燕京學報 35：51-94。

王　力

    1958   漢語史稿，修訂本，科學出版社。

    1980a 詩經韻讀，上海古籍出版社。

    1980b 南北朝人詩人用韻考，龍蟲並雕齋文集，第一冊：1-62，北京：中華書局。

    1980c 漢語音韻，北京：中華書局。

    1982a 古韻脂微質物月五部的分野，龍蟲並雕齋文集，第三冊：56-92，北京：中華書局。

    1982b 同源字典，北京：商務印書館。

廈門大學中國語言文學研究所漢語方言研究室

    1982   普通話閩南方言詞典，三聯分店香港分店。

許　慎

    1979   說文解字，北京：中華書局。

嚴一萍（選輯）

    1967   江氏音學十書，（二）楚辭韻讀，藝文印書館。

連金發

楊家駱（編）

　1973　白虎通疏證十二卷，清陳立撰，經義雜記十卷，清臧琳撰，台北：鼎文書局。

楊樹達

　1971a　之部古韻證，積微居小學金石論叢卜辭求義：89-96，臺灣大通書局。

　1971b　古音對轉疏證，積微居小學金石論叢卜辭求義：96-148，臺灣大通書局。

　1971c　古音哈德部與痕部對轉證，積微居小學金石論叢卜辭求義：148-154，臺灣
　　　　　大通書局。

　1971d　積微居小學述林耐林廎甲文說，臺灣大通書局。

佚　名

　1987　渡江書十五音，東京外國語大學亞非言語文化研究所。

殷煥先

　1962　反切釋例，中國語文 8/9：384-392。

俞　敏

　1983　〈詩〉〝薄言〞解平議，中國語言學報，第一期：160-166。

余迺永（校著）

　1970　互註校正宋本廣韻，台北：聯貫出版社。

喻世長

　1984　用諧聲關係擬測上古聲母系統，中國音韻學研究會（編）音韻學研究，第一
　　　　　輯：182-206，中華書局。

雲惟利

　1987　海南方言，澳門東亞大學。

張光宇

　1990　切韻與方言，台灣商務印書館。

張　琨

　1984　論比較閩方言，中央研究院歷史語言研究所集刊 55：415-458。

　1987　漢語音韻史論文集，張賢豹譯，聯經出版事業公司。

　待刊　再論比較閩方言，中央研究院歷史語言研究所集刊。

中國社會科學院語言研究所（編）

　　1981　方言調查字表，北京：商務印書館。

周斌武（選註）

　　1988　中國古代語言學文選，上海古籍出版社。

周祖謨

　　1981　問學集，上下冊，北京：中華書局。

　　1984　論裴務齊正字本<刊謬補缺切韻>，傅懋勣、周定一、張壽康、羅愼儀（編）
　　　　　羅常培紀念論文集：271-280，北京：商務印書館。

朱駿聲

　　1975　說文通訓定聲，藝文印書館。

朱情牽（編釋）

　　1980　老子釋譯，台北：里仁書局。

Baldi, Philip and Ronald N. Werth. (eds.)

　　1978　Readings in Historical Phonology: Chapters in the Theory of Sound Change. University Park and London: The Pennsylvania State University Press.

Chang, Kun.

　　1974　"Ancient Chinese and the Ch'ieh-yun." The Tsing Hua Journal of Chinese Studies (New Series) 10: 2. 61–82.

　　1975　"Dialect Variations in Chinese Historical Phonology." Bulletin of Institute of History and Philology, Academia Sinica 46. 631–35.

　　1979　"The Composite Nature of the Ch'ieh Yun." Bulletin of Institute of History and Philology, Academia Sinica 50. 35–43.

Chao, Yuenren.

　　1941　"Distinctions within Ancient Chinese." Harvard Journal of Asiatic Studies. 5. 203–233.

Chen, Matthew Y.

　　1972　"The Time Dimension: Contribution toward a Theory of Sound Change." Foundations of Language 8. 457–498. Reprinted in Wang, ed. 1977. 197–251.

連金發

Chen, Matthew Y. and William S-Y. Wang.

   1975 "Sound Change: Actuation and Implementation." Language 51. 255-81.

Cheng, Chin-chuan and William S-Y. Wang.

   1972 "Tone Change in Chao-zhou Chinese: A Study in Lexical Diffusion." Papers in Linguistics in Honor of Henry and Renee Kanhane 99-113. Reprinted in Wang, ed. 1977. 86-100.

Douglas, Carstairs.

   1899 Chinese-English Dictionary of the Vernacular Language of Amoy. London: Publishing Office of the Presbyterian Church of England.

Egerod, Soren.

   1976 "Tonal Splits in Min." Journal of Chinese Linguistics 4. 108-11.

   1982 "How not to Split Tones --- The Chaozhou case." Fangyan 3. 169-73.

Fries, Charles C. and Kenneth L. Pike.

   1949 "Coexistent Phonemic Systems." Language 25. 29-50.

Hsieh, Hsin-I.

   1973 "A New Method of Dialect Subgrouping." Journal of Chinese Linguistics 1. 64-92. In Wang, ed. 1977. 159-196.

Jakobson, Roman.

   1931 "Prinzipien der Historischen Phonologie." TCLP 4. 247-267. (Engl. transl. in Baldi and Werth 1978).

Karlgren, Bernhard.

   1988 Compendium of Phonetics in Ancient and Archaic Chinese. Reprinted by Southern Materials Center, Inc.

Labov, William.

   1981 "Resolving the Neogrammarian Controversy." Language 57. 267-308.

Lien, Chinfa.

1989 "Competing Tone Changes in Chaozhou." Paper presented at the Eighth Work-shop on Chinese Linguistics, Project on Linguistic Analysis, University of California at Berkeley, March 20-21.

1990a "Competing Final Systems in the Jian'ou Dialect." Tsing Hua Journal of Chinese Studies. New Series 20. 1-53.

1990b "Levels of Language in Taoist Liturgical Texts." Paper presented at Conference on the Rituals and Scriptures of Chinese Popular Religion, Bodega Bay Lodge, San Francisco, California. January 3-7.

Shen, Zhongwei.

1990 "Lexical Diffusion: A Population Perspective and a Mathematical Model." Journal of Chinese Linguistics 18. 159-201.

Sung, Margaret M. Y.

1973 "A Study of Literary and Colloquial Amoy Chinese." Journal of Chinese Linguistics 1. 414-436.

Ting, Pang-hsin.

1978 "A Note on Tone Change in the Ch'ao-chou Dialect." Bulletin of the Institute of History and Philology, Academia Sinica, 50. 257-71. Taipei.

Trubetzkoy, N. S.

1939 "Grundzuge der Phonologie." TCLP 7. English Version, trans. C. Baltaxe (1969). Principles of Phonology. Berkeley: University of California Press.

Van Coetsem, Frans.

1988 "Loan Phonology and the Two Transfer Types in Language Contact. Dordrecht, Holland: Foris Publications.

Wang, William S-Y.

1969 "Competing Sound Change as a Cause of Residue." Language 45. 9-25.

1977 (ed.) The Lexicon in Phonological Change. The Hague: Moulton.

連金發

1979　"Language Change----A Lexical Perspective." Annual Review of Anthropology 8. 353-71.

1982　"Variation and Selection in Language Change." Bulletin of the Institute of History and Philology, Academia Sinica, 53. 495-519. Taipei.

1989　"Theoretical Issues in Studying Chinese Dialects." Keynote speech presented at the First Northeast Conference on Chinese Linguistics, Columbus, Ohio.

Yue-Hashimoto, Anne O.

1985　The Suxi Dialect of Leizhou--- A Study of its Phonological, Lexical and Syntactic Structure. The Ng Tor-tai Chinese Language Research Centre. Institute of Chinese Studies. The Chinese University of Hong Kong.

On the kai-he distinction in Min dialects

Chinfa Lien

Institute of Linguistics

National Tsing Hua University

This paper falls into six sections: 1. introduction; 2. the evolution of the kai and he finals and their dialectal divergence of which eight patterns showing the agreement and discrepancy among Middle Chinese, Xiamen and Beijing regarding the kai-he distinction are identified; 3. phonetic compounds and the development of the kai and he finals: phonetic compounds, sound glosses of ancient texts, and modern sound values are pooled to grasp the traits of the Old Chinese final system and trace the path of its development; 4. a collation of an array of rime categories of Qie-yun and Guang-yun: we assess the phonetic values of rime categories in light of the order of their arrangement; 5. the theory of lexical diffusion and the evolution of the ke-he finals: from the modern reflexes of a series of phonetic compounds it is evident that the development of the kai-he finals is not accomplished overnight, but proceeds in a lexically gradual manner; 6. conclusion: scanty attention has been paid to the kai-he distinction in the reconstruction of the Old Chinese final system. It is hoped that the issues that emerge in our study of the development of the kai-he finals in Min dialects will form points of departure for the revision of the Old Chinese phonological system in the future.

甘肅漢語方言的特點·
—— 關於夏河（拉卜楞）話的語言接觸

中島幹起
（日本、國立亞非語言文化研究所）

一

　　甘肅當地使用的漢語稱爲「秦隴話」，屬於北方話中西北官話的一種。甘肅內部方言的差別，大致以永登爲界線，河東和河西有很大的區別。河東以蘭州爲中心，包括隴東，隴南，隴西，大夏河等地的分支。在河西漢族主要分布在沙漠中的河西綠州部分。河西地區的敦煌屬於河東方言系統，成爲一個方言島。[1]

　　西北地方的漢語方言都有很多具有當地特點的語言結構。西北地方的人大多數認爲自己所使用的語言是北方話。當地人除了當地話以外，目前由於教育的普及，不少人可以使用普通話。但是，如果對甘肅各地的漢語做深入的研究，就會明顯地發現它們與一般的北方話有相當大的區別。作者曾經在蘭州做過實地調查，發現了位於騰格里沙漠的民勤縣的土語中，用雙脣振動而發出的奇妙的語音([tprrr] trill vibratory) 現象。[2]作者也發現了北方官話中的捲舌音的聲母zh-、ch-、sh-、r-,在蘭州一帶被發做pf-、pf'-、f-、v-, 而在河西走廊綠州地區的張掖一帶都被發成k-、k'-、f-、v-。[3]

二

　　本稿打算對甘肅夏河縣（拉卜楞）的漢語方言的語法特徵做一些論述。

　　夏河縣是屬於甘肅藏族自治州的一個縣。距蘭州三百公里，位於青藏高原的東南部，大夏河上游，海拔三千米。甘南藏族自治州管轄夏河、碌曲、瑪曲、卓尼、臨潭、迭部、舟曲七個縣。總人口五十二萬，其中以藏族爲主共二十三萬，另外還雜居著回族和漢族等民族。甘南地區通用語言是藏語安多方言和康方言兩種。

　　夏河一帶古爲氐、羌之地。藏族從很久以前就在甘肅南部以及青海東部居住，可以稱爲這一帶的土著居民。其中包括早在公元七世紀吐蕃國繁榮時，被拉薩中央政權派來駐守東方並從此在此地居住下來的士兵的後裔。

　　夏河縣以拉卜楞寺而著名。它建於清代康熙四十八年 (1709)。拉卜楞寺院建成之後，逐步形成爲各族群衆物資交流集散地和宗教活動的中心，被稱爲第二個拉薩。

　　夏河縣總人口十二萬，百分之七十是藏族，他們操安多方言。安多方言無聲調。另外也居住著漢族（占百分之十），回族（占百分之六），撒拉族和蒙古族。在當地的藏民小學，藏民子弟同時接受漢語和藏族的兩種語言教育，特別是側重於漢語能力的培養。在佛學院修行的藏族年輕僧侶，已經成爲很好的雙語使用者。但是，根據作者的觀察，一般的藏民幾乎不懂漢語，相反的是漢民、回民不論老少都可以掌握日常會話程度的藏語。

<div align="center">三</div>

　　在這種藏族占多數的社會中，屬於少數派的漢族和回族的語言——漢語，由於受其影響「藏化」(Tibetanization) 現象很明顯，其中有很多是在深層的語言構造上的變化。語言構造的變化，總的來講可以在音韻，詞彙，語法上表現出來。

　　在音韻方面，夏河地區的漢語，已經脫離了「聲調語言」類型。聲調只有兩種。讀單字的時候，有甲：〔343〕和乙:〔53〕音值的兩種音調。甘肅各地方言大都有三種聲調。像夏河地區這種語音現象是很少有的。如表：

音調 音節	甲：[343]	乙：[53]
pi	碑鼻筆	比被備
p'i	批皮避	屁倍
ti	低笛敵	底地弟
t'i	梯題提	体替剃
tɕi	基枝集	己計忌
tɕ'i	妻奇七	起氣去

在詞彙方面，夏河地區的漢語中的親屬稱謂以及日常生活用語有很多是從藏語借用過來的。例如：

a-jia　（爸爸　[藏語] a-rgya）　　　　　a-ma　　（媽媽　[藏語] a-ma）

jia-mo（妻子　[藏語] skye-dman）　　ri-hua　（朋友　[藏語] rogs-pa）

zan-ba（炒麵　[藏語] rtsam-pa）　　　cəng-la（市場　[藏語] tshong-ra）

man-ba（醫生　[藏語] sman-pa）　　　wa-rə-wa（媒人　[藏語] bar-ba）

四

夏河話的人稱代詞和一般漢語不同，具有自己的形態特點。首先是有不同的「格」(case)。其次是有「雙數」(dual number)。如下表所示。

人稱 格 數	單 數		雙 數	複 數
	主格	賓格		
第1人稱	ngə	nga	ngə-la	ngə-məng
第2人稱	ni	nia	ni-la	ni-məng
第3人稱	ta		ta-la	ta-məng

在單數第1人稱和第2人稱形式時，根據韻母的不同 (vowel alternation)，有明確的不同「格」的形態，區分主格和賓格。請看下面這些不同的代詞形式的機能。

中島幹起

(1) Ngə   nia   gie
    吾   爾   給。   （我給你。）

(2) Ni   nga   gie
    汝   我   給。   （你給我。）

如上例(1)，(2)句代詞都用「格」的形態變化來表現。如後述，「賓－動」型的語序是夏河話的基本句型。上例(1)，(2)句就和下例(3)，(4)夏河（拉卜楞）藏語土話一樣，詞序沒有絲毫不同。第一人稱有「格」的形態變化（ŋe〔主格〕～ŋa〔賓格〕）。

(3) ŋe   tɕʻɔ   ɕiŋ
    我   你   給。   （我給你。）

(4) tɕʻɔ   ŋa   ɕiŋ
    你   我   給。   （你給我。）

在雙賓語句里，把有「格」的代詞形式放在前面，標志出受事地位(dative case)。例如

(5) Nga   qiaN   gie
    我   錢   給。   （給我錢。）

(6) Nia   qiaN   gie
    爾   錢   給。   （給你錢。）

在人稱代詞中，和藏語相似除了單數，複數，另外還有雙數形式。這些雙數形式都是在夏河話代詞詞形變化表裡 (paradigm) 不可缺少的成分。我們可以說它們和藏語一樣已經成爲一種語法範疇。這種雙數的形式有＂咱倆＂＂你倆＂＂他倆＂，都是包括式 (inclusive)。例如：

(7) Ni   xiaN   qi   ngə-la   dəng   yi-hong-hong   lə   zai   qi
    汝   先   去，   我 拉   等   一 紅 紅   了   再   去。
    （你先去吧，咱倆等一會兒再去。）

(8) Ji   liang-tiaN   ni-la   vuo-ye-zhe   lə   mei-you
    只   兩 天   汝 拉   鍋也者   了   沒 有 ？
    （這兩天你倆舒服了沒有？）

(9) Ta-la   yi-gua-la   lai   lə
    他 拉   一 掛 拉   來   了。   （他倆一起來了。）

在語序方面「賓──動」句式是夏河方言句法中的一種基本句式。它不像在普通話裡作為"顛倒"出現。以「喫飯」為例，我們可以有以下的句子：

(10) Ngə   faN   chi-ba-lə
    我   飯   喫 罷 了。   （我喫完了飯。）

(11) Ngə   hai   faN   chi-ba-li
    我   還   飯   喫 罷 哩。   （我還沒喫完飯。）

(12) Ta   faN   chi-guo-lə   ni   faN   chi-shang-lə   mei-you
    他   飯   喫 過 了，   汝   飯   喫 上 了   沒 有 ？
    （他喫了飯了，你喫了飯沒有呢？）

(13) Ngə   faN   xiang   chi-zhe-li
    我   飯   想   喫 者 哩。   （我想喫飯。）

(14) Ni   mi-tang   hə-li-ma   faN   chi-li
    汝 米 湯   喝 哩 馬   飯   喫 哩。   （你是喫稀飯是喫飯？）

這種「賓一動」句式範圍極廣，如下列陳述句都是賓語在前，動詞在後。

(15) Ngə　nia　saN-kuai-qiaN　xiaN　gie-ha
　　　吾　爾　三　塊　錢　先　給　下。　　　（我先給你三塊錢。）

(16) A-gə　ha-cha-li　xyng-di　da-zhə-li
　　　阿哥　下査里　兄弟　打者哩。　　　（哥哥常常打弟弟。）

(17) Zhang-saN　Li-si　kaN　di　lə　yi-gua
　　　張三　李四　看　的　了　一掛。　　　（張三看了看李四。）

(18) Ta　nia　zhi-dao　la　bu-zhi-dao　sha
　　　他　爾　知道　拉　不知道　啥？　　　（他認識你吧？）

　　　——Ta　nga　zhi-dao-li
　　　　　他　我　知道哩。　　　（他認識我。）

　　　——Ta　nga　bu-zhi-dao
　　　　　他　我　不知道。　　　（他不認識我。）

(19) Ni　shəng-mə-gə　yao-li-sha
　　　汝　甚麼個　要哩啥？　　　（你要甚麼呢？）

(20) Ng-di　ya-tou　ta　gie　lə
　　　我的　丫頭　他　給　了。　　　（[我]給他我的丫頭了。）

(21) Ga-song-zi　ni　bei-shang-zhe　a-li　qi-li
　　　尕孫子　汝　背上者　阿里　去哩？
　　　　　　　　　（你背著小孫子到哪里去？）

(22) Dai-fu-di　u-da-xie　bing　kaN　yi-ha　zou
　　　大夫的　吾搭些　病　看　一下　走。
　　　　　　　　　（到醫生那裡去看病一下。）

(23) Ni　xi　kaN-di　ngai　la　bu-ngai　sha
　　　汝　戲　看的　愛　拉　不愛　啥？
　　　　　　　　　（你喜歡看戲不喜歡？）

夏河話，除了代詞以外，也和一般的漢語一樣沒有「格」的變化。文法上，所謂「格」大致可以分成兩種——表層的格和深層的格。表層的格，也會以顯性的 (overt) 形態變化表現出來。與此相對的，深層的格是隱性的 (covert)，可以從與動詞所對應的名詞的意思中表現出來。比如說，普通話中的「菜噢，飯不噢」這句話中作爲賓語的「菜」，「飯」被置於動詞之前，這樣一來，便彷彿成爲了謂語「噢」的主語。但是，我們可以把「菜噢，飯不噢」一文解釋爲修辭上的一種語序顛倒。漢語的語彙，不以格的變化來代替句型的變化。在這種情況下，「菜」，「飯」，在深層格中，可以被認爲是賓格。普通話使用「將」，「把」等介詞，把賓語提前的方式，被稱爲「處置式」。這種用法必須是在一定條件下才能使用。夏河方言不存在著這種使用「將」，「把」等詞把後置名詞提前到動詞前面的現象。

這種夏河話的「賓——動」型構造的特點之一是後置語（即accusative postposition）——'哈'(ha) 的存在。它明確指明文中的賓語。這也是當地方言和一般漢語的重要的不同之處。後置詞「哈」(ha) 位於賓語之後，可以起到指明賓格的作用，將動詞的賓語明顯表示出來。

(24) Ni qiaN-tou zou Ngə jia ha shou-shi yi-ha shou-shi hao
　　 汝　前　頭　走，　吾　家　哈　收　拾　一　下　收　拾　好
　　 lə jiu-jiu lai
　　 了　就　就　來。　　（你先走，我把家收拾好了再來。）

(25) Xue-xiao-li qi shi zi-xi ha hao-hao-di shang shang-kə
　　 學　校　哩　去　時　自　習　哈　好　好　的　上　，　上　課
　　 shi xing yong-shang lə ting bao waN
　　 時　心　用　上　了　聽，　[不要]　玩。
　　 （學校裡把自習好好地上，上課時用心聽講，不要玩。）

五

語序也會在語言演變的過程中變化，但這是一個漫長的過程，不是那麼容易變的。在中國國內除了西北地區的方言以外我們很少看到過類似的「賓——動」句式。據

中國國內的調查報告，[4]這種「賓──動」句式只在甘肅南部，青海和四川接壤的邊疆地區可以看到，這一帶正是藏漢雜居並以藏族人爲主的地方。我們也可以說「賓──動」結構是這一帶的地域特徵。

據以上所說的，夏河話是(1)已經脫離了「聲調語言」的範疇；(2)代詞體系裡有「格」的變化，(3)「賓──動」句式是句法中的基本句式，(4)後置詞「哈」(ha) 的存在，這些語言特徵，因其不同於漢語的一般結構的特徵，如果單從漢語角度來分析很難說明問題。從這種意義上說，夏河漢語也可以乾脆被認爲是一種具有漢語外觀特徵的藏語。

一般來講，在漢民族和其它民族接觸時，其它民族的「漢化」(Sinicization) 現象是比較普遍的。而像夏河地區存在的這種「藏化」(Tibetanization) 現象是不太多見的，所以引起了筆者比較大的興趣。

夏河地區的漢民族，處於藏族的包圍中，而當地的藏族傳統文化長期以來已經形成，沒有受到很多「漢化」的影響，在這種情況下，數量上處於劣勢的漢族人便從已獨自形成的藏族文明中接受了許多影響。由於各種各樣的原因，便逐漸產生了「藏化」。語言結構中的這種變化也可以說是這種藏化的表現。

一種漢語方言由於和藏語，阿爾泰語接觸而產生了變化的現象，不止甘肅，據調查在新疆，青海，內蒙古等地也分布很廣。對於這些，中國方面的學者也進行了調查。[5]比如說，位於蘭州和拉卜楞中間的寧夏回族自治州（古名河州）所使用的河州話中，人稱代詞的格的顯示，「賓──動」型的語序變化以及「哈」的使用的現象等已有人寫出報告。另外、關於拉卜楞的北部，青海省循化撒拉族自治縣的漢語方言中，表現主格和賓格的「哈」的使用，利用名詞的付加成分來表現「起點」「接受」「工具」等的情況也已見於報告。

像這種情況，由於接觸（或者是互相影響）而產生的變化是可能產生一種具有兩種語言特徵的新的語言的。

4　甘肅師範大學中文系方言調查室編『甘肅方言概況』，1960年8月
5　程祥徽「青海口語語法散論」，『中國語文』1980年2期
　　馬樹鈞「臨夏話中的”名＋哈”結構」，『中國語文』，1982年第1期
　　馬樹鈞「談循化話中名詞語與其後附語素的組合」，『青海民族學院學報』，1985年第2期
　　張成材、朱世奎『西寧方言志』，1987年

Some Remarks on the Demonstratives in the Fuzhou Dialect with Reference to their Historical Evolution in Medieval and Modern Chinese

Michel Desirat & Alain Peyraube
CRLAO, Paris-France

0. Introduction

0.1. There are only two demonstratives in Contemporary Standard Chinese: *zhè* 這 "this" and *nà* 那 "that". [1] Generally speaking, they can be used as determinatives, or subjects or even objects in some cases. When they are determinatives or subjects, they may be or not followed by a classifier (they usually are when they are determinatives but not when they are subjects), and when they are objects, they must be followed by a classifier, e.g.:

1. a) 這個小伙子眞了不起

    zheige xiaohuozi zhen liaobuqi

    this–young guy –really –terrific

    "This young guy is really terrific". (determinative with classifier)

    b) 這小伙子眞了不起

    zhe xiaohuozi zhen liaobuqi

    ibid. (determinative without classifier)

2. a) 那個是我的哥哥

    neige shi wode gege

    that–be–my–brother

    "That (one) is my brother". (subject with classifier)

---

1 *Zhè* is more frequently used than *nà*. This was already the case in *Shǔi hǔ zhuàn* 水滸傳 where we have more than 58 % of *zhè* against less than 42 % of *nà*, cf. Li Siming (1986). This is why the examples in *zhè* are more frequent than those in *nà* in this paper.

    b)   那是我哥哥

        na shi wo gege

        ibid. (subject without classifier)

3.   a)   我不喜歡這個

        wo bu xihuan zheige

        I–neg.–like–this

        "I don't like this". (object with classifier)

    b) * 我不喜歡這

        wo bu xihuan zhe

        ibid. (object without classifier)

0.2. In Ancient Chinese, there are many more demonstratives. Huang Shengzhang (1983) has found fourteen in the pre-Qin (先秦) language, seven of them are demonstratives for near reference (*cǐ* 此, *sī* 斯, *shì* 是, *shí* 時, *zī* 茲, *zhī* 之 and *yī* 伊) and seven demonstratives for far reference (*bǐ* 彼, *fěi* 匪, *fū* 夫, *júe* 厥, *qí* 其, *ěr* 爾, *ruò* 若). But most of these pronouns have already been used in Early Archaic Chinese (for example *zī* 茲 can be traced back to *jiǎgǔwén*, 厥 *júe* existed already in bronze inscriptions etc). The classical language *par excellence* as it was settled during the Warring States period only consists of five demonstratives of which three are near (*cǐ* 此, *sī* 斯, *shì* 是) and two far (*bǐ* 彼 and *fū* 夫). From the Han onwards, *cǐ* and *bǐ* become predominant.[2] *Cǐ* (as *sī* or *shí* before it) can equally be determinative, subject or object. E.g.:

4.   a)   此二君者異于子干（左傳：昭13）

        ci er jun zhe yi yu Zigan

---

2 *Sī* 斯 has never been frequently used except in *Lúnyǔ* 論語. From the Han onwards, *shì* 是 which has been the most common near demonstrative (59 % of the demonstratives in *Lúnyǔ* are *shì*, 63 % in *Mèngzǐ* 孟子, 60 % in *Zhuāngzǐ* 莊子, 75 % in *Xúnzǐ* 荀子) left its predominant place to *cǐ* 此 (almost 59 % of *cǐ* in *Lùn Héng* 論衡, where there are only a little more than 37 % of *shì* 是), probably because *shì* has already become in this period the copula "to be ", cf. Guo Xiliang, 1989; Huang Konggui, 1989.

this-two-prince-the one who-different-from-Zigan

"These two princes are different from Zigan". ($c\breve{\imath}$ is determinative)

b) 此非論者所以為實也（論衡：訂篇）

ci fei lun zhe suo yi wei shi ye

this-neg.-discuss-that which-thus-be-real-part.

"This is not something to be discussed, thus it is real". ($c\breve{\imath}$ is subject)

c) 不賢者雖有此不樂也（孟子：梁惠王上）

bu xian zhe sui you ci bu le ye

neg.-wise-the one who-though-have-this-neg.-happy-part.

"He who is not wise, though he has this, will not be happy". ($c\breve{\imath}$ is object)

The same can be said about $b\breve{\imath}$ (but not for $f\bar{u}$ which is above all determinative):

5. a) 彼王不能用君之言任臣（史記：商君傳）

bi wang bu neng yong jun zhi yan ren chen

that-king-neg.-can-use-your-word-employ-subordinate

"That king cannot employ his subordinates upon your advice".

($b\breve{\imath}$ is determinative)

b) 是亦彼也，彼亦是也

shi yi bi ye , bi yi shi ye

this-also-that-part.-that-also-this-part.

"This also is that, that also is this". (the first $b\breve{\imath}$ is object, the second one is subject)

These pronouns are thus used until Medieval Chinese, when they are replaced, at least in the vernacular language, by zhè 這 as near demonstrative and by nà 那 as far demonstrative. The first occurrences of these pronouns appeared in the Tang.[3] 這 (which original form is 遆) was written as 這, 者 or 遮 in Medieval Chinese: 這 or 者 under the Tang, in

---

3 Examples of 這/那 could be found in Buddhist texts of the Han, but it is doubtful that these were already pronouns, cf. Chen Zhiwen, 1988.

Dūnhuáng biànwén 敦煌變文 and under the Five Dynasties, in *Zǔ táng jí* 祖堂集；遮 or 這 under the Song; 這 under the Yuan.

The origin of *zhè* and *nà* is not very clear. That which is for sure is that they do not come directly from *cǐ* 此 and *bǐ* 彼. For Wang Li (1958, p. 284) 這 comes from 之, which was also a near demonstrative in Archaic Chinese. For Lü Shuxiang and *al* (1985), 這 should rather have come from 者. Lastly, Mei Tsu-lin (1986) has proposed a new hypothesis: 這 might be derived from 只者, either by fusion, or by the dropping of 只. 那 has ties rather with 爾 or 若. The use of 爾 as demonstrative being later than that of 若, many have proposed 爾 > 那. But the thesis of Lü and Jiang (1985) which suggests 若 > 那 seems to be more accurate.

Now let us look at the use of 這 and 那 from Tang to Ming.

1. 這/那 from Tang to Ming

1.1. From Tang to Northern Song

這 and 那 followed or not by any classifier are often used in this period as determinatives. They behave as 此 and 彼 did in Ancient Chinese. E.g. without classifier as in (6) and with classifier as in (7).

6.   a)   慚恥這身无得解（變文：丑女. 790）

          canchi zhe shen wu de jie

          ashamed-this-body-neg.-obtain-solve

          "(I'm) ashamed that (the problem of) this body is not solved."

    b)   莫把那不淨涂汙人好（景德傳燈錄：12.5）

          mo ba na bu jing tu wu ren hao

          neg.-BA-that-neg.-clean-spread-dirty-other-sure

          "Be sure not to contaminate others by spreading that unclean thing."

7.   a)   思想慈親這個恩（變文：父母恩重. 690）

          sixiang ci qin zhe ge en

think-kind-parent-this-cl.-grace

"Think of the grace of your kind parents".

b) 師云：那個人還吃不？（祖堂集：5.97）

shi yun: na ge ren hai chi bu

master-say-that-cl.-man-still-eat-neg.

"The master said: does that man still want to eat?"

Other classifiers than *ge* 個 could of course also be used, e.g.:

8. ⋯總在遮一碗茶里（燈錄：20.8）

zong zai zhe yi wan cha li

always-be in-this-one-bowl-tea-in

"⋯always in this bowl of tea".

However, as for 這/那 in the subject position, things go differently. Contrary to 此 and 彼 in Classical Chinese and to 這 and 那 in Contemporary Chinese, 這 and 那 from Tang to Song cannot be used alone in the subject position. This was noted for the first time by Ye Youwen in 1983 (cf. Mei Tsu-lin, 1987), and then remarked upon again by Mei Tsu-lin (1986), Mei Tsu-lin (1987), Ye Youwen (1988). This contradicts the idea of Ohta Tatsuo (1958) which is that 這 and 那 are autonomous since the end of the Tang.[4]

Thus, all the 74 examples of *zhè* 這 (or the equivalent forms) in the collection *Dūn-huáng biànwén jí* 敦煌變文集 which best represents the Tang vernacular language are forms tied to a classifier or to a noun. The demonstrative subject is still *cǐ* 此. None of the 346 cases of *zhè* 這 taken from *Zǔ táng jí* 祖堂集 (Five Dynasties) is a subject. This

4　Ohta Tatsuo cites two examples to support his point:
孔雀毛衣應者是（齊已詩：對菊）
kongque mao yi ying zhe shi
peacock-feather-coat-should-this -be
"This should be the feather coat of the peacock".
長年只這是（寒山詩）
chang nian zhi zhe shi
long-year-only-this-be
"Only this for the whole year long".
Cf. Mei Tsu-lin (1987), Ye Youwen (1988) for a discussion of these examples.

is the same for *Jǐngdé chuán dēng lù* 景德傳燈錄 or for *Sān cháo běiméng hùi biān* 三朝北盟會編 of the Song. If *zhè* 這 and *nà* 那 are to be employed as subjects, they have to be followed by *gè* 個 or, from the Song onwards, by *dǐ* 底 or later by *dè* 的.[5] Examples:

9. 頭上緣何白髮多？只這個是无常拋暗號（變文：无常. 667）

   tou shang yuan he bai fa duo? zhi zhe ge shi wuchang pao an hao

   head-on-reason-why-white-hair-plenty-only-this-cl.-be-uncertainty-throw-subtle-sign

   "Why is there so much white hair on the head? Only because this is a sign thrown by uncertainty."

10. 這個是啊誰不是？（變文：舜子. 131）

    zhe ge shi ashei bu shi

    this-cl.-be-who-neg.-be

    "Who can this be?"

11. 這個是某甲兄（祖：1.175）

    zhe ge shi mo jia xiong

    this-cl.-be-certain-X-brother

    "This is a certain brother X."

12. 師云：遮底不生死（燈錄：6.9）

    shi yun: zhe di bu sheng si

    master-say-this-*di*-neg. -alive-dead

    "Master asked: Is this alive or dead?"

13. 這底只是我怕你們不知（三朝北盟：紹興甲寅通和錄）

    zhe di zhi shi wo pa nimen bu zhi

    this-*di*-only-be-I-be afraid-you-neg.-know

---

5 The classifier *ge* 個 existed already in the pre-Qin period but became common especially from the Six Dynasties, cf. Wang Shaoxin (1989). The particle *dǐ* 底 appeared in the Tang period, cf. Cao Guangshun(1986). 底＞的 between the 12th and 13th centuries (Mei Tsu-lin, 1982). For another different point of view, cf. Cao Guangshun(1987): he dates the first appearances of *de* 的 to the Northern Song.

"Only I am afraid that you don't know about this".

One can ask about the nature of *ge* 個 in the sentences 9-11. Is it a true classifier? The answer seems to be no. A hypothesis has been put forward that it is rather a suffix. Attached to the demonstrative, it polysyllabizes it so that the latter could become subject. Cf. Lü & Jiang (1985), Mei Tsu-lin (1987). The following examples cited by Lü & Jiang, where the number *yi* 一 is between *zhège* and the noun the demonstrative determines, prove that *zhège* must be considered as an entity and that *ge* is not a classifier. If it was a classifier, it necessarily had to appear after the number *yi*:

14.　　遮個一場狼藉不是小事（燈錄：19.13）

　　　　zhege yi chang langji bu shi xiao shi

　　　　this-one-cl.-chaos-neg.-be-small-business

　　　　"This chaos is no small buisness".

15.　　三人同行，一人解語，一人不解語；那個一人是什麼？（洞山. 517b）

　　　　san ren tong xing, yi ren jie yu, yi ren bu jie yu; nage yi ren shi shenme

　　　　three-man-together-walk-one-man-understand-word-one-man-neg.-understand-word-that-one-man-be-what

　　　　"If three men walk together, one of them understands the words and one doesn't, what about that (remaining) one?"

16.　　三十六路啊那個一路最妙？（燈錄：20.12）

　　　　san shi liu lu anage yi lu zui miao

　　　　thirty six-road-which-one-road-the most-excellent

　　　　"Which one of these thirty-six roads is the best?"

(In the last example, *ānà* is an interrogative pronoun, equivalent to *nǎ* 哪 of contemporary Chinese.)

Ye Youwen (1988) agrees with this analysis and calls this *ge* ge_2 個$_2$ so as to distinguish it from the classifier he labels as ge_1 個$_1$. ge_2 may have come from ge_1 by a grammaticalization process (*xuhua* 虛化). This grammaticalization process might have already

occurred during the Tang since Ye Youwen has noted two *zhège*₂ 這個₂ and 15 *zhège*₁ 這個₁ out of the 17 *zhège* he has found in the *Dūnhuáng biànwén*:

17.　　這個修行是道場（變文：維摩詰經講經文. 613）

　　　　zhege xiuxing shi Dao chang

　　　　this-cultivation-be-Dao-place

　　　　"This cultivation is the place of the Dao".

Here, *ge* is not a classifier because one cannot say **yige xiuxing* *一個修行. It is only a "phonic thickener".

1.2. Southern Song

　　　The situation becomes different under the Southern Song. For the determinative function, there is no change in relation to preceding periods: *zhè* 這 and *nà* 那, no matter whether they are followed by a classifier or not, they still can be used as determinative. In the position of object, the demonstrative must be followed by *ge* 個. E.g.:

18.　　也改移這個不得（夢溪筆談）

　　　　ye gaiyi zhege bu de

　　　　still-change-this-neg.-can

　　　　"…(but) still this cannot be changed".

But what is remarkable under the Southern Song is that the situation changes for the demonstrative subjects. Not only are these still realized in their dissyllabical form (*zhège* 這個, *nàge* 那個, *zhèdǐ* 這底 or *nàdǐ* 那底), but also in their simple form (*zhè* 這, *nà* 那). This is the case in *Zhūzǐ yǔlèi* 朱子語類 which records sayings between 1170-1200. E.g.:

19.　　如眞見得這底是我合爲（朱語：18）

　　　　ru zhen jian de zhedi shi wo he wei

　　　　if-truly-see-DE-this-be-I-suitable-be

　　　　"If I truly see this is suitable for me…"

20. 　那底在人，工夫卻在致中和（同上：26）

nadi zai ren, gongfu que zai zhi zhonghe

that-be in-man-strength-however-at-attain-neutrality-harmony

"That depends on man, but the acquired strength is to attain neutrality and harmony."

21. 　這是說天地无心處（朱子語類輯略：3頁）

zhe shi shuo tian di wu xin chu

this-be-say-heaven-earth-no-heart and mind-place

"This is to say where there is no heart-and-mind in heavens and earth".

22. 　那是做人的樣子（朱語：7）

na shi zuo ren de yangzi

that-be-become-man-det. part. -way

"That is the way of becoming a man".

23. 　這自是世上公共底事物（朱語：35）

zhe zi shi shi shang gonggong di shiwu

this-naturally-be-world-in public-det. part. -affair

"These are naturally public affairs in the world".

24. 　這也難說（朱語：35）

zhe ye nan shuo

this-also-difficult-say

"This is difficult to say".

This is also the case in other works of the late Song, especially in the opera *Zhāng Xiè zhuàng yuán* 張協狀元 where one finds at the same time *zhè* 這 and *zhège* 這個 as subjects (altogether six examples):

25. 　行不動裙，笑不動唇，這是婦女體態（20出）

xing bu dong qun, xiao bu dong chun, zhe shi funu titai

walk-neg. -move-dress-smile-neg.-move-lip-this-be-woman-demeanor

"To walk without stirring the dress, to smile without moving the lips, this should be a (good) woman's demeanor".

26.　這是你本事（52出）

zhe shi ni benshi

this-be-you-ability

"This is your ability".

27.　大人說得極是，這個謂之決疑（2出）

daren shuo de ji shi, zhege wei zhi jueyi

your honour-say-DE-extremely-correct-this-call-it-doubt

"Your honour is very correct, this is what we call doubt."

28.　這是什麼？是刀⋯這底？是棒。看你要那個吃？（8出）

zhe shi sheme? shi dao⋯zhedi? shi bang. kan ni yao nage chi

this-be-what-be-knife⋯this-be-stick-see-you-want-which-strike

"What is this? This is a knife⋯And this? A stick. Which one do you want to strike with?"

According to Cao Guangshun (1987),most of the demonstrative subjects in *Zhūzǐ yǔlèi* have the *zhè* form; the cases of *zhèdǐ* are much less frequent. He finds out that in chapters 120-140, there are more than 80 subject *zhè* against only one *zhèdǐ*. There are also several cases of subject *nà* but no cases of *nàdi*.

Ye Youwen (1988) however notes that besides *zhè* and *zhèdǐ*, *Zhūzǐ yǔlèi* also uses the demonstratives *zhège* or *cǐ* as subjects. He also adds that the cases of *zhège* as subjects are not less common than those of *zhè*: E.g.:

29.　這個不知如何（朱語：10）

zhege bu zhi ruhe

this-neg.-know-how

"(One) doesn't know about this one".

30.　這個以物譬之難以親切（同上：37）

zhege yi wu pi zhi nan yi qinqie

this-object marker-thing-compare-it-difficult-to-near

"(If we) compare this with other things, it is difficult to get near (its true meaning)".

31.　這個亦只是說個大概（同上：98 ）

zhege yi zhi shi shuo ge dagai

this-also-only-be-say-*ge*-outline

"This is also only to say its outline".

On the other hand, this change which we have just discussed (*zhè* and *nà* can be used alone as subjects) seems to be limited in the Southern Song, especially in the Jiangnan region. Indeed, in *Dóng jiěyuán xīxiāng jì* 董解元西廂記 as well as in *Liú Zhīyuǎn zhū gōngdiào* 劉知遠諸宮調 which is of the Jin 金 dynasty, this phenomenon is not present: *zhè* (84 cases in the former work and 5 cases in the latter work) is never used alone as subject. On the contrary, one finds *zhège/nàge, zhèdǐ/nàdǐ* as subjects:

32.　那底甚般禮道 ？（ 劉知遠：12 ）

nadi shen ban lidao

that-what-kind-manners

"What kind of manners is that?"

33.　那底久后必榮顯（ 劉…：6 ）

nadi jiuhou bi rong xian

that-subsequently-certainly-rich-famous

"That (man) will certainly become rich and famous subsequently".

The situation will change again during the Yuan so that it becomes the same that prevails in the Tang and Northern Song.

1.3. Under the Yuan

Vernacular Yuan works are characterized by the presence of demonstrative subjects

in the form of *zhède* 這的 and *nàde* 那的. This is the case of *Xiào jīng zhí jiě* 孝經直解 (1308) of Guàn Yúnshí 貫雲石, of *Lǎo Qídà* 老乞大 and *Piǎo tōngshì* 朴通事,[6] and also of operas compiled in *Yuán kān zájù sānshí zhǒng* 元刊雜劇三十種 which is the only collection of operatic works dated in the Yuan, e.g.:

34. 這的是聖人教人行孝的法度（孝經直解：15右）

    zhede shi shengren jiao ren xing xiao de fadu

    this-be-sage-teach-people-practice-filial piety-DE-rule

    "These are the rules the sages use to teach the people about filial piety".

In *Xiào jīng zhí jiě* one can also find the demonstrative subject 阿的 or 兀的. The suffix *de* 的 is always present.

35. 這的是圣恩（元刊雜劇…280頁）

    zhede shi sheng en

    this-be-sacred-grace

    "This is royal grace".

36. 這的是送你身的榮華富貴（同上．512頁）

    zhede shi song ni shen de ronghua fugui

    this-be-give-you-body-det. part.-luxury-wealth

    "These are luxuries and wealth given to you".

Mei Tsu-lin (1987) finds 856 這 in *Yuán kān zájù sānshí zhǒng*. 845 of them are determinatives and eleven are subjects, of which ten are used in recitatives and only one among them is used in dialogues. These figures are instructive.

37. 這的是誰不是（朴通事：261）

    zhede shi shei bu shi

    this-be-who-neg.-be

    "Who can this be?"

---

6 Yang Lien-sheng (1957) was probably the first to say that only the dissyllables 這的 or 那的 can be used as subjects in *Lǎo Qídà* and *Piǎo tōngshì*.

38. 這的是眞陝西地面裡來的（朴：131）

zhede shi zhen Shaanxi dimian li lai de

this-be-truly-Shaanxi-region-in-come-DE

"This is truly from the Shaanxi region".

39. 你用心下功夫打。這的你不須說（老乞大：35）

ni yongxin xia gongfu da. zhede ni bu xu shuo

you-with care-apply-effort-strike-this-you-neg.-need-say

"You strike with great care. This you don't need to say".

40. 那的也中（老：22）

nade ye zhong

that-also-good

"That is also good".

Mei Tsu-lin (1984) has found more than one hundred 這 in *Lǎo Qídà* and also more than one hundred 這 in *Piǎo tōngshì*, 57 那 in *Lǎo Qídà and* 101 那 in *Piǎo tōngshì*. 這 and 那 alone, in these works, are always determinatives. There is only one exception:

41. 這不是燒子的什麼？（朴：310）

zhe bu shi shaozi de shenme

this-neg.-be-burn-DE-what

"This (string of pearls) is not burnt (in the furnace) or what?"

This being said, one must notice that 這的/那的 are not only subjects in these works. They can also be determinatives. The situation of 這的/那的 in *Piǎo tōngshì* is the following: twenty-four 這的 subjects, six 這的 determinatives, seven 那的 subjects, and none 那的 determinative. In *Lǎo Qídà*: seven 這的 subjects for six 這的 determinatives; two 那的 subjects and none 那的 determinative.

Another point is that when the pronoun has a human reference, one uses 這個,那個 and not 這的/那的:

42. 這個姓金（老：27）

zhege xing Jin

this–name–Jin

"This (man) is named Jin".

這的/那的 thus used as subjects can also be found in other Yuan works, as in the operas collected in *Yǒnglè dàdiǎn* 永樂大典, especially in "Chén mén dìzǐ cùo lìshēn 臣門弟子錯立身" (ca 1300) and in "Xiǎo Sūntú 小孫屠" (ca 1350). The demonstrative subjects that could be found in these works are all in the form 這的 (two cases in the former opera, three in the latter).[7] The same situation can be found in *Pípá jì* 琵琶記 :

43.   這的不嗄殺了你（121頁）

zhede bu xia sha le ni

this–neg.–excl.–kill–LE–you

"Didn't this kill you!"

44.   這的卻是（140頁）

zhede que shi

this–however–be

"This, however, is (it)".

However, in the latter opera, the occurrences of 這的 subject are very few. Only three cases have been found while we have thirty-one subjects with 這 alone and four 這個 subjects (cf. Ye Youwen, 1988). One can therefore consider that it is because this opera is from the south (Zhejiang) and that the phenomenon described above is limited to northern China, especially to the language spoken in the capital Dadu 大都 and its neighbourhood.

Lastly, if in the spoken passages in the operas of Guān Hànqīng 關漢卿 (1227-1297), for instance in "Dou E yuan 竇娥冤" or "Jiu fengchen 救風塵", one can find mostly 這 alone as subjects, it is because these works were written during a period where the change 這 > 這的 in subject position had not yet occurred. This is how Cao Guangshun

---

7   The first piece in the collection: "Zhāng Xiè zhuàngyuán 張協狀元" on the contrary does not employ 這的 subject. It uses 這 alone or 這個. Cf. e.g. 25-28. But this opera is dated Southern Song.

(1987) explains the fact.

The use of 這的/那的 as subject demonstratives, which characterizes the Yuan language, did not last long. Indeed, since the beginning of the Ming, the situation has returned to the same one of the Southern Song, that is to say 這 and 那 alone can be subjects. The above phenomenon might have thus lasted for slightly over one hundred years, from 1280 to 1400.

1.4. Conclusion

(i) While 這 and 那 appear during the Tang, these are determinatives. They alone cannot be used as subjects. In order to be used as subjects, they have to be followed by a suffix (個 or 底) which dissyllabizes them. There is therefore an opposition between the subject demonstratives and the determinative demonstratives. This situation extended till the end of the Northern Song.

(ii) A change occurred during the Southern Song. 這 and 那 alone are used as determinatives as well as subjects.

(iii) Under the Yuan, the situation is again characterized as a whole by the opposition between the subject demonstratives (這的/那的) and the determinative demonstratives (這/那).

(iv) Lastly, under the Ming, the neutralization of the opposition under the Southern Song appears again. 這 and 那 alone are used again as subjects. This is still the case for Contemporary Chinese, at least in Mandarin.

To illuminate these changes, several explanations have been put forward which call upon a general principle of diachronic syntax: external borrowing.

1. Mei Tsu-lin (1984) was probably the first to talk about the Mongolian influence on the Chinese demonstratives during the Yuan dynasty, which might have caused the opposition 這/那 : 這的/那的. It may be under the Mongolian influence that 這 and 那 have been reserved to the determinative position and could not be used as subjects except with the

Michel Desirat & Alain Peyraube

suffix 的.

2. Cao Guangshun (1987) supports this hypothesis and links the above linguistic changes to political changes which took place between Southern Song and Ming. He notes that the political center of China was first transferred from the Jiangnan region (Hangzhou) to the North (Dadu, i.e. Peking) at the beginning of Yuan; then, as the Mongolians later lost their control over China, the Ming monarchs, coming from the south, established themselves eventually in the north (first in Nanking, then in Peking). These changes brought about many language contacts: contacts with the Mongolian language under the Yuan causing the opposition 這 / 那 determinatives: 這的 / 那的 subjects; contacts with the Jiangnan dialects neutralizing this opposition which had not existed under the Southern Song.

These explanations are not very satisfactory.

a. The hypothesis of the Mongolian influence on the appearance of 這的 and 那的 subjects under the Yuan does not respect the fact that these subject demonstratives were already dissyllabic under the Tang when they first appeared. Naturally, the suffix tied to 這 and 那 is 個 and not 的, but the nature of the phenomenon is the same, all the more so since from the Five Dynasties onward, we already have 這底 and 那底 where 底 is obviously the earlier form of 的.[8] It is unlikely, under these conditions, that Mongolian has exerted any direct influence. At best, it has served as an analogical model to reactivate a pre-existent form in the Chinese language.

b. The loss of the opposition between monosyllabic determinative demonstratives and

---

8   See Ye Youwen (1988) on the identity between 個 and 的. He cites many examples where 個 replaces 的, as in, for instance, the opera "Zhāng Xiè zhuàngyuán" of the Southern Song :
       (i) 你個骨是乞骨（4出）
            ni ge gu shi qi gu
            you-*ge*-bone-be-beggar-bone
            "Your bones are those of a beggar."
      (ii) 照你個臉兒
            zhao ni ge lianr
            shed light on-you-*ge*-face
            "Shed light on your face."
     This phenomenon is again seen in contemporary dialects, especially in Hakka of Meixian where one uses 我個 (for 我的) "my", 紅個 (for 紅的) "the red one", etc.

dissyllabic subject demonstratives under the Southern Song might have happened, as we have already seen, in the Jiangnan region, where the influence of the northern Altaic languages was non-existent; such influence might have allowed the preservation of this opposition in the north until the Ming, after the fall of the Yuan. But it is wrong to assert that this opposition was maintained only in the north. It is in fact well known that the major dialects of today's Fujian and Guangdong provinces, which are further south than the Jiangnan region, thus even less influenced by the Altaic languages, have preserved this determinative-monosyllabic/subject-dissyllabic opposition. This is especially the case, as we are going to see below, of the Fuzhou dialect.

2. Demonstratives in the Fuzhou dialect

The Fuzhou dialect is interesting in the sense that it does not only oppose the subject demonstratives to the determinative demonstratives, but it also distinguishes the far and the near demonstratives in three different forms.

2.1. Tsi ^{32} 這 and hi ^{32} 許 are used as demonstratives when they are determinatives followed by a classifier, which itself is followed by a noun. E.g.:

45.   這碗菜汝食禮固會又

tsi ^{24} uaŋ ^{32} ts'ai ^{21} ny ^{32} sieʔ ^{5} le   ku ^{11} e ^{52} iu ^{242}

this-cup-dish-you-eat-asp. part.-again-can-want

"When you have eaten one bowl of this dish, you'll want more" (Zheng Yide 1988b: 451). [9]

---

9   The information in brackets is the reference to the example given. When there is no such information, the example is provided by an informant.
The transcription of the Fuzhou dialect is based on the pronunciation of two informants, each 35 years old, from Fuzhou (in the centre of the town). The transcription is slightly different from the one given by other authors for the tone quoted " 21 " (low level), which is generally quoted low-high. But the phonetic analysis with an oscillograph proves this point, as far as the two informants mentioned above are concerned.
The consonants in brackets indicate that they change according to the consonant sandhi rules. See Désirat & Liang (1990) for these rules. We do not note here the final and tone sandhi rules, as other Chinese authors do. We think that the text is clearer without these indications. This is the reason why the tones and finals are quoted as they are pronounced.
The Chinese characters which differ from those used in Mandarin are generally those used by other authors; the "〇" indicates that there is no Chinese character for the word concerned.

46.　這塊柴鋸禮做椅囝

tsi ^{44} (t)ɔy ^{21} ts'ia ^{52} k∅y ^{21} le　tso ^{11} ie ^{24} iaŋ ^{32}

this–piece–wood –saw–asp.part.– make–stool

"This piece of wood was sawn to make a stool" (Zheng Yide 1988b: 451).

47.　這題謎，我准著過

tsi ^{11} leu ^{52} mei ^{242} , nguai ^{32} tsung ^{32} (t)uok kuo

this –cl.– guess–, I –guess– get–asp.part.

"I got this guess right" (Désirat/Liang 1990).

48.　由許條途行眞遠

iu ^{52} hi ^{11} leu ^{52} tuo ^{242} kiaŋ ^{52} tsiŋ ^{52} ŋuoŋ ^{242}

by–that–cl.–road–go –very–far

"It is very far by that road" (Zheng Yide 1985: 309).

(途 written 墿 by Zheng).

49.　這頭魚頭尾都削去了

tsi ^{11} lau ^{52} ŋy ^{33} t'au ^{52} muoi ^{32} tu ^{52} suɔʔ ^{23} (k')o ^{33} lau ^{32}

this–cl.–fish–head–tail–all–take off–asp.part.

"The head and tail of this fish have been cut off" (Liang 1983: 166).

50.　昨○來其這只人野奇怪

soʔ ^{11} maŋ ^{52} li ^{52} (k)i tsi ^{44} (ts)ieʔ ^{23} n∅yŋ ^{52} ia ^{11} ki ^{52} kuai ^{242}

yesterday–come –det.part.–this–cl.–man–very–strange

"The man who came yesterday is very strange".

51.　去年曼其這樣大計野壞

k'o ^{11} nieŋ ^{33} maŋ ^{52} (k)i tsi ^{44} yoŋ ^{242} tai ^{52} (k)ie ^{21} ia ^{11} ŋai ^{52}

last year –det.part.– this– cl.–event–very–bad

"The things (which happened) last year were very bad".

52.　桌○○許把刀眞利

toʔ ^{23} ke ^{33} leiŋ ^{32} hi ^{24} (p)a ^{32} to ^{44} tsiŋ ^{52} (l)ei ^{242}

table-on –that – cl.– knife –very –sharp

"The knife on the table is very sharp".

In this last example, the determinative particle (k)i is omitted between the modifier and the head (See also (75)).

The noun may also be absent in the NP composed only of a demonstrative (+number) +classifier. The demonstratives then have the same forms: tsi ^{32} & hi ^{32}, e.g.:

53. 乞我這只

k'øyʔ ^{23} ŋuai ^{32} tsi ^{44} (ts)ieʔ ^{23}

give - I - this- cl.

"Give me this one".

54. 這本看看，許本看看，煞煞尾渾乇都〔不會〕八

tsi ^{24} (p)uoŋ ^{32} k'aŋ ^{52} k'aŋ ^{21}, hi ^{24} (p)uoŋ ^{32} k'aŋ ^{52} k'aŋ ^{21}, sa ^{11} la ^{24} mui ^{32} xuŋ ^{11} nɔʔ ^{23} tu ^{11} me ^{52} (p)aiʔ ^{6}

this –cl.– read– that–cl.–read–, –in the end– everything– all –neg.– know

"(He/she) reads this, he reads that but in the end he knows nothing" (Zheng Yide 1983: 31).

It is impossible, however, to have a NP which only consists of the demonstratives tsi ^{32} and hi ^{32} directly followed by the noun they modify. In others words, with tsi ^{32} and hi ^{32} the classifier is compulsory.

2.2. Tsia ^{3} 者 and hia ^{32} 許 are used as demonstratives when they are determinatives which modify a noun without the presence of any classifier. They can be either singular or plural, e.g.:

55. 著這方面，伊比汝好

tuok ^{5} tsia ^{21} huong ^{52} mieng ^{21}, i ^{44} pi ^{32} ny ^{32} ho ^{32}

"at –this –field –he/she –compare –you– good"

"In this field he/she is better than you"(Désirat/Liang 1990).

56. 者索没硬，世了蜀回又蜀回

tsia ^{44} sɔʔ ^{23} mo ^{11} ŋaiŋ ^{242}, sie ^{21} le $^{}$ soʔ ^{5} hui ^{52} iu ^{21} (s)o ^{21} (h)ui ^{52}

this –string– neg. –strong, tie– asp.part.–one–time–again –one–time

"This string is not strong so we have made several knots" (Zheng Yide 1988b: 451).

没 written 無 by Liang and others.

57. 者話著蜀半，無著蜀半

tsia ^{44} ua ^{242} tuok ^{5} so ^{11} puang ^{21}, mo ^{33} (t)uok ^{5} so ^{11} puang ^{21}

the –speech– correct –one–half, not –correct–one–half

"This speech is half right, half wrong" (Désirat/Liang 1990).

58. 者雨會著下月才動

tsia ^{24} y ^{32} e ^{44} tuok ^{5} a ^{44} nguok ^{5} tsia ^{52} toung ^{242}

the –rain –can –must –next month –only –fall

"It could only rain next month" (Désirat/Liang 1990).

59. 者貨，無一定著去掏

tsia ^{44} huo ^{21} mo ^{21} i ^{44} tiang ^{242} tuo ^{21} k'o ^{33} to ^{52}

these –goods –not have –certain –must –go –take

"It is not certain that we should go and look for the goods" (Désirat/Liang 1990).

60. 者菜著我來講食野慣去了

tsia ^{44} ts'ai ^{21} tuok ^{5} nguai ^{32} li ^{32} koung ^{32} siek ^{5} ia ^{44} (k)aing ^{21} (k')o lau

this –dish–at– I–concern –eat–very –used to –asp.part.

"As far as I am concerned, I am used to eating this dish" (Désirat/Liang 1990).

61. 者生活著伊算頂好了

tsia ^{21} seing ^{33} uak ^{5} tuok ^{5} i ^{44} soung ^{21} ting ^{24} ŋo ^{32} lau

this –life –at– he/she –consider –very –good –asp.part.

"You could say he/she has a good life" (Désirat/Liang 1990).

62. 伊許字寫禮○歪歪

i ^{44} hia ^{44} tsei ^{242} sia ^{32} le $^{}$ i ^{11} uai ^{44} uai ^{44}

he/she–that–character–write– durative– crooked

"He wrote those characters all crooked" (Zheng Yide 1988a: 307).

i uai uai is one of the reduplication forms of *uai* [44]

63. 許柴厝是我其

hia [44] ts'a [11] zo [21] si [11] ŋuai [32] i

that– wood –house– be –I–det.part.

"That wooden house is mine".

64. 者箱箱（不會）邁重

tsia [11] suoŋ [44] suoŋ [44] me [52] (k)au [21] tɔyŋ [242]

that –luggage –cannot– reach– heavy

"That luggage cannot be heavy".

65. 書架○○其者紅其杯杯野壞

tsy [52] (k)a [21] ke [44] leiŋ [32] ((k)i) tsia [32] ɸyŋ [52] (k)i pui [44] pui [44] ia [44] (ts)ouŋ [21]

shelf–on–det.part.–this–red–det.part. – cup –very–nice

"This red cup which is on the shelf is very nice".

66. 牌我者書

k'ɸyʔ [23] ŋuai [32] tsia [11] tsy [44]

give –I –this –book

"Give me this/these book(s)".

67. 這死囝不做

tsia [11] si [24] iaŋ [32] ŋ [52] (ts)ɔ [21]

this –bad–person –not –do

"This bad guy doesn't do anything !" (Liang 1983: 168).

(這 noted by Liang instead of 者

不 noted 侉 by all authors)

68. 許聚人囝眞壞

hia [32] tsy [52] nɸyŋ [33] (k)iaŋ [32] tsiŋ [33] ŋai [52]

that –girl –very –bad

"That girl is very naughty".

2.3. **Tsui**[52] 這回 and **hui**[52] 那回 are used as demonstratives for near and far reference when they are subjects, e.g.:

69.　　許回無者事

hui[52] mo[11] tsia[44] tai[242]

there–have not–this–matter

"That fact does not exist" (Liang 1986: 73).

70.　　這回是蜀件正正經其事計

tsui[52] (s)ei[242] so?[11] yɔŋ[242] tsiaŋ[11] (ts)iaŋ[44] (k)iŋ[44] ŋi tai[52] ie[21]

this – be – one – kind – very – common –det. part. –matter

"This is a very common matter" (Zheng Yide 1988a: 309).

71.　　這回查查，許回問問，會做共保長媽蜀樣

tsui[52] tsia[44] tsia[44], hui[52] muoŋ[52] muoŋ[21], e[52] tsɔ[21] kɸy[11] pɔ[11] luoŋ[24] ma[32] sɔ[11] yɔŋ[242]

this – look for –that– ask – do –with –gossip –be the same

"He looks here, he asks there, he seems to be a gossip" (Zheng Yide 1983: 31).

72.　　這回无什麼了不起

tsui[52] mo[33] sien[52] nɔ?[23] liau[11] pu[44] k'i[32]

this–have not–something– fantastic

"This has nothing fantastic".

73.　　這回無客氣

tsui[52] mo[11] (k')a[33] (s)ie?[5]

this– not have –polite

"It's not worth being polite about this".

74.　　許回我會八

hui[52] ŋuai[32] e[52] (p)ai?[23]

this – I – understand

"I understand this."

(會八 notes "understand" but 八 could be 白 although the tone is different).

Tsui ^{52} / hui ^{52} are also used after a modifier phrase:

75. 書架○○這回野壞

tsy ^{52} (k)a ^{21} ke ^{44} lein ^{32} tsui ^{52} me ^{52} (ts)oun ^{21}

shelf -on -det.part. -this- not-beautiful

"This (thing) on the shelf is not beautiful".

76. 牌我許回

k'ϕy? ^{23} ŋuai ^{32} tsui ^{52}

give -I-that

"Give me that".

Although, tsi ^{32} + cl. / hi ^{32} + cl. or tsia ^{32} / hia ^{32} + noun can be said after any modifier phrase, it is not always the case for hui ^{52} or tsui ^{52}, for which the referential object must be present. Thus, the following sentence is ungrammatical:

77. * k'o ^{11} nien ^{33} man ^{52} (k)i tsui ^{52} ia ^{11} ŋai ^{52}

last year -det. part. -this -very-bad

"What happened last year was very bad".

Some of our informants also accept the use of tsui ^{52} and hui ^{52} as determinatives of nouns, in almost the same conditions as tsia ^{32} and hia ^{32}. E.g.:

78. 這回腳踏車是底人其？

tsui ^{52} k'a ^{11} (t')a ^{33} (ts')ia ^{44} si ^{11} tϕ^{11} nϕyŋ ^{52} (k)i?

this -bicycle -be -who -det.part.

"Whose is this bicycle?"

79. 許回野長其桌會搬遷這邊

hui ^{52} ia ^{11} (t)ouŋ ^{52} (k)i to? ^{23} e ^{33} puaŋ ^{44} (k)ao ^{21} tsi ^{11} (p)eiŋ ^{44}

that-very -long-det.part.-table-can-move-to-here

"That table, the very long one, could be brought here".

80. 這回書陶蜀本牌我

tsui ^{52} tsy ^{44} to ^{52} (s)o ^{33} (p)uoŋ ^{32} k'ϕy? ^{23} ŋuai ^{32}

this/these–book(s)–take–one–cl. –give–me

"Bring me this/these book(s)".

However, this use of **tsui** ^{52} / **hui** ^{52} in a determinative position is not as frequent as the subject position. Moreover, it is interesting to notice that these two words do not apply the tone sandhi rules before a noun, as **tsia** ^{32} and **hia** ^{32} do. That means that **tsui** ^{52} / **hui** ^{52} are not in the same syntactic relation to the noun as **tsia** ^{32} / **hia** ^{32} . The exact translation of the demonstratives in the two sentences above should be "this, the bicycle…" and "that, the very long table".

Tsui ^{52} / **hui** ^{52} , on the other hand, cannot be used with a noun denoting a human person.

Still according to the same informants, this use of **tsui** ^{52} / **hui** ^{52} as determinatives is a new phenomenon, in the centre of the town (Fuzhou), probably caused by the influence of Mandarin, in which **zhei/nei** are used both as subjects and as demonstratives. A revealing indication of this point is that there is no example of **tsui** ^{52} / **hui** ^{52} before a noun in the whole literature about the dialect.

Finally, when the demonstratives are immediately followed by a number which precedes the 'classifier + noun', they behave like the demonstratives followed by the classifiers. **Tsi** ^{32} and **hi** ^{32} must be used as demonstratives, e.g.:

81. 這三本書

tsi ^{11} saŋ ^{52} (p)uoŋ ^{32} tsyu ^{44}

this –3 –cl.–book

"These three books".

82. 許四只紅其杯杯

hi ^{11} si ^{52} (ts)ie? ^{23} ϕyŋ ^{52} i pui ^{44} pui ^{44}

that –four –cl. –red–det.part.–cup

"Those four red cups".

83.　企前面其許兩只聚人団都是我姐

k'ie ^{32} sein ^{11} mein ^{21} (k)i hi ^{11} nan ^{52} (ts)ie? ^{23} tsy ^{52} nɸyn ^{33} (k)ian ^{32} tu ^{11}

(s)i ^{11} ŋuai ^{24} tsia ^{32}

stand up-in front of –det.part.–that –2-cl. –girl –all –be– elder–sister

"These two girls standing up in front are my elder sisters".

When the number preceded by the demonstrative is **s(u)o?** ^{5} 'one', it can be omitted.

E.g.:

84.　這（蜀）只人 ·····················> 這只人

tsi ^{32} (s)uo? ^{11} (ts)ie? ^{23} nɸyn ^{52} = tsi ^{44} (ts)ie? ^{23} nɸyn ^{52}

"This person".

Thus, in conclusion, the distribution of the Fuzhou dialect demonstratives is as follows:

Demonstratives	Following elements		
	(number)+C1.	Noun	Verb
tsi³²/hi³²	+	—	—
tsia³²/hia³²	—	+	—
tsui⁵²/hui⁵²	—	(+)	+

The following examples show how the Fuzhou demonstratives occur:

85.　這（蜀）只毛是我其

tsi ^{32} ((s)o) ^{11} (ts)ie ^{24} no? ^{23} sei ^{242} ŋuai ^{32} (k)i

this-one-(cl.)-thing -be-I-det.part.

"This thing is mine".

86.　者毛是我其

tsia ^{44} no? ^{23} sei ^{242} ŋuai ^{32} (k)i

this-thing-be-I-det.part.

"This thing is mine".

87.   這回毛是我其

tsui ^{52} no? ^{23} sei ^{242} ŋuai ^{32} (k)i

this-thing-be-I-det.part.

"This thing is mine".

This sentence in not as usual as (86).

88.   這回是我其

tsui ^{52} sei ^{242} ŋuai ^{32} (k)i

this-be-I-det.part.

"This is mine".

3. Conclusion

This brief discussion on the Fuzhou dialect perhaps allows us to answer more precisely now the initial question: is there any influence of the Altaic languages which might have provoked, under the Yuan dynasty, the appearance of dissyllabic subject demonstratives in the form of 這的/那的? Our answer should be that is unlikely. The principle of external borrowing, if important in the phonological or lexical realms, does not seem to be very operate in syntax. It is often raised to hinder our better understanding of the internal mechanism of syntactatic change (cf. Peyraube, 1989).

As we just seen, as soon as 這 and 那 appeared in Medieval Chinese under the Tang, they have been dissyllabic in the subject position. And in some of the southern dialects, particularly that of Fouzhou, the equivalent demonstratives have remained dissyllabic until today. No evidence whatsoever suggests that they had once been monosyllabic under the Southern Song and later became dissyllabic.

What remains to be explained is, of course, the reason why under the Southern Song, especially in literary works of the Jiangnan region, the subject demonstratives could have been monosyllabic. First of all, one would like to indicate that this phenomenon was not

as widespread as some would think. Even in *Zhūzǐ yǔlèi*, which is the major work of the Southern Song period (the other quoted work is "Zhang Xie zhuangyuan" which has too few examples to be representative), there are in fact many more examples of *cǐ* 此 , *zhège* 這個 or *zhèdǐ* 這底 as subjects than those of *zhè* 這 as subjects. Moreover, this work is not an excellent document of the really vernacular language. The classical language is often mingled with the truly vernacular.

One could thus account for the appearance of 這 subject by calling upon an analogical extension phenomenon with the classical demonstrative 此, which has always existed alone as subject.

In other words, from a situation where the subject demonstratives were dissyllabic (Tang), one moves to another situation where they could be monosyllabic (Southern Song), by analogy with the prevailing situation of the Classical Chinese. But this did not prevent, under the Yuan, the situation from going back to that of the Tang, before returning again to that of the Southern Song under the Ming.

This is typically something, unrelated to any influence of any foreign languages, which may be called an internal mechanism of cyclical change. The evolution could be achieved, as the cyclical theory would predict (cf. C. Hagège, 1978), by cycles comparable to erosion cycles in geology, i.e. reproducing similar patterns each time that a cycle is completed.

Other syntactic phenomena in Chinese could also be quoted as examples of cyclical changes without relying on the principle of external borrowing. For instance:
- the existence, in Early Archaic of the general negative *fú* 弗(=*bù* 不) which became, in Late Archaic a fusion of 不+ 之, before becoming again the general negative under the Han;
- the existence of the structure "V + *le* 了 + Object + *le* 了 " under the Southern Song, which disappeared under the Yuan and reappeared under the Ming(cf. Cao Guangshun, 1987, which quotes other similar examples of probably cyclical changes).

Michel Desirat & Alain Peyraube

- the existence, under the Tang, of the form "V - *jiāng* 將- Directional verb" which gave
way to the form "V- *le* 了 - Dir. V" under the Song before returning to " V - *jiang* - Dir.
V" under the Yuan, and later again leaving the place to the form "V - *le* - Dir. V" under
the Ming. Cf. Chen Gang, 1987.

REFERENCES

Cao Guangshun　曹廣順

　　1986　"《祖堂集》中的「底（地）」「卻（了）」「著」"，中國語文 3, 192-202。

　　1987　"試說「就」和「快」在宋代的使用及有關的斷代問題"，中國語文 4, 288-
　　　　294。

Chen Gang　陳剛

　　1987　"試論「動-了-趨」式和「動-將-趨」式"，中國語文 4, 282-287。

Chen Zhiwen　陳治文

　　1988　"東漢時的「這」不是指示詞"，中國語文 6, 475。

M. Désirat & Liang Yuzhang

　　1990　"Tuok5 in the Fuzhou dialect", *Cahiers de linguistique d'Asie orientale,*
　　　　forthcoming.

Guo Xiliang　郭錫良

　　1989　"試論上古漢語指示代詞的體系"，語言文字學術論文集。上海：知識出版社
　　　　，57-76。

C. Hagège

　　1978　"Du thème au thème en passant par le sujet. Pour une théorie cyclique", *La*
　　　　linguistique, 14-2, 3-38.

Huang Konggui　黃孔葵

　　1989　"《論衡》中的代詞"，湖北大學學報 4, 61-70。

Huang Shengzhang　黃盛璋

　　1983　"先秦古漢語指示詞研究"，語文研究 1, 6-12。

Li Siming　李思明

　　1986　″《水滸全傳》的指示代詞″，語文研究 1, 6-12。

Liang Yuzhang　梁玉璋

　　1983　″福州方言聯讀音變與語義分別″，方言 3, 166-169。

　　1986　″福州方言的單音節「無字句」″，福建師範大學學報 4, 71-76。

　　1988　″福州方言的倒序詞″，福建師範大學學報 4, 79-82。

Lü Shuxiang & Jiang Lansheng　呂叔湘　江藍生

　　1985　近代漢語指代詞。上海：學林出版社。

Mei Tsu-lin　梅祖麟

　　1982　″Some linguistic criteria for dating Early Chinese Vernacular Stories″, AAS Meeting, Chicago, April 3.

　　1984　″從語言史看幾本元雜劇賓白的寫作時期″，語言學論叢 13, 111-153。

　　1986　″關於近代漢語指代詞″，中國語文 6, 401-412。

　　1987　″唐、五代 ′這、那′ 不單用作主語″，中國語文 3, 205-207。

Ohta Tatsuo　太田辰夫

　　1958　中國語歷史文法。東京：江南書院。

A. Peyraube　貝羅貝

　　1989　″早期「把」字句″，語文研究 1, 1-9。

　　1990　″Syntactic Change in Chinese: on Grammaticalization″, *Bulletin of the Institute of History and Philology*, forthcoming.

Wang Li　王力

　　1958　漢語史稿，中。北京：科學出版社。

Wang Shaoxin　王紹新

　　1989　″量詞 ′個′ 在唐代前後的發展″，語言教學與研究 2, 98-119。

Yang Lien-sheng　楊聯陞

　　1957　″《老乞大・朴通事》裡的語法語匯″，史語所集刊 29, 197-208。

Michel Desirat & Alain Peyraube

Ye Youwen　葉友文

　　1988　〞「這」的功能嬗變及其他〞，語文研究 1, 17-21。

Zheng Yide　鄭懿德

　　1983　〞福州方言單音動詞重疊式〞，中國語文 1, 30-40。

　　1985　〞福州方言的「有」字句〞，方言 4, 309-313。

　　1988a　〞福州方言形容詞重疊式〞，方言 4, 301-311。

　　1988b　〞福州方言「禮」的詞性及其用法〞，中國語文 6, 450-452。

漢語方言入聲音節的生理特徵
—— 兼論入聲韻尾的歷時變化 ——

岩田禮

日本・靜岡大學

一、前　言

關於漢語方言的入聲，無論在共時上還是歷時上都有不少問題需要重新進行考察。本文用實驗的方法直接或間接地觀察入聲音節發音時的喉頭動作，據此提出對於入聲歷時變化的若干見解。

實驗工具主要有光纖維鏡 (fiberscope) 和肌電 (electromyography, 略稱 EMG) 兩種。纖維鏡是醫科用的一根細長的軟導管，導管直徑很小，可以從鼻腔伸進去，懸在聲門上面（咽頭部分），每秒可以拍攝六十張喉頭的影像。這種實驗較爲簡單，也不妨礙發音人的發音動作。[1]肌電是測量各種肌肉活動的醫科工具，實驗時把一根細針從喉頭附近的皮膚扎到喉肌上；針的裏面是兩根細線，其尖端是用白金作的雙極電極；針扎進喉頭再拔出來，把電極留在肌肉上。肌肉的收縮和放鬆由肌電強度的大小反映出來。[2]喉肌分喉外肌和喉內肌；就語音的產生來講，喉外肌的活動主要參與調節喉頭的上下運動、下顎的開度以及舌位；喉內肌，有的控制聲門的開合，有的控制音高（基頻），而有的則參與調節聲帶內部的緊張度。

實驗的對象方言是香港粵語、臺灣閩南話、蘇州話和山西的太谷話。[3]四種方言都用纖維鏡進行了觀察，而蘇州話還用肌電測量了三種喉頭肌：環甲肌 (cricothyroid)、胸骨

1　*Sawashima,M. and H.Hirose* (1968) "New laryngoscopic technique by use of Fiber optic" The Journal of the Acoustical Society of America, Vol.43,168–169.
2　*Hirano,M. and J.J.Ohala* (1969) "Use of hooked-wire electrodes for electromyography of the intrinsic laryngeal muscles" Journal of Speech and Hearing Research, 12,362–373.
　　Sagart,L.,P.Hallé, B.Boysson-Bardies (1987) "An Electromyographic investigation of Laryngeal muscle activity in Modern standard Chinese tones" Proceedings of the 11th International Congress of Phonetic Sciences, Tallin.
3　關於太谷話，參看楊述祖 (1983)「太谷方言志」（山西省社會科學院語言研究室「語文研究」增刊3）

岩田禮

舌骨肌(sternohyoid) 和聲帶肌(vocalis)。

粵語有三種入聲調,閩南、蘇州和太谷分別都有二種入聲調,舉例如下:

	粵	閩 南		蘇州	太谷
陰入 （上）竹[tʃuk⁵]		得[tit³²]	滴[tiʔ³²]	跌[tirʔ⁵]	滴[tiəʔ³]
（下）鼈[pit³]					
陽入	褶[tʃip²]	直[tit⁵]	碟[tiʔ⁵]	笛[tɦirʔ²³]	笛[tiəʔ⁴¹²]

二、實驗結果

閩南話和粵語的實驗主要於1979年進行,1989年又做了一次閩南話的實驗;蘇州話和太谷話分別在1989年做了一次實驗。幾次實驗都在日本東京大學醫學部語音語言醫學研究所(Research Institute of Logopedics and Phoniatrics,略稱ＲＩＬＰ)進行。實驗結果已經在ＲＩＬＰ年報上發表,[4]本節將其概要敘述一下。

2-1.喉塞音[ʔ]的生理特徵

"喉塞音"(glottal stop),一般認爲是在聲門形成閉塞的音:緊閉聲門,把聲門下的氣流閉塞住,從而停止聲帶的顫動,而聲門上面的口腔內則沒形成任何閉塞或阻礙。這種說法,要是單就聲門的狀態說是對的,但並沒有說明喉塞音的全部情況。在喉塞音的發音動作中,我們往往能發現的是聲門上面的緊縮運動(supraglottic laryngeal constriction),特別是假聲帶的內轉運動。 Fig.1 表示單念蘇州話陰入音節[tirʔ⁵]時的喉頭影像。可以看到,假聲帶在韻母部分逐漸向內轉動,在音節末位幾乎要互爲接觸(參看示意圖)。Fig.1影像下面的圖表表示兩個假聲帶之間距離以及基頻的變動。值得注意的是,這種假聲帶的運動已在韻母的開頭部分開始;這說明,不僅是韻尾部分而且是整個入聲韻母都發生了"喉化"(glottalized)。還有一點需要指出:喉頭在

4　*Iwata, R., M. Sawashima, H. Hirose and S.Niimi* (1979) "Laryngeal adjustments of Fukienese stops--Initial plosives and final applosives--"Ann.Bull.RILP (Faculty of Medicine, University of Tokyo),No.13,61-81.
　Iwata, R., M. Sawashima and H. Hirose (1981) "Laryngeal adjustments for syllable-final stops in Cantonese" Ann.Bull.RILP,No.15,45-54.
　Iwata, R., H. Hirose, S. Niimi and S. Horiguchi (1990) "Syllable final" glottal stop "in Chinese dialects-A Fiberoptic and Electromyographic study--" Ann.Bull.RILP,No.24.,19-40
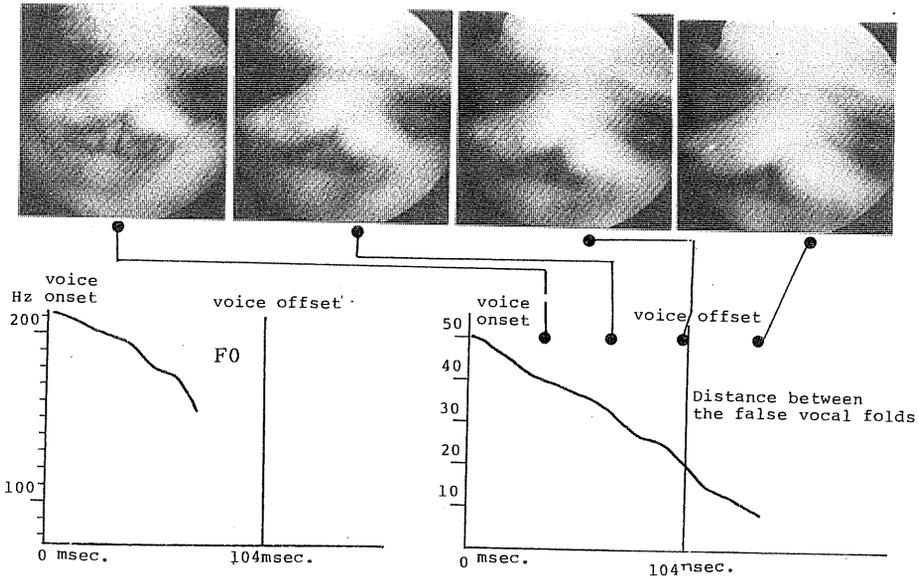
Fig. 1 Selected laryngeal views for Suzhou (蘇州) [tiɪʔ 5] in the isolated form, with the temporal contour of the F0 and the distance beteen the false vocal folds for vowel [iɪ].
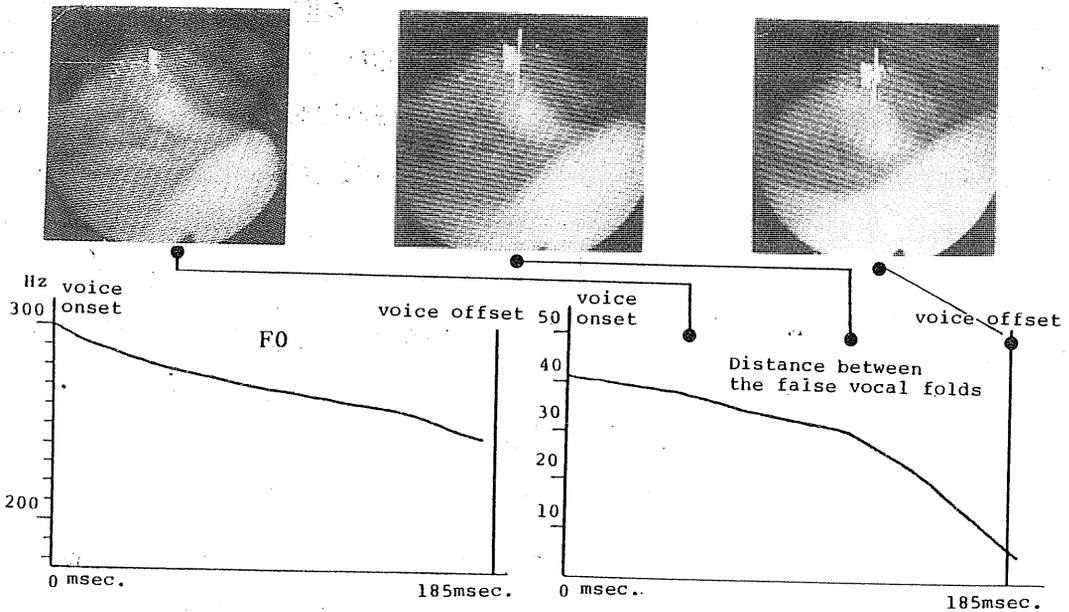
Fig. 2 Selected laryngeal views for Taigu(太谷)[tiəʔ 3] in the isolated form, with the temporal contour of the F0 and the distance between the false vocal folds for vowel [iə].
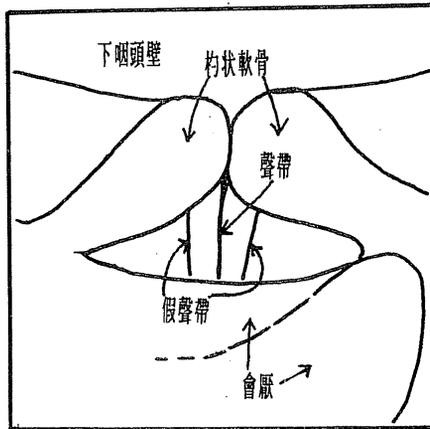
示意圖

音節末位似乎上昇了。蘇州話陽入音節中的喉頭運動與陰入音節也有不同之處，這與所謂＂濁聲母＂或陽聲調的發聲 (breathy phonation) 有關，有待另文討論。閩南話，有的入聲字帶喉塞韻尾－ʔ，假聲帶運動的時間推移，陰入和陽入大致上都與蘇州話的陰入相同（圖從略）。 Fig.2 表示太谷話單念陰入音節[tiəʔ³]時的喉頭影像，兩個假聲帶之間的距離以及基頻表示在下面的圖表上。可見，假聲帶在音節的後一半才開始向內轉動。太谷話的陰入和陽入單念時念得不算短促，是比舒聲調略短的程度，[5] 假聲帶內轉起始時間的差異可能與音節時長的差異有關。從 Fig.2 還能看到，假聲帶向內轉動的同時會厭 (epiglottis) 和杓骨 (arytenoid) 之間的距離（喉頭的前後徑）也逐漸縮短。在 Fig.1,2 另有一點值得注意的：緊喉運動使得基頻略降低（基頻下降的幅度大約在20-60 Hz的範圍之內）。這種現象也在其它樣品中看到，參看下面 Fig.4,5 以及注6。

元音起頭的音節,有時以喉塞音 (syllable initial glottal stop) 起音，與韻末喉塞音一樣，聲門上面明顯緊縮。

舒聲調（非入聲調），一般認爲不帶韻末喉塞音，事實未必如此。舒聲調音節一般比入聲調長，音節首段和中段沒有緊喉運動而在音節末往往出現聲門上面的緊喉運動。Fig.3表示蘇州話發陰平[ti⁵⁵]和陰入[tirʔ⁵]時兩個假聲帶之間距離的變動。在陰平

5　太谷話有五個聲調，平聲[33]，上聲[412]，去聲[452]，陰入[3]，陽入[412]。平聲和陰入、上聲和陽入，調值分別相同或相近。據初步測量，單字平均時長：平聲207.4ms，陰入172.3ms；上聲335.0ms，陽入286.9ms.。連讀調值,平聲[33], 上聲[41]，去聲[45]，陰入[3]，陽入[41]；連讀時的平均時長：平聲224.0ms，陰入117.4ms；上聲138.4ms，陽入106.8ms。
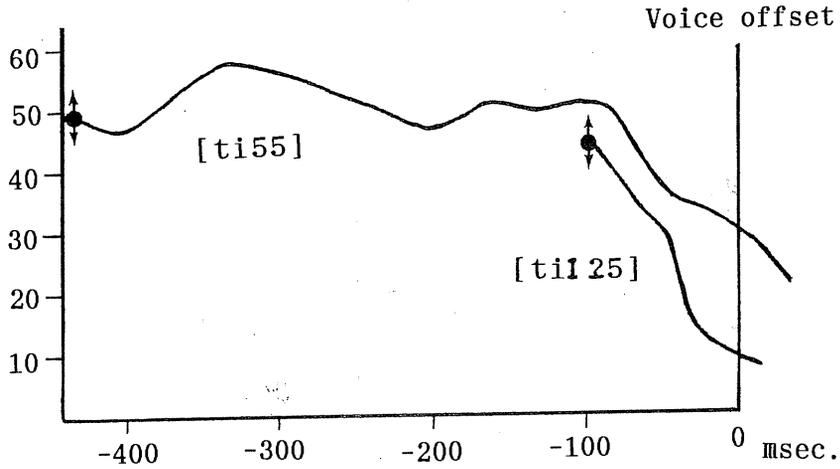
Fig. 3 Temporal contour of the distance between the false vocal folds for Suzhou (蘇州) [ti ^{55}] and [tiɪʔ ^{5}]. The time points of voice onset are indicated by closed circle on each line.
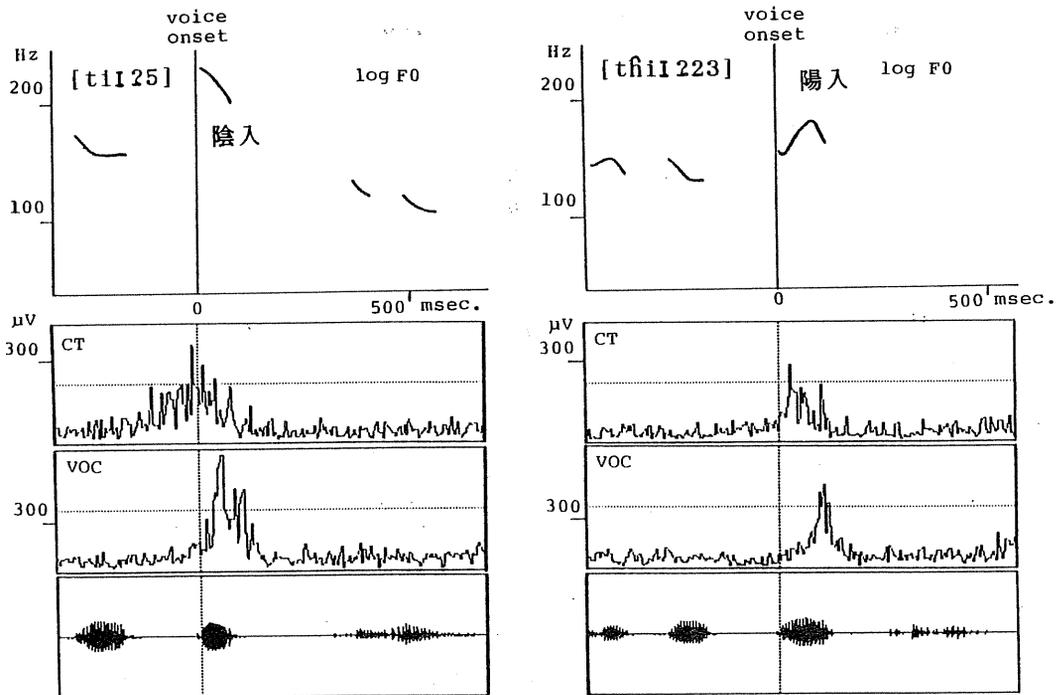
Fig. 4 Integrated EMG signals of CT and VOC for Suzhou (蘇州) [tiɪʔ ^{5}] and[tɦiɪʔ ^{23}] with the F0 contours and the audio signals.

岩田禮
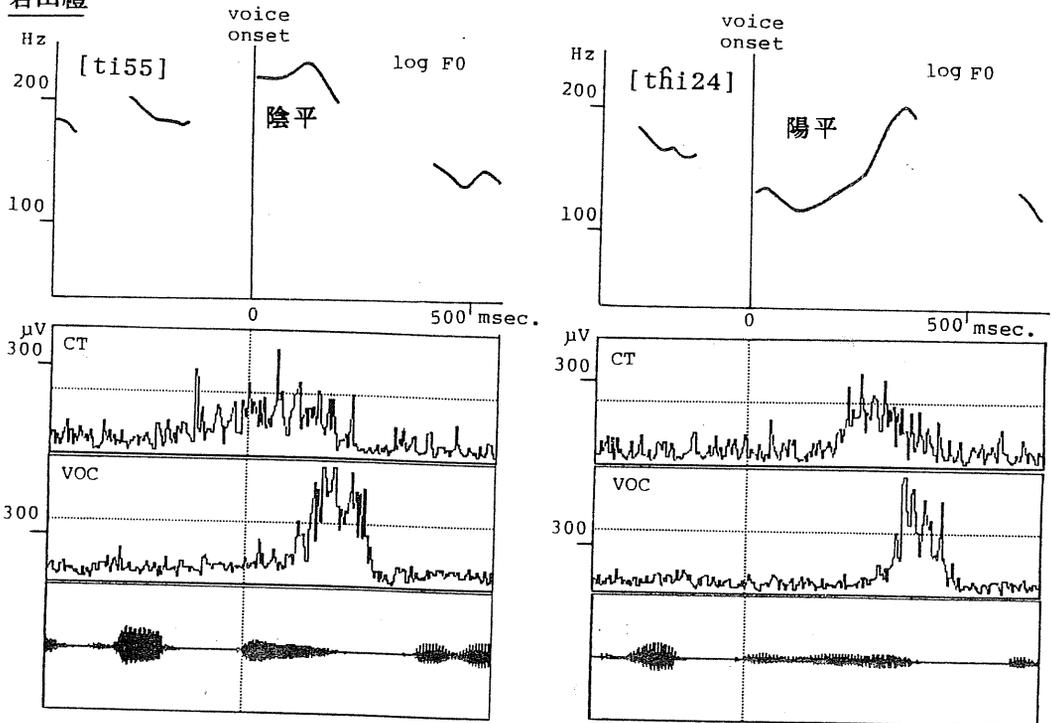
Fig. 5 Integrated EMG signals of CT and VOC for Suzhou (蘇州) [ti⁵⁵] and [tɦi²⁴] with the F0 contours and the audio signals.
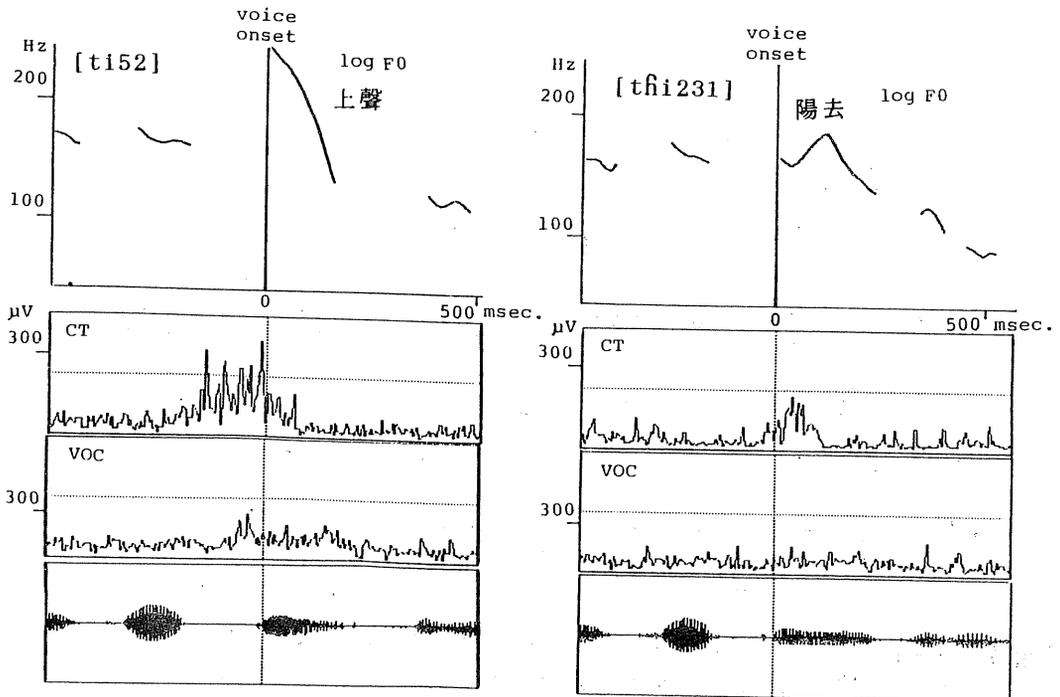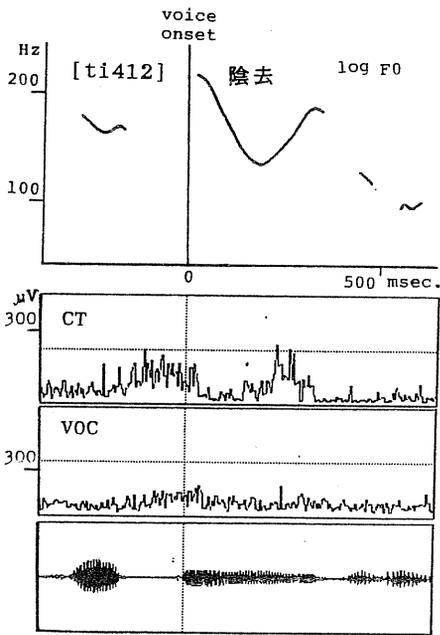
Fig. 6　Integrated EMG signals of CT and VOC for Suzhou（蘇州）[ti [52]]，[ti [412]] and [tɦi[231]] with the FO contours and the audio signals.

音節末位假聲帶向內轉動，以致聲帶顫動停止。陰平和陰入雖然時長很不相同，但若以聲帶顫動停止時間 (voice offset time) 爲基點，假聲帶內轉的起點是大致相同的。在蘇州話，凡是末位調值相對高的昇調和高平調（陰平、陽平、陰入、陽入）都有這種緊喉運動，曲折調陰去[412]時而有之，而在末位調值低的降調（上聲、陽去）中幾乎沒有。舒聲調末位的緊喉運動或多或少也能在其它三種方言中觀察到。尤其是太谷方言，所有的話語不管是詞語或句子都以緊喉運動爲終止。雖然這可能是這位發音人個人的發聲特徵，但不妨說緊喉運動在太谷話入聲調和舒聲調的區分上不起作用。我們曾經觀察過普通話四聲的喉頭運動，除第四聲以外音節末位往往出現聲門上面的緊縮運動。

　　Fig.4-6　表示蘇州話七種聲調的ＥＭＧ。實驗時把七個字放在引導句〝俚看＿＿辭個字〞[li [55] k'ø [41] ＿＿＿ kɦəʔ [1] kəʔ [5] zɿ [31]]（他看＿＿這個字）中念，分別念了八次。Fig.4-6表示一個典型的樣品。嵌入字韻尾可能受到後接聲母的影響，但發音人在多數情況下念了嵌入字後略加停頓，發音條件略近單獨念。胸骨舌骨肌（ＳＨ）的活動在陽聲調的起

頭部分明顯增強，Fig.4-6從略示之。環甲肌（ＣＴ）控制基頻的變動，它的收縮使得聲帶拉長，基頻昇高；ＣＴ放鬆，聲帶縮短，基頻則降低。從圖可以看出，ＣＴ的活動與基頻的變化對應得很好。聲帶肌（ＶＯＣ）的活動，在一方面對基頻的變化起著一定的作用，[6]另一方面又使聲帶內部的緊張度提高，使聲門緊閉。ＶＯＣ的這種功能在各種防護動作中（protective gesture of the larynx）表現得最好，如咳嗽、嚥咽唾沫時ＶＯＣ有明顯的活動。從Fig.4可以看見，入聲音節ＶＯＣ活動明顯增強，但相對來說在陽入弱一點。ＶＯＣ在陰平、陽平的音節末位也活動有力，在陰去有的樣品略有增強而有的則沒有活動，在上聲和陽去幾乎不活動。ＶＯＣ的活動正好與聲門上面的緊縮運動相對應。但這不一定說ＶＯＣ參與控制聲門上面一些器官的運動。因爲我們知道，發耳語（whisper）的時候聲門放開的同時聲門上面明顯緊縮。[7]最好還是說，ＶＯＣ直接控制聲帶內部的緊張度，而聲門上面的緊縮運動則是由另外一些肌肉（可能是喉外肌）引起的。但也可以說，兩種肌肉的作用是相互協調的，聲門上面的緊縮運動間接地促使聲帶提高緊張度。

2-2. 入聲韻尾－ｐ，－ｔ，－ｋ的生理特徵

Fig.7 表示單念閩南話陽入音節[tit⁵]時的喉頭影像。可以看到，在韻母部分聲門一直沒開；－ｔ的成阻後假聲帶開始向內轉動，喉頭的前後徑也逐漸縮短。這種特徵也在－ｐ和－ｋ上能看見，粵語的－ｐ，－ｔ，－ｋ基本上亦如此。由此可以說，漢語方言的－ｐ，－ｔ，－ｋ帶有緊喉運動。與－ʔ所不同的是，元音部分緊喉不顯著，成阻顯著地出現；[8]帶有－ʔ的音節，則是元音部分已經明顯喉化。這種差異可歸

---

6 聲帶筋（ＶＯＣ）對基頻的作用，筆者在拙作（Iwata et al.1990,p.36）中加以討論，今承徐雲揚（Eric Zee）先生的指點補充若干論點。從Fig.4-6可以看到，ＶＯＣ只在末位調值相對高的音節（陰入、陽入、陰平、陽平）中有力活動，而ＶＯＣ和ＣＴ的活動呈現出相互關係（reciprocity）：隨著ＣＴ的活動減弱ＶＯＣ則活動有力。值得注意的是，這些音節末位往往發生基頻略降的現象。拙作認爲，ＶＯＣ在音節末跟ＣＴ對抗，由於提高聲帶內部的緊張度，導致產生基頻的下降。其實筆者沒論及另一個很重要的看法，正好在ＩＳＣＬＬ會議上由徐先生提出來：ＶＯＣ的活動在高音域的發聲（high pitch register）中可能防止音高的下降；因爲在音節末ＣＴ的活動減弱，聲門下面的壓力（subglottal pressure）也會降低，這些條件不利於發出高音。但是假如說ＶＯＣ在音節末輔助發出高音的話，那麼它的活動應該在基頻下降以前就增強（基頻的變化一般比肌肉活動晚一點出現，是所謂 "latency time"）。事實則不然，ＶＯＣ多數都在基頻開始下降的前後才開始有力活動，似乎與基頻的下降相對應。我們知道ＶＯＣ在有些人的發聲中使基頻昇高，而且歷來認爲喉塞音使元音的基頻昇高（參看 J-M. Hombert (1978) "Consonant types, vowel quality, and tone" pp.92-5, in V.A.Fromkin ed. "Tone a linguistic survey" Academic Press,pp.77-111），但本實驗的結果似乎與此相反。這個問題今後還需要從各方面加以研究。

7 Weitzman, R. S., M. Sawashima, H. Hirose and T. Ushijima (1976) "Devoiced and whispered vowels in Japanese" Ann.Bull.RILP, No. 10, 61-80.

8 粵語的－ｐ，－ｔ，－ｋ，緊喉運動已在元音的結尾部分開始，喉化的起始時間似乎比閩南話早一點。但緊喉運動在成阻前遠不如成阻之後那麼顯著。
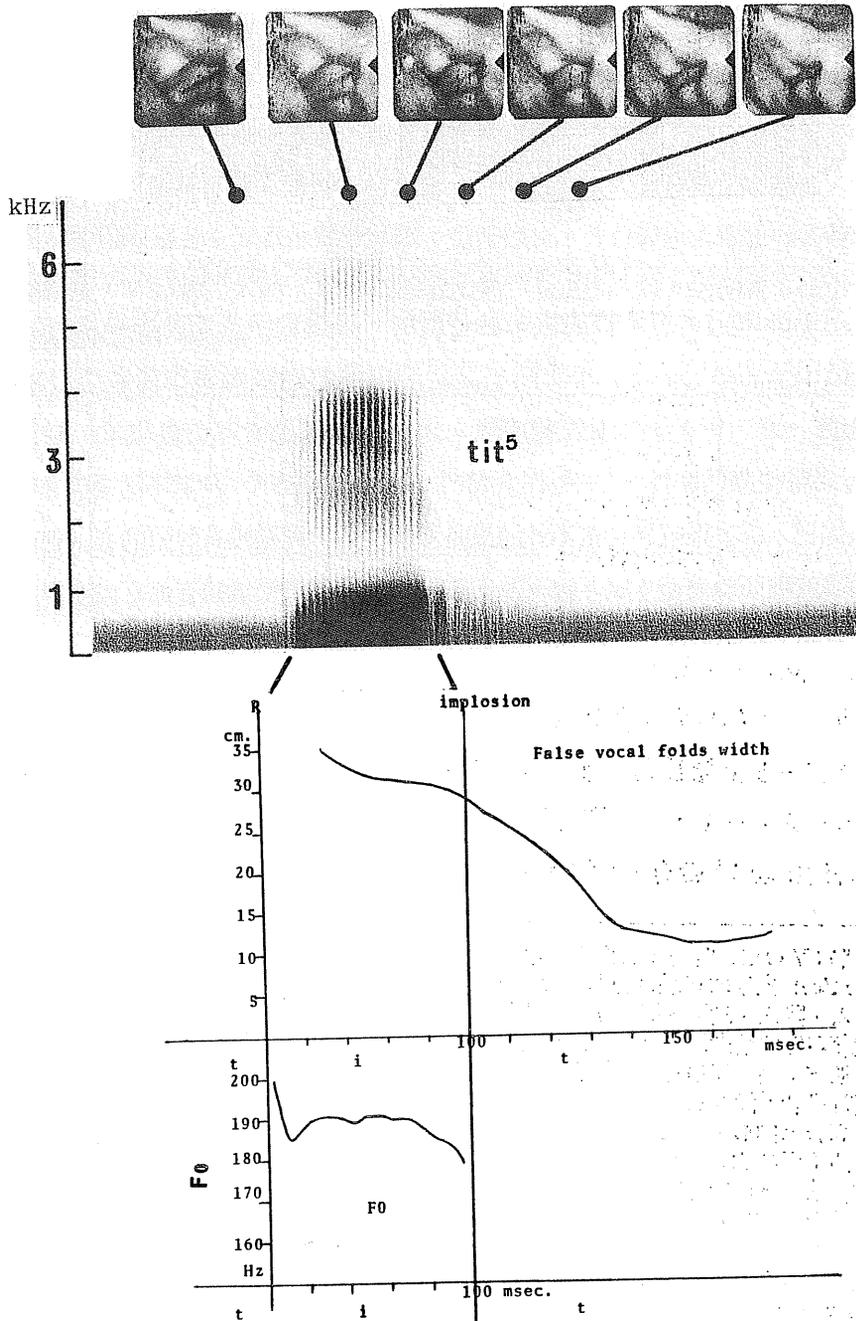
Fig. 7   Selected glottal views for South Min(閩南)[tit] in the isolated from, with the wide-band spectrogram, temporal contour of the distance between the false vocal folds and the pithch contour.

於有無口腔內的封閉這一特徵：在－ｐ，－ｔ，－ｋ音節，封閉一形成口腔中的氣壓就上昇，以致把聲門上下的氣壓差降低，這有利於停止聲帶的顫動；－ʔ音節沒有口腔內的封閉，口腔中的氣壓大致上等於大氣壓，如果聲門下面的壓力不降低，聲門上下的氣壓差則不降低，這不利於停止聲帶顫動，不是放開聲門（[h]）就是緊閉聲門（[ʔ]）才能使音節終止。

在－ｐ，－ｔ，－ｋ喉頭和口腔內的封閉同時形成，有人可能認爲是雙重發音（double articulation）。但這種說法未必是對的。因爲除喉音而外幾乎所有的音都是由喉頭調節（laryngeal control）和聲門上面口腔內的某種阻礙協作而產生出來的。朝鮮語音節末的－ｐ，－ｔ，－ｋ沒有除阻，這一點與漢語方言完全相同；但它們不帶喉塞音，而成阻後聲門略開。[9]一是閉合聲門，一是放開聲門，兩者不過是停止聲帶顫動的兩種辦法而已，而這種喉頭特徵不能認爲是區別性的。同樣沒有除阻的音，何以在不同語言中由不同的喉頭調節產生呢？這可能與音節特性（單音節或複音節）以及聲調特性（有無聲調）有關，此不贅述。[10]

2-3. 後接音對入聲音節的影響

趙元任早在二十年代指出，吳方言入聲音節的－ʔ在話語的非末位都消失，只保持音節的短促性。[11]董同龢等人指出，閩南話帶有－ʔ的入聲音節在＂某種語法結構之中的非末位＂不僅失掉－ʔ而且失掉短促性，聲調調值也起變化。[12]我們的實驗證明了這些觀察基本上是對的：蘇州話幾乎都沒有例外；閩南話入聲字作爲雙音節詞語前字時緊喉運動都消失，在句子（引導句）[13]當中元音後接時總有緊喉運動，帶音聲母或／h／後接時也有時出現，而清音（不帶音）聲母後接時緊喉運動都消失。太谷話的入聲音節單念念得

9　*Sawashima, M., H-S Park, K. Honda and H. Hirose* (1980) ″Fiberoptic study on the laryngeal adjustments for syllable-final applosives in Korean″ Ann. Bull., RILP, No. 14, 125-138.

10　*Iwata, R, H. Hirose, S. Niimi, M. Sawashima and S. Horiguchi* (1990) ″Syllable final stops in South-Asian languages; Southern Chinese dialects, Thai and Korean″ in proceedings of 1990 International Congress on Spoken Language Processing, Kobe.

11　趙元任(1928)『現代吳語的研究』（清華學院研究院叢書第四種），p.68。

12　董同龢、趙榮琅、藍亞秀(1967)『記台灣的一種閩南語』歷史語言研究所單刊，甲種之二十四，pp. 16-18。″某種語法結構″則是李如龍所說的″聲調單位″，也是R.L.Cheng 所說的″tonal groups″（參看李如龍「廈門話的變調和輕聲」廈門大學學報（社會科學版）1962年第3期，78-114, *R.L. Cheng* ″Tone Sandhi in Taiwanese″ Linguistics Vol. 41, 1968）。

13　引導句″這隻鼈－－″[tɕi ³³ tɕiaʔ ²¹ piʔ ²¹ ____]，″鼈″字位於″聲調單位″(tonal group) 的末位；嵌入的是″新唔新″[ʃin ⁵⁵ m ʃin ⁵⁵]″好唔好″[hə ⁵¹ m hə ⁵¹]″脹唔脹″[tiŋ ²¹ m tiŋ ²¹]″猛唔猛″[bin ⁵¹ m bin ⁵¹]″輕唔輕″[kʻin ⁵⁵ m kʻin ⁵⁵]″會靠″[e ²¹ kʻo ²¹]等詞組或詞。

不算短；在非末位顯然很短促了，但緊喉運動在清聲母後接時都消失，在元音和帶音聲母後接時才有時出現。至於粵語和閩南語的－ｐ，－ｔ，－ｋ，在清聲母後接時緊喉運動都消失而在元音、帶音聲母以及／ｈ／後接時或多或少都保持著緊喉運動。總之，入聲音節在詞語或句子當中傾向於失掉喉塞音，而有無喉塞音在一定程度上決定於後接音的語音性質。[14] 下表總結一下後接音對入聲音節的影響。表中Ｇ表示入聲音節帶喉塞音，Ｖ、ＳＯ、ＷＯ都表示不帶喉塞音；Ｖ表示聲帶顫動一直沒停止，ＳＯ表示入聲韻母聲帶顫動停止後聲門立即略開，ＷＯ聲門大開。加括號的表示是少數情況。加＊號則表示在引導句中才出現而在雙音節詞語中不出現。

方言 後接音	蘇州	太谷	閩南		粵
	－ʔ	－ʔ	－ʔ	-p, -t, -k	-p, -t, -k
元音	V	V, G＊	V, G＊	G（V）	G
帶音聲母	V	V, (G＊)	V, G＊	V（G）	G
／ｈ／	WO	WO	WO, G＊	WO, G	G
不帶音聲母 不送氣	SO	SO	SO	SO	SO
不帶音聲母 送氣	WO	WO	WO	WO	WO
不帶音聲母 擦音	WO	WO	WO	WO	WO

G：glottal stop；V：glottal vibration
SO：slight opening of the glottis；WO：wide opening of the glottis

2-4. 小 結

漢語方言入聲音節的喉頭特徵可歸納如下：

(1) 所謂 ”喉塞音” 的產生方式：聲帶肌（ＶＯＣ）等一些喉內肌的活動明顯增強，促使聲門緊閉，與此同時假聲帶向內轉動，聲門上面明顯緊縮。

14　參看注10所引論文以及岩田禮(1985)「南部中國語の音節末閉鎖音」(Syllable final stops in southern Chinese)「言語研究」(Bull. of the linguistic society of Japan)87, 21-39。

(2) 這種 ”緊喉運動” 在－ʔ音節中往往開始於韻母的開頭部分。

(3) 韻尾－p，－t，－k都帶緊喉運動，但在口腔內的封閉形成以前不大顯著，封閉形成後才顯著地出現。

(4) 舒聲音節末位往往也出現緊喉運動。

(5) 在詞語或句子當中，入聲音節往往失掉 ”喉塞音” ，而入聲韻尾的喉頭特徵決定於後接音的喉頭特徵。

　　緊喉運動，其原來的功能是防止異物侵入，保護氣管。人類能把它利用於語音的產生。 ”喉塞音” 在某些語言中具有區別性功能而在某些語言中只作爲變體。英語的詞末輔音有時也出現緊喉運動，則是後者。[15]在漢語方言中，一般認爲－ʔ跟－p，－t，－k一樣是一個韻尾，－ʔ則起區別性作用。但緊喉運動也出現在舒聲音節中，在話語的非末位它往往都消失，且－p，－t，－k韻尾也都帶有喉塞音；這些事實都證明，緊喉運動是停止聲帶顫動、產生短促音節的一種手段，而喉塞音本身不起區別性作用。

P.Ladefoged 說， ”From a phonological point of view it is often convenient to consider a glottal stop along with articulatory stops such as p t k. But from a phonetic point of view it has to be considered as a state of the glottis”。[16]粵語、閩南話和蘇州話的入聲音節很短促，蘇州和閩南的－ʔ音節整個韻母就 ”喉化” ，我們也不妨把它們認爲 ”音節特徵” (syllabic feature)或 ”發聲類型” (phonation type)。如閩南方言的入聲音節都有 ”短促性” 或 ”喉化” 這類特徵，而－p，－t，－k和－ʔ的區別在於口腔內封閉的有無而不在於發音部位的不同。這好比閩南方言中－m，－n，－ŋ和鼻化韻母ṽ之間的關係，凡有這些音的音節都有 ”鼻化” (nasalized)這一特徵，而－m，－n，－ŋ和ṽ的區別在於口腔內封閉的有無。

三、入聲韻尾的歷時變化

　　Matthew Chen（陳淵泉）曾指出，漢語方言入聲韻尾和鼻音韻尾的歷時演變完全

15　*Fujimura, O. and M. Sawashima* (1971) ″Consonant sequences and laryngeal control″ Ann. Bull. RILP, No. 5, 1-6.

16　*P. Ladefoged* (1971) ″Preliminaries to Linguistic Phonetics″ (The Univ. of Chicago Press), p. 16.

平行。[17]今將Chen文所舉的兩張表轉錄如下：

	p	t	k			m	n	ŋ
I	p	t	k		I	m	n	ŋ
II a	p		k		II a	m		ŋ
II b		t	k		II b		n	ŋ
III			k		III			ŋ
IV			?		IV			V^N
V			V̆		V			Ṽ
VI			V		VI			V
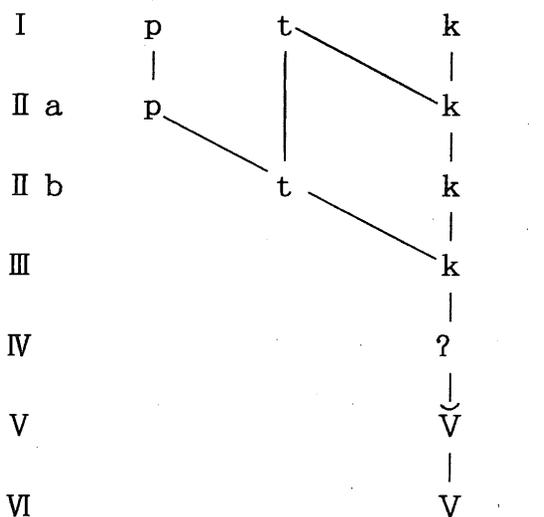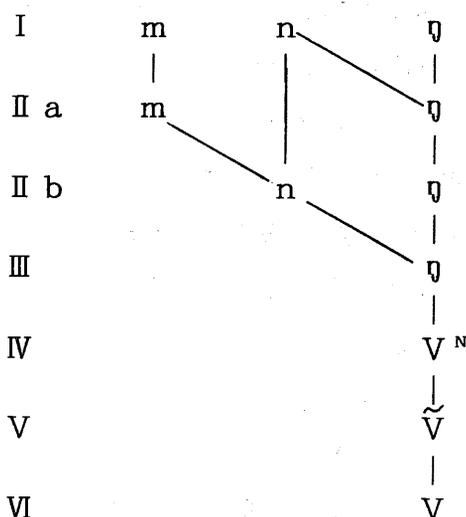
表 1　　入聲韻尾的演變　　　　　　　　表 2　　鼻音韻尾的演變

Chen 文說，"In both cases the direction is invariably from the front to the back along the dimension of the place of articulation (Steps II and III in both diagrams). The weakening of a full-fledged consonant ending to a glottal stop parallels the weakening of [-VN] to [-V ^{N}], a transitional stage on the way to full nasalization and the loss of the nasal ending (StepIV). Just as the nasal ending is deleted after leaving the trace of nasality in the vocalic nucleus, the stop ending did not disappear without tranferring its contrastive vowel shortening to the vocalic portion of the syllable (Step V)." (p.39,42)

現在根據實驗結果對Chen 說加以修正。表1 第一階段(Step I)，－p，－t，－k 改爲－p？，－t？，－k？。因爲中古漢語的－p，－t，－k一定是緊縮喉頭的。 表 1，2 從Step I 到StepII，III的變化，本文沒有發言權，今不討論。表 1 從Step I, II,III到Step IV的變化，即－p，－t，－k＞－？，一般認爲是發音部位的後移，這 顯然不妥，應該是口腔內封閉的消失，剩下的就是喉塞音。表 1 Step IV最好改爲 V？

17　*M. Chen* (1973) "Cross-dialectal comparison: A case study and some theoretical considerations" Journal of Chinese Linguistics 1-1, 38-63.

（V$^{?}$表示元音喉化）。Chen 文認爲－p，－t，－k 弱化爲－?，這是與鼻音韻尾相對比而說的，－m，－n，－ŋ 弱化爲V^{N}。但這里所說弱化的含意似乎尚不明確，並且方言中－? 頗多而V^{N}不多，[18] 不免有失平衡。從音理上說，表2 Step IV 應該是V，和表1的V$^{?}$ 相對應。本文認爲，V^{N} 可歸於StepIII或StepV，因爲V^{N} 是 ”一種不完全的 n g 韻尾，或前半元音不帶鼻音後半帶半鼻音 ”。[19] 入聲的Ṽ 可歸於Step IV，因爲－? 只是停止聲帶顫動、實現短促音節的一種手段，而如有其它辦法能停止聲帶顫動也不必緊縮喉頭。今舉些後者的例子：在話語當中清聲母後接時放開的聲門也可以實現短促音節，四種方言都如此；山西太谷方言的入聲單念時音節不算短促，連讀才讀得短促（參看注5），但實驗證明，單念時音節末總有緊喉運動而連讀時在某種音之前才有之。有一點值得注意：V$^{?}$，Ṽ 之類的入聲音節，不僅音節短促而且韻母音值也與舒聲調不同，如蘇州話和太谷話，與舒聲韻[i]相對應的入聲韻是[iɪ]或[iə]。這說明，在音節的區分上韻母音值也起相當大的作用；尤其是太谷話，因入聲調值與舒聲調大致相同，單念時音節時長也差不遠，（參看注5），故入聲和舒聲的主要差異在於韻母的音值上。現在將入聲音節的歷時演變過程圖示如下：
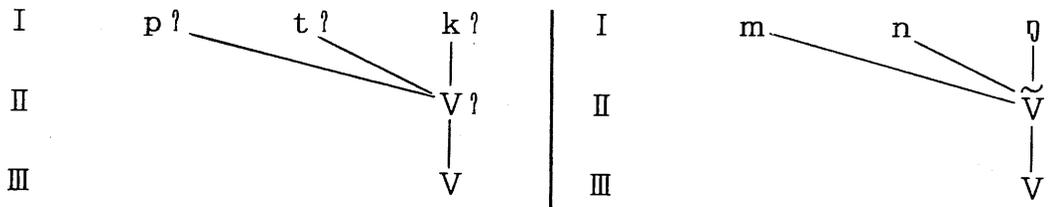
從V$^{?}$到V的變化可以認爲是 ”短促性 ”這一特徵的消失。關於這一點太谷和閩南方言給我們提供了線索：太谷話入聲的音節時長單讀時較長而連讀時卻短促；閩南話帶－? 的音節與太谷恰恰相反，單讀時短促而連讀時與舒聲音節大致相同。入聲的舒聲化在有的方言中先開始在話語的末位，而在有的方言中先開始在非末位。從V$^{?}$到V的變化也可以叫作 ”喉化 ”這一特徵的消失。這也不妨叫作緊喉作用的弱化，則

18　Chen 文舉十三個點吳方言，以常熟爲代表，資料引自趙元任『現代吳語的研究 』。
19　參看趙元任『現代吳語的研究 』p.66。

也可能引起喉化起始時間的推延。如太谷話入聲音節的緊喉運動在音節末才比較顯著。緊喉作用越弱音節時長越長，音節越長喉化的起始時間相對越遲，以至與舒聲音節一樣了。緊喉作用的弱化在韻母方面引起了元音音質的變化，入聲韻與舒聲韻合流，太谷話尚未發生韻母的這種合流。

　　以上所說入聲音節的演變主要發生在江淮以南的南方方言地區以及晉語中。所謂"秦"方言[20]（包括北京方言的口語層次）中的演變可能與此不相同。在"秦"方言裏，入聲韻母宕・江攝變爲-(i)au，曾・梗攝變爲-ei或-(i)ai，分別都有－u和－i韻尾。保留入聲的方言，除閩方言等而外，韻尾－u，－i一般不與－ʔ共起，而且入聲韻母（主要元音）一般傾向於央化，高元音u，i等尤甚。我們假定：在"秦"方言中宕・江攝入聲字的韻尾唇音化 (∗-awk)，曾・梗攝入聲字韻尾顎化 (∗ajk)。－k失掉了，因韻尾－u和－i不易和－ʔ同時並存（或者說不易與"喉化"發聲共起），入聲音節沒經過第II階段直接變爲－au和－ai(>－ei)，就不帶喉塞音（或者象舒聲調那樣緊喉運動在音節末才顯著）了。

【付　記】

20　*M. Hashimoto* (1969) "Nasal and stop endings in Ancient Chinese" Unicorn 5, 29-53.

Northern and Southern Forms in Hangzhou Grammar

Richard VanNess Simmons
The University of Washington, Seattle

Located in northern Zhejiang, the city of Hangzhou lies in the heart of Wu dialect country. Yet the dialect spoken in the city does not fit neatly within the typical Wu dialect pattern when examined in terms of its overall characteristics. Instead, it exhibits a striking mixture of Mandarin and Wu features, a situation whose origins may be attributed to the influence of the great numbers of Northern Chinese speakers who migrated to Hangzhou at the beginning of the Southern Song.

For instance, Hangzhou reflects a three-way contrast of initial stops and affricates characteristic of Wu dialects: voiceless unaspirated, voiceless aspirated, and murmured. The dialect also shows the strict division between upper and lower (*yīn* and *yáng*) tonal registers found in the Wu dialects. However, the present-day Hangzhou dialect also exhibits a great number of typical Mandarin features, especially in lexicon. These include the use of the Mandarin pronouns *wǒ* --/ngo3/, *nǐ*--/ni3/, and *tā* --/t'a1/; [1] the use of typical Mandarin negatives; and the extensive employment of the *-er* (/-er2/) suffix.

In this paper, a variety of approaches are adopted to illuminate this situation with regard to the grammar--specifically the lexicon and morphology--of the dialect. It will be seen that in general outline, and especially when compared to neighboring dialects, the grammar of the dialect of Hangzhou indeed is strongly Northern in character; yet when examined item by item a great many elements of Wu dialect or Southern stock are found,

---

1 For typographical convenience, the Hangzhou forms in this study are rendered in a phonemic transcription which utilizes the following conventions: 1) /tc, tc', dj/ and /c/ represent pre-palatals [tɕ, tɕ', dʑ, ɕ] ; 2) /ng/ represents the velar nasal stop [ŋ] ; 3) /i/ following sibilants /ts, ts', dz, s/ and /z/ represents the apical vowel [ɿ] ; 4) /ÿ/ represents the rounded apical vowel [ʮ] ; 5) /ô/ represents a rounded mid-low back vowel [ɔ]; and 6) /q/ represents a syllable-final glottal stop [ʔ]. The phonetic value of the remainder of the elements in the transcription generally matches that of corresponding IPA symbols (though /e/ is closer to schwa [ə] before /n/ and /q/ [but excepting /ieq/]). Tones (where they can be determined) are represented by numbers according to the traditional tonal categories as follows: 1 for *yīn píng*, 2 for *yáng píng*, 3 for *yīn shàng*, 5 for *yīn qù*, 6 for *yáng qù*, 7 for *yīn rù*, and 8 for *yáng rù*.

as well as items peculiar to the city of Hangzhou itself.

The Hangzhou data presented here is based on the language of two informants, Cheng Yongfang 程永芳 and Wang Lizhen 王麗珍, using data gathered at interviews in Hangzhou during 1988-89.[2] The informants are mother and daughter and were both born and raised in Hangzhou. At the start of the interviews, Cheng Yongfang was 76 and Wang Lizhen was 57.

To profile the Hangzhou lexicon in relation to Chinese dialects in general, we can utilize the classification scheme suggested by Jerry Norman (1988, 181-83), who proposed arranging the Chinese dialects into three groups--a Northern group, a Central group, and a Southern group--based on a set of phonological, grammatical and lexical criteria. In his scheme, dialects of the Northern and Southern groups contrast in all the criteria, while dialects of the Central group agree with the Northern group in certain criteria and with the Southern group in others. Leaving out the phonological criteria, which are not relevant to the present study, we can chart Hangzhou with representatives of the three groups as follows:

	Bj	Hz	Sh	Gz
1. 3rd person pronoun is *tā* or cognate ····················	+	+	−	−
2. Subordinative part. is *de/di* or cognate ·················	+	+	−	−
3. Ordinary neg. is *bù* or cognate ·························	+	+	+	−
4. Gender marker is prefixed for animals····················	+	+[3]	+	−
5. *Zhàn* or cognate for 'to stand' ·························	+	−	−	−
6. *Zǒu* or cognate for 'to walk' ··························	+	+	+	−
7. *Érzi* or cognate for 'son' ····························	+	+	+	−
8. *Fángzi* or cognate for 'house'·························	+	+	+	−

---

2 The fieldwork in Hangzhou was made possible through the generous support of the U.S. Department of Education Fulbright-Hays Doctoral Dissertation Research Abroad program and the National Program for Advanced Study and Research in China administered by the CSCPRC, National Academy of Sciences.

3 Only one exception is observed in the speech of the informants: /tsÿ1 niǎ2/ for 'sow'. In contrast, for 'boar' they give /iong2 tsÿ1/, which follows the pattern given for most gender distinctions, as /bo2 tci1/ 'hen' & /iong2 tci1/ 'cock', /bo2 iaq7/ 'female duck' & /iong2 iaq7/ 'male duck', /ts'i1 ny∅2/ 'cow' & /iong2 ny∅2/ 'bull', /ts'i1 ma3/ 'mare' & /iong2 ma3/ 'stallion'. The use of the rather literary prefixes /ts'i1/ and /iong2/--the informants insist these are the terms used colloquially--indicates the urban orientation of Hangzhou speakers.

In the above chart, Beijing (Bj), representing the Northern group, matches all the features defined by the criteria, while Guangzhou (Gz), representing the Southern group, differs in all the features. (A plus sign [+] indicates a correspondence; a minus sign [-] indicates variance.) Shanghai (Sh), representing the Central group, matches in five criteria and differs in three. Hangzhou could perhaps be placed with the Central group because it varies from the Northern group in one feature.

If we go a step further, however, and evaluate Hangzhou against only dialects of the Central group, we find that it clearly stands apart and essentially represents the Northern standard in this set of features. Below we compare Hangzhou with the five dialects Norman identified with the Central group--Suzhou (Sz), Wenzhou (Wz), Changsha (Cs), Shuangfeng (Sf), and Nanchang (Nc): [4]

	Hz	Sz	Wz	Cs	Sf	Nc
1. 3rd person pronoun is *tā* or cognate ··········	+	−	−	+	+	−
2. Subordinative part. is *de/di* or cognate ········	+	−	−	−	−	−
3. Ordinary neg. is *bù* or cognate ···················	+	+	+	+	+	+
4. Gender marker is prefixed for animals········	+	+	+	−	−	−
5. *Zhàn* or cognate for 'to stand' ·················	−	−	−	+	?	+
6. *Zǒu* or cognate for 'to walk' ····················	+	+	+	+	−	+
7. *Érzi* or cognate for 'son' ·························	+	+	+	−	−	−
8. *Fángzi* or cognate for 'house'·················	+	±	−	±	?	−

Note that all dialects but Hangzhou differ from the criteria in at least three features each. (This is true for Shanghai also, as may be noted in the previous chart.) Hangzhou only varies from the Northern group in a single criteria, number 7--the word for 'to stand' in Hangzhou is /lieq8/.

Clearly, the dialect is a borderline case in Norman's grouping, which provides a succinct picture of Hangzhou's strong Northern coloring. We can see that the task chal-

---

4   All but the Hangzhou data simply follows Norman 1988, 182.

lenging us is to more vividly delineate the dialect's status at the boundary between the Northern and Central groups. Because, among the widely diverse dialects of the Central group, Hangzhou shares the greatest number of similarities with the Jiangnan Wu dialects that surround it on all sides, such a task is best accomplished by focusing on Hangzhou's relation to the Wu dialects. Hence from this point on, our discussion of Hangzhou with regard to the North-South continuum will generally take the non-Northern, Wu-like elements of the dialect as representative of its Southern component.

Bao 1988 outlines four categories for the classification of Hangzhou vocabulary on the basis of the regional character of individual forms (284-85): 1) Words shared with *pǔtōnghuà* ; 2) Words not shared with *pǔtōnghuà* but shared with close-by dialects such as Shaoxing and Huzhou; 3) Words which share "similarities" with both *pǔtōnghuà* and nearby dialects ; 4) Words peculiar to Hangzhou.

In this scheme, Bao is no doubt using *pǔtōnghuà* to identify Northern, or Mandarin forms. The items of vocabulary that Bao notes Hangzhou shares with Shaoxing and Huzhou are for the most part common to many Jiangnan Wu dialects and represent the Southern component in Hangzhou vocabulary. The "similarities" Bao refers to are found where a given Hangzhou word contains a combination of elements (usually morphemes) which are apparently separately associated with corresponding Northern and Southern expressions. Bao has obviously, and quite appropriately, left out of consideration the large stock of vocabulary that the Mandarin and Wu dialects have in common. But he has failed to note that there are also cases where Hangzhou speakers accept both Northern and Southern forms. With these points in mind, Bao's classification scheme can be utilized as a useful framework for cataloging the disparate items of the dialect's lexicon.

Listed below is a brief set of examples organized along the lines of Bao's categories to illustrate the characteristic mix of the Hangzhou lexicon. For reference, Beijing and Shanghai equivalents are provided as representatives of Mandarin and Wu forms.

1. Forms shared with Mandarin--Northern forms

		Beijing	*Hangzhou*	*Shanghai*[5]
'speak'		說 *shuō*	說 /sueq₇/	講 /gáwng/
'table'		桌子 *zhuōzi*	桌子 /tsoq₇tsi₃/	台子 /dhae dzz/
'cricket'		蛐蛐兒 *qūqur*	蛐蛐兒 /tc'y₁tc'y₁er₂/	蟿蚯 /zhae jiq/
'flea'		疙蚤 *gèzao*	疙蚤 /kaq₇tsô₃/	跳蚤 /tyáw dzaw/
'swill'		泔水 *gānshuǐ*	泔水 /kæ̃₁suei₃/ [6]	泔腳 /gòe jaq/ [7]
'old man'		老頭兒 *lǎotóur*	老頭兒 /lô₃dei₂er₂/	老頭子 /lhaw dheu dzz/
'inside'		裏頭 *lǐtou*	裏頭 /li₃dei₂/	裏向 /lhi syang/
'livestock'		畜生 *chùsheng*	畜生 /ts'oq₇sen₁/	中牲 /dzùng sang/
'wash the face'		洗臉 *xǐliǎn*	洗臉 /ci₃ liɛ̃₃/ [8]	揩面 /ká mhy/

---

5   Shanghai forms are from Sherard 1982 or Miyata 1988. For typographical convenience they are henceforth written in the phonemic orthography given in Sherard 1982. The phonetic values of this system are: FINALS. Stop--/iq, eq, aq, oq/= [iI?, ə?, ɑ?, o?]; Nasal--/ing, oeng, eng, ang, ong, awng/= [iŋ, ɸŋ, əŋ, ã, oŋ, ɔ̃]; Plain--/i, iu, y, ei, oe, ae, z, wz, eu, er, a, uw, wo, aw/= [i, y, iI, e, ɸ, ɛ, ɿ, Ч, ɤ, ər, ɑ, u, o, ɔ] (syllabic nasal finals are indicated by doubling initial). INITIALS. /b, by, p, py, d, dy, t, ty, g, gw, k, kw, dz, ts, j, tsy, f, h, hw, s, sy, m, my, n, ny, ng, l, ly, w, y, 0/ = [p, pi, p', p'i, t, ti, t', t'i, k, ku, k', k'u, ts, ts', tɕ, tɕ', f, h, hu, s, ɕ, ?m, ?mi, ?n, ?n(i), ?ŋ, ?l, ?li, ?u, ?i, ?] (/f/ or /h/ before /uw/= [Φ]). Murmured initials are indicated by the addition of /h/ (= [ɦ]) and are voiced in manner of articulation (hence murmured correspondents to /s/ and /f/ are written /z/ & /v/; also phonetically there is no initial glottal stop). Shanghai tone 1 is indicated by a falling accent /ˋ/, tone 5 by a rising accent /ˊ/; the *rù* tones (7 and 8) are shown by the presence of a final /q/; murmured initials distinguish lower register tones 6 and 8.

6   Compare /ts'æ5 tɕiaq7/ 'waste leftover food'.

7   This refers to both 'swill' and 'waste leftover food'; see Miyata 1988, 176.

8   /Do2 liɛ̃3/ 'wash one's face (with a dripping wet cloth)' and /tc'iel liɛ̃3/ 'wipe the face' (this latter is cognate to the Shanghai form) are also used.

Richard VanNess Simmons

'beggar'	乞丐 qǐgài	乞丐 /tɕ'ioq$_7$kæ$_5$/	癩三 /biq sae/
'jujube'	棗兒 zǎor	棗兒 /tsɔ̂$_3$er$_2$/	棗子 /dzáw dzz/
'blink'	眨眼 zhǎ yǎn	眨眼睛 /tsaq$_7$ iẽ$_3$tɕin$_1$/	剎眼 /saq nghae/
'thirsty'	渴 kě	渴 /k'aq$_7$/	乾 /gòe/
'kernel'	核兒 hér	核兒 /uaq$_8$er$_2$/	心　　果核 /sying/ or /gúw wheq/ [9]
'brother's son'	侄兒 zhír	侄兒 /dzeq$_8$er$_2$/	阿侄 /aq zheq/

2. Forms shared with nearby Wu dialects--Southern forms

	Beijing	*Hangzhou*	*Shanghai*
'room'	屋子 wūzi	房間 /vã$_2$tɕiẽ$_1$/	房間 /vhawng gae/
'matter'	事情 shìqing	事體 /zi$_6$t'i$_3$/	事體 /zhz ti/
'chair'	椅子 yǐzi	○子 /y$_3$tsi$_3$/	○子 /iú dzz/
'tomorrow'	明天 míngtiān	明朝 /min$_2$tsɔ̂$_1$/ [10]	明朝 /mhing dzaw/
'lightening'	打閃 dǎ shǎn	打豁閃 /ta$_3$ huaq$_7$suõ$_1$/	豁閃 /hwaq sóe/
'rain'	下雨 xià yǔ	落雨 /loq$_8$ y$_3$/	落雨 /lhoq hhiu/
'neck'	脖子 bózi	頭頸 /dei$_2$-tɕin$_3$/	頭頸 /dheu jing/
'eat'	○ chī	○ /tɕ'ioq$_7$/	○ /tsyeq/
'take a wife'	娶 qǔ	討（老婆） /t'ɔ̂$_3$ (lɔ̂$_3$bo$_2$)/	討（老婆） /táw (lhaw bhuw)/
'dinner'	晚飯 wǎnfàn	夜飯 /i$_6$v æ̃$_6$/	夜飯 /yha vhae/

9　Latter term from Miyata 1988, 235.
10　'Tomorrow' has the alternate form /men2 tsɔ̂1/ in Hangzhou.

'very'	很 hěn	交關 /tciθ₁kuõ/	交關 /jàw gwae/
'last year'	去年 qùnián	舊年 /djyφ₆niẽ₂/	舊年 /jheu nhyy/
'thief'	賊 zéi	賊骨頭 /dzeq₈kuaq₇dei₂/	賊骨頭 /zheq gweq dheu/
'bind'	綁 bǎng	縛 /voq₈/	縛 /bhoq/
'capon'	閹雞 yānjī	○雞 /ciẽ₁tci₁/	○雞 /syỳ ji/

3. Forms combining elements of both Northern and Southern expressions

	Beijing	*Hangzhou*	*Shanghai*
'face'	臉 liǎn	臉孔 /liẽ₃kong₃/	面孔 /mhy kung/
'pot'	鍋 guō	鍋子 /ku₁tsi₃/	鑊子 /hhoq dzz/
'spatula'	鍋鏟 guōchǎn	搶鍋刀 /tc'iã₃ku₁tθ₁/	鑊刀 /tsáe daw/
'short while'	一會兒 yì huǐr	一歇兒 /ieq₇-cieq₇er₂/	一歇歇 /iq syq syq/
'fence'	籬笆 líba	槍籬笆 /tc'iã₁li₂pa₁/	槍笆 /tsyàng bwo/
'eye gunk'	眼眵 yǎnchī	眼眵污 /iẽ₃tsi₁u₁/	眼污 /nghae hhuw/
'take a bath'	洗澡 xǐ zǎo	洗浴 /ci₃ ioq₈/	汏浴 /dha yhoq/
'puddle'	水坑 shuǐkēng	水汪塘 /suei₃uã₁dã₂/	水塘 /sź dhawng/
'dusk'	傍晚 bàngwǎn	晚快邊兒 /vǽ₃k'uæ₅piẽ₁er₂/	夜快頭 /yha kwa dheu/

4. Forms peculiar to Hangzhou

	Beijing	Hangzhou	Shanghai
'just now'	剛剛 gānggāng	○○ /tciã₁tciã/	剛剛 /gàwng gawng/
'who'	誰 shéi	○○ /la₃koq₇/	啥人 /sá nhying/
'house lizard'	壁虎 bìhǔ	壁虎兒 /pieq₇fu₃er₂/	壁虎 /biq huw/
'mischievous'	頑皮 wánpí	皮皮兒 /bi₂bi₂er₂/	頑皮 /whae bhi/
'address'	地址 dìzhǐ	地腳兒 /di₆tciaq₇er₂/	地址 /dhi dzz/
'customer'	顧客 gùkè	買主 /mæ₃tsÿ₃/[11]	顧客 /gúw kaq/
'play'	玩兒 wánr	耍子兒 /sua₃tsi₃er₂/ [12]	孛相 /bheq syang/
'bird'	鳥 niǎo	○兒 /tc'iô₃er₂/	鳥 /nyáw/
'diaper'	褯子 jièzi	○○兒 /tæ₁pæ-er₂/	尿布 /sż buw/
'string'	繩子 shéngzi	索兒 /soq₇er₂/	繩子 /zheng dzz/
'earrings'	耳環 ěrhuán	箍兒 /k'u₁er₂/	耳朵環 /nhyi duw gwhae/
'box'	盒子 hézi	簏兒 /loq₈er₂/	盒子 /hhaq dzz/
'bowl'	碗 wǎn	碗盞 /uõ₃tsæ₃/	碗 /wóe/

---

11   /Ko5 k'aq7/ also known to the informants.
12   Or /sua3 tsi3/; the syllable /sua3/ may be read /sa3/.

5. Expressions where both Northern and Southern forms are accepted

		Beijing	*Hangzhou*	*Shanghai*
'money'		錢 qián	錢 /djiẽ₂/	
	or		鈔票 /ts'ỗ₁p'iỗ₅/	鈔票 /tsáw pyaw/
	or		銅錢 /dong₂djiẽ₂/	銅錢 /dhung dhy/
	or		○○ /long₂niẽ₂/	
'time'		時候 shíhou	時候 /zi₂ei₆/	
	or		辰光 /zen₂kuã₁/	辰光 /zheng gwang/
'monkey'		猴子 hóuzi	猴子 /ei₂tsi₃/	
	or		活猻 /uaq₈suen₁/	活猻 /wheq seng/
'play chess'		下棋 xià qí	下棋 /ia₆dji₂/	
	or		著棋 /tsaq₇dji₂/	著棋 /dzaq jhi/
'like to'		喜歡 xǐhuan	喜歡 /ci₃huỗ₁/	
	or		歡喜 /huỗ₁ci₃/	歡喜 /hwóe syi/
'sleeptalking'		說夢話 shuō mènghuà	說夢話 /sueq₇mong₆ua₆/ [13]	
	or		說睏話 /sueq₇k'uen₅ua₆/	講睏話 /gáwng kwéng hhwo/

---

13 For 'talk in one's sleep' the informants also give /dzaq8 iẽ3/.

Examined in this way, the vocabulary of Hangzhou appears to have a fairly equal mix of Mandarin and Wu elements. But this is rather misleading with regard to the overall regional character of the dialect. Because upon still closer scrutiny, we find that Northern forms still predominate, though Southern forms are present in great number. The main reason for this rather paradoxical situation is that a large number of words and morphemes of great frequency, such as the pronouns and the negatives, all correspond to Mandarin forms, while high frequency items of Southern pedigree are in the minority. This comes into greater focus below, where we discuss certain constituents of the lexicon in closer detail.

Pronouns

One area where the Wu dialects diverge sharply from the North, and where they differ most greatly amongst themselves, is in their pronouns, a situation illustrated quite well by the Suzhou and Shanghai forms:

Suzhou[14]

	(singular)	(plural)	
'I'	[ŋəu₆] or [nəu₆]	[n̠i₆]	'we'
'you'	[nɛ₆]	[n̠₆toʔ₇]	'you'
'he/she'	[li₁]	[li₁toʔ₇]	'them'

Shanghai

	(singular)	(plural)	
'I'	/nghuw/	/aq lhaq/, /nghuw nhyi/	'we'
'you'	/nghung/	/nha/	'you'
'he/she'	/hhi/	/hhi lha/	'them'

In contrast, Hangzhou possesses a set of pronouns wholly cognate to the Mandarin forms:

14   From Beijing daxue 1964; also see Xie 1988.

Hangzhou	(singular)	(plural)	
'I'	/ngo₃/	/ngo₃men/	'we'
'you'	/ni₃/	/ni₃men/	'you'
'he/she'	/t'a₁/	/t'a₁men/	'them'

Note that the plural suffix /-men/ is also cognate to the Northern form. The one item where Hangzhou diverges from the Northern set of pronouns is the interrogative: /la3 koq7/ (or /na3 koq7/) 'who'.

Demonstratives

Demonstratives in Hangzhou are rather peculiar to the dialect; though shades of both North and South can be identified. In the following discussion of them, note that Hangzhou /keq7/ corresponds to forms found in many Wu dialects, as Shaoxing and Danyang among others (Chao 1928, 98); while Hangzhou /na5/ and /na3/ correspond to Mandarin forms:

Near reference: /keq7/. This ordinarily must be followed by a measure: /keq7 koq7/ 'this', /keq7-tsi1/ 'this (pen)'; /keq7-iǎ6/ 'this kind'. Alone or with the general classifier /koq7/ there is the alternate /tcioq7/: /tcioq7 koq7/ 'this'.

Far reference: /laq7/ or /na5/. These also ordinarily require a measure: /laq7 koq7/ (or /na5 koq7/) 'that', /laq7-tsi1/ 'that (pen)', /laq7-iǎ6/ 'that kind'. Of the informants, Wang Lizhen prefers /na5/, while Cheng Yongfang favors /laq7/ (which she often likes to use in combination with /ieq7/ 'one': /laq7 ieq7-/).

Interrogative: /na3 ieq7-/, /na3 li3 ieq7-/, /na3 li3 keq7-/, /na3 li3 keq7 ieq7-/. These are all bound forms and must be followed by a measure: /na3 ieq7 koq7/, /na3 li3 ieq7 koq7/, /na3 li3 keq7 koq7/, /na3 li3 keq7-ieq7 koq7/--all 'which'; /na3 li3 keq7 ieq7-tsi1/ 'which (pen)'. With the general classifier /koq7/, /la3 koq7/ or /na3 koq7/ are also acceptable for the sense 'which', though Cheng Yongfang avoids them, probably because of interference from the meaning 'who'.

Hangzhou demonstratives may combine to form the following position words:

To mean 'here' /keq7-/ may combine in the following forms: /keq7 li3/, /keq7 li3 dei2/, /keq7 dei2/, /keq7 piě1/, /keq7 miě6/. /keq7 li3/ and /keq7 li3 dei2/ are most preferred by the informants overall, the latter especially in reply to questions.

To mean 'there' /laq7-/ or /na5-/ may combine in the following forms: /laq7 dei2/, /laq7 muŏ3 miě6/, /laq7 miě6/, /laq7 piě1/, /na5 dei2/ or /na5 li3/. Cheng Yongfang favors the forms with /laq7-/, while Wang Lizhen prefers the forms with /na5/.

To mean 'where' both informants avoided using a term formed with an interrogative demonstrative and preferred /saq7 koq7 di6 fã1/ or /sa5 di6 fã1/. However, they also give /na3 li3 dei2/ (which Cheng Yongfang sometimes pronounces /la3 li3 dei2/) or simply /na3 li3/.

Negatives

Generally in the Central group of dialects, the ordinary negative is a cognate to Mandarin *bù*. The Wu dialects are no exception in this regard, though they generally have forms with a labiodental initial, as Shanghai /vheq/. In Hangzhou, the ordinary negative is /peq7/, which also corresponds to Mandarin *bù*; but, unlike most Wu forms, it has a bilabial initial and compares even more closely to the Mandarin form.

The existential negative ('not have') and the negative perfective ('not yet') are both /meq8 yϕ3/ in Hangzhou, which corresponds to Mandarin *méi* (*yǒu*). Thus Hangzhou in this regard contrasts with most Wu dialects, which generally distinguish between the existential negative and the negative perfective, for example Shanghai /mhm(-mheq)/ 'not have' and /vheq-zheng/ 'not yet' (Chao 1928, 103; Fu et al. 1985, 99; Xu et al. 1988, 349).

Particles

The mixed nature of Hangzhou's lexicon is also seen in the particles of the dialect,

which nevertheless evidence the Northern trend. We mention a few here to illustrate:

Subordinative. The Hangzhou form /tieq7/ is cognate to Mandarin *de* and stands in contrast to Wu dialect forms which begin with a velar, Shanghai /gheq/ for example. [15] As the possessive uses this particle, Hangzhou possessive pronouns also parallel Mandarin forms: /ngo3 tieq7/ 'my', /ni3 tieq7/ 'your', /t'a1 tieq7/ 'his/hers'. Examples of /tieq7/ in context include: /loq8-yø2-yø2 tieq7 ieq8 er2, ong2-cyeq7-cyeq7 tieq7 hua1 er2/ 'shiny green leaves and bright red flowers', /Ngo3 tieq7 mô6 er2 læ1 na3 li3?/ 'Where's my hat?' /T'a1 huõ1 ci3 tc'ioq7 suõ1 tieq7 er2 tieq7 ts'æ5./ 'He likes to eat rather sour food.'

Perfective aspect. /-liô3/ is the Hangzhou correspondent of the Mandarin perfective suffix *-le*, to which it is most likely cognate. Hence Hangzhou differs from the Wu pattern in which the perfective aspect particles generally begin with a sibilant, as Shanghai /dzz/ or Suzhou [tsï3]. [16] Note the following examples: /T'a1 ci3-liô3 ieq7-koq7 ioq8./ 'He took a bath.' /Tseq7 læ2-liô3 ieq7-koq7 zen2./ 'Only one person has come.'

But the progressive aspect corresponding to Mandarin expressions using *-zhe* is also indicated with /-liô3/ in Hangzhou, parallel to the Wu tendency to use the perfective particle in such a context: Corresponding to *Tā ná-zhe yì-běn shū.* 'She's holding a book.' Hangzhou has /T'a1 tæ̃1-liô3 ieq7-pen3 sÿ1./ For the progressive, Hangzhou also uses /laq8 haq7/, which is most likely related to Wu forms such as Shanghai /lhaq/ and /lheq-lheq/: [17] /T'a1 lieq8 laq8 haq7 tc'ioq7./ 'He is eating standing up.'

Adverbial. Hangzhou vivid adverbs are formed with /-tciô1/ or /-tieq7/, the former corresponding to Wu forms such as Shanghai /-jàw/ and Suzhou [-tciæ5], the latter to

---

15 In fact, Hangzhou is the only dialect listed in Chao's *Studies in the Modern Wu-dialects* having a subordinative particle that does not begin with a velar; see p. 123.

16 See Chao 1928, 125 & 1926, 882-883; on Shanghai, also see Miyata 1988, 102. The phonological correspondence of Hangzhou /liô3/ to the Northern form is even more clearly seen by reference to a Mandarin dialect such as Changli where the subordinative particle is [liou̇]; see *Chānglí fāngyán zhì* 139-141.

17 On progressive forms in Wu dialects, see Chao 1928, 125 and 1926, 895-96. On Shanghai, Miyata 1988, 98-102 may be consulted. Also, Qian Nairong 1988 provides a detailed discussion of Shanghai /lhaq/, /lheq-lheq/ and related forms.

Mandarin *de/di*. As elsewhere, in Hangzhou vivid adverbs often have the sense of a gentle command. The informants tended to use /-tciô1/ in the majority, which is not peculiar as forms matching /-tciô/ are very common in most dialects around Hangzhou. [18] The following are examples:

With /-tciô/--/Yɸ1-yɸ1-tciô1/ 'Quietly!' or 'Be quiet!', /soq7-soq7-tciô1/ 'cringingly', /æ̃5-æ̃5-tciô1/ 'secretly', /djiẽ6-djiẽ6-tciô1/ 'gradually', /Mæ̃6-mæ̃6-tciô1 tsei3./ 'Walk slowly!'

With /tieq7/--/Mæ̃6-mæ̃6-tieq7 daq8./ 'Pedal slowly (home)!' /Hô3-hô3-tieq7 tæ̃1-lô2, peq7 iô5 tieq7-liô3./ 'Hold it well; don't lose it!'

The particle /tieq7/ is also used in Hangzhou to construct adverbs of manner or adverbs formed from verbs, similar to the corresponding Mandarin *de/di*: /T'a1 peq7 din2 tieq7 iô2-dei2./ 'He kept shaking his head.' /Ngo3 ieq7-iã̃6-ieq7-iã̃6-tieq7 ciô3 teq7 t'a1 tieq7 i5 si1./ 'I one by one [i.e. gradually] came to understand what he meant.' /men1-sen1-peq7-ciã̃3-tieq7 song5-uei2-tc'i5 ieq7-koq7/ 'secretly sent one back'. Wu dialects generally have a form beginning with a velar, as Shanghai /gheq/ or Suzhou [kəʔ] . The Wu form is observed in the speech of the informants as /kaq7/; but its occurrence is rare and the informants note it may be substituted by /tieq7/: [19] /kô1-kô1-cin5-cin5-kaq7 tsei3/ 'happily go', /T'a1 tc'i3 tcin1-kaq7 daq8./ 'She pedalled with vigor.'

Suffixes

No suffixes are found in Hangzhou that do not correspond to forms in Beijing. Perhaps more significant is that cognates to all of the noun suffixes identified for Beijing in Chao 1968 are used colloquially in Hangzhou (228).

In addition to the plural suffix /-men/, corresponding to Beijing *-men*, seen in the pronouns /ni3 men/ 'you', /t'a1 men/ 'they, them', /ngo3 men/ 'we, us', and sometimes

---

18   See Chao 1926, 874 and 1928, 123. On Suzhou see Xie et al. 1989, 216; on surrounding dialects see Fu et al. 1985, 98.

19   On these adverbs in Wu dialects, see Chao 1928, 123 and 1926, 874.

used in other (non-pronoun) forms, as /ia2 er2 men/ 'children'; and the suffix /-pa1/, corresponding to Beijing *-ba*, found for example in /tsuei3 pa1/ 'mouth', /ia6 pa1/ 'chin', /ts'uã1 pa1/ 'scar', /tcin1 pa1/ 'stingy', and /tc'iã1 li2 pa1/ 'fence'; there are also the suffixes /-er2/, /-tsi3/, and /-dei2/, corresponding to Beijing *-r*, *-zi*, and *-tou*. The latter three are discussed below.

/-er2/ suffix. This suffix is not found in other dialects near to Hangzhou except for Yuhang and Deqing (Fu et al. 1985, 84). While the suffix is a feature of many Wu dialects further south in Zhejiang, in those dialects it is in a form phonetically quite distinct from the Beijing *-r*, generally some kind of nasal, [ŋ] in Wenzhou, [n] in Yiwu, and [ɲi] in Longquan for example (Zhengzhang 1980-81; Fang 1988).[20] However, in Hangzhou--where it is extremely common--the lack of any nasal element combined with a clear *r*-coloring, or rhotacization (it sounds similar to 'er' in the American pronunciation of 'her'), give the suffix a character very similar to that of Beijing, intensifying the Northern coloring of the dialect. A generally clear syllabic quality of the Hangzhou /-er2/ is one aspect where it differs from the Beijing *-r*, which is nonsyllabic. Yet this does not diminish the Northern quality of the suffix in Hangzhou, for it is found in a syllabic form in other Northern dialects, in Baoding (Hebei) as [ər] for example (He, Qian and Chen 1986, 250-51). [21] Examples include:

/ten5 er2/ 'stool', /pin5 er2/ 'handle', /bong2 er2/ 'shed', /vaq8 er2/ 'socks', /loq8 er2/ 'box', /soq7 er2/ 'rope', /k'uæ5 er2/ 'chopsticks', /tsi1 niô3 er2/ 'cicada', /u2 lo2 er2/ 'gourd', /cia1 er2/ 'shrimp', /hua1 er2/ 'flower', /dæ6 huã1 er2/ 'egg yolk', /tæ5 er2/ 'carrying pole', /kæ5 er2/ 'lid; cover', /seq7 er2/ 'stopper; cork', /kø1 er2/ 'hook', /ua6 er2/ 'picture', /t'æ1 er2/ 'vendor's stall', /laq8 dji2 er2/ 'chili pepper', /lô3 dei2 er2/ 'old man',

---

20 In the single example found in Shanghai where it is seen, this suffix also has a nasal form, /nghngh/: /nhoe nghngh/ 'daughter' (cf. Hangzhou /ny3 er2/). Another example shows a residual nasal where the suffix has been lost: /mhwo jang/ 'mahjong' from an original /mwho tsyaq nghngh/ (Xu et al. 1988, 411). (Note that the Hangzhou for 'mahjong'--/ma2 tciã5/-- is probably a borrowing.)

21 He Wei has noted the suffix most probably originated as a separate syllable in the Northern dialects, and has since lost its syllabicity in many areas (personal communication).

/ciô3 ia2 er2/ 'child', /tcia3 djy∅6 er2/ 'new cuff (on an old sleeve)', /di6 tciaq7 er2/ 'address', /men2 lin2 er2/ 'doorbell', /zÿ6 tiô1 er2/ 'branch', /iẽ3 tcin5 er2/ 'eyeglasses', /do6 bi2 iẽ3 er2/ 'navel', /uei2 sen1 djyn2 er2/ 'apron', /t'o1 ie2 er2/ 'slippers', /pô1 ku3 er2/ 'package', /nô6 tcia5 er2/ 'quarrel', /bô6 uã2 kua1 er2/ 'overcharge', /ieq7-cieq7 er2/ 'a moment', /ieq7-tieq7 er2/ 'a little', /mô2 dei2 er2/ 'infant', /kuã1 kuen5 dei2 er2/ 'bachelor', /len3 vẽ6 dei2 er2/ 'leftovers', /tin1 dei2 er2/ 'nail'.

/-tsi3/ suffix. Frequent in both Mandarin and Wu dialects, this suffix is also very common in Hangzhou, though forms with /-tsi3/ appear to be rather less numerous than those with /-er2/, especially in informants of Cheng Yongfang's generation. Examples include:

/li2 tsi3/ 'donkey', /y3 tsi3/ 'chair', /ma3 tsi3/ 'chamber pot', /iẽ6 tsi3/ 'filling' (as for *jiǎozi*), /dzen2 tsi3/ 'orange', /ven2 tsi3/ 'mosquito', /ts'uei1 tsi3/ 'bicycle, car' (cf. /ts'uei1 er2/ 'pushcart'), /dji2 tsi3/ 'piece' (in a board game), /p'iẽ5 tsi3/ 'card', /zeq8 tsi3/ 'days' (cf. /zeq8/ 'day' which is a measure), /tcy5 tsi3/ 'saw' (the tool), /p'iẽ5 tsi3/ 'swindler', /djy∅6 tsi3/ 'brother-in-law, wife's brother', /fong1 tsi3/ 'madman', /lã6 dã6 tsi3/ 'dissolute chap', /ie3 tsi3/ 'shorty', /tæ1 tsi3/ 'simpleton', /ciã1 kua1 tsi3/ 'sunflower seeds', /djiẽ2 zeq8 tsi3/ 'day before yesterday', /sa1 ku3 tsi3/ 'earthenware pot', /di6 in5 tsi3/ 'cellar', /sei3 uô2 tsi3/ 'wrist', /t'ô3 vẽ6 tsi3/ 'beggar'.

/-dei2/ suffix. Similar to the situation Y. R. Chao noted for Beijing (1968, 243), in Hangzhou this suffix is not nearly as productive as /-er2/ and /-tsi3/. Examples include:

/tsô5 dei2/ '(traditional) stove', /miô2 dei2/ 'seedling', /bu6 dei2/ 'pier', /zeq8 dei2/ 'stone', /men2 k'∅3 dei2/ 'doorway', /hua1 dei2/ 'clever idea, method', /li3 dei2/ 'inside', /uæ6 dei2/ 'outside', /ei6 dei2/ 'behind, rear', /kô1 dei2/ 'top', /er5 hun1 dei2/ 'remarried person', /tc'ioq7 dei2/ 'flavor', /ieq7-k'uei5 dei2/ 'one cash unit', /ieq7-tci5 dei2/ 'a short time'.

Variant Readings

Pairs of variant readings for words or morphemes of the same etymon, generally re-
ferred to as literary and colloquial pronunciations, are a characteristic feature of the Wu
dialects, in which they are often found in great quantity. The Hangzhou dialect, in
striking contrast, hardly evidences this Wu phenomenon.[22] In the few cases where double
readings are found in Hangzhou, since the variant forms are all colloquial pronunciations
they are often more accurately characterized as either Northern or Southern. The North-
ern forms correspond to pronunciations of Northern origin and to literary readings in
neighboring Wu dialects;[23] the Southern forms correspond to colloquial pronunciations in
the surrounding Wu dialects. Preferences for the various readings vary from speaker to
speaker in Hangzhou.

In some cases speakers might accept both variants. For example, the informants use
/vã2 tciẽ1/ and /vã2 kæ̃1/ 'room' interchangeably, the former corresponding to the
Northern reading *fángjiān* and the latter to a form such as Shanghai /vhawng gae/. For
the measure word for rooms, they prefer /tciẽ1/, corresponding to Beijing *jiān*, though
they also accept the Southern reading /kæ̃1/. Both informants usually pronounce the
word 'silver' as /nin2 tsi3/, corresponding to the Southern form /nhying dzz/ of
Shanghai; but they are occasionally heard saying /in2 tsi3/--cf. Beijing *yínzi*--as well.
However, 'bank', which contains the same etymon /in2/ is always /in2 ã2/. In /iẽ3
tcin1/, /iẽ3/ parallels *yǎn* of *yǎnjīng* 'eye' in Beijing and contrasts with the Shanghai
reading /nghae/ in /nghae jing/ 'eye', all of the same etymon. The Beijing and Shanghai
pronunciations do not vary in any occurrence of this etymon. In Hangzhou also, both the
informants give /iẽ3/ consistently except in /dong6 ngæ̃3/ 'hole' where they supply the Wu
colloquial pronunciation.

---

22 The double readings as a characteristic Wu feature and Hangzhou's independence in this regard
    was probably first formally pointed out in Chao 1928.
23 An outline of the correspondence between Wu literary readings (represented by those of
    Suzhou) and Northern pronunciation (that of Beijing) is found in Li Rong 1957, 97–99.

In a phrase very common in Hangzhou earlier in the century, /ieq7 tciaq7 koq7 tsi3/ 'one dime', /tciaq7/ and /koq7/ are variant pronunciations of the same etymon, /tciaq7/ representing the Northern pronunciation and /koq7/ in /koq7 tsi3/ the Southern (cf. Shanghai /goq dzz/). /Tciaq7/ is still the common measure for dime in Hangzhou, though /koq7 tsi3/ 'dime' is now little used. The Northern palatalized /tciaq7/ is also seen in other words, such as /pin1 tciaq7/ 'hair on the temples', while the Southern pronunciation of the morpheme, /koq7/, is still alive in the city in other words, such as /koq7 loq8 dei2/ 'corner'.

In other cases speakers differ on which variant they prefer. In the following examples, Cheng Yongfang rejects the Wu-like readings preferred by Wang Lizhen—seen here in the latter's use of nasal and velar initials which correspond to the Shanghai forms:

	Cheng Yongfang	Wang Lizhen	Shanghai
'wallet'	/bi₂tciaq₇er₂/	/bi₂kaq₇er₂/	/bi gaq dzz/
'net, web'	/vã₃er₂/	/mã₃er₂/ [24]	/mhawng/
'socks'	/vaq₈er₂/	/maq₈er₂/	/mhaq dzz/
'jade'	/ioq₈/	/nioq₈/	/nhyoq/

But for 'soap' Cheng Yongfang prefers the Southern pronunciation /bi2 zô6/ corresponding to Shanghai /bhi zhaw/, while Wang Lizhen insists that /vi2 zô6/ (more closely corresponding to Beijing *féizào*) is the "correct" reading—all the same acknowledging that she herself usually says /bi2 zô6/. For 'tail', Cheng Yongfang prefers /mi3 pa1/, which corresponds to Shanghai /mhi bwo/; but Wang Lizhen always reads /vi3 pa1/, comparable to Beijing *wěiba*. However, Cheng Yongfang gives /vi3/ for the morpheme 'tail' in such phrases as /yø3 dei2 u2 vi3/ 'has a head but no tail' (i. e. 'had a start but no finish').

In one interesting case, neither informant was certain of the native Hangzhou pro-

---

24 But in /y2 vã3(er2)/ 'fish net' and /vã3 y2/ 'net fish', Wang Lizhen's reading agrees with Cheng Yongfang's and not that of the Shanghai forms /nghng mhawng/ and /mhawng nghng/.

nunciation of the surname Ren (任), a name they most frequently hear read as /nin2/, with a nasal initial corresponding to the Shanghai pronunciation of /nhying/. But it seemed to them it maybe should be read /zen2/. The question was not cleared up until an acquaintance with that surname from a long-standing Hangzhou family verified that his family had always read their name /zen2/. The pronunciation /nin2/, then, has been brought to Hangzhou by migrants from the surrounding Wu speaking areas.

It may be pointed out that the Northern type pronunciation predominates in Hangzhou in cases where Wu dialects have literary and colloquial readings but for which Hangzhou has only a single pronunciation. For example, the morpheme represented in the word 'ask' has only one pronunciation in Hangzhou--/ven6/, but in Shanghai it is pronounced /mheng/ meaning 'ask', but may be found pronounced /vheng/ in contexts calling for a literary reading, as in /fáng vheng/ 'interview'. Similarly 'day' and 'person' are only pronounced /zeq8/ and /zen2/ (respectively) in Hangzhou, but in Shanghai are /nhyiq/ (colloquial) or /zheq/, and /nhying/ (colloquial) or /zheng/ (literary). In these cases, the forms not seen in Hangzhou--those with nasal initials--represent a Southern pedigree, while the Hangzhou forms are of Northern ancestry. This situation provides strong evidence to show that the majority of Southern type readings in Hangzhou are probably borrowed from the surrounding dialects.

Certain divergent forms in the colloquial of Hangzhou, while not necessarily originating in the same etymon, nevertheless afford direct evidence of recent influence from both North and South.

For the word 'to give' our informant's give /pa3/, the reading Y. R. Chao found for Hangzhou (Chao 1928, 105). Yet while they insist on the reading /pa3/ in isolation, in rapid conversation they often pronounce the word as /paq7/, in the *rù* tone with a glottal stop ending. This *rù* form is very close to the reading /peq7/ given for 'to give' in two of the recently published studies of Hangzhou (Akitani 1986, 77; Bao 1988, 287). As a *rù* tone word for 'to give' is very common in Wu dialects, for example Shanghai /beq/, any *rù*

Richard VanNess Simmons

form in Hangzhou is likely the result of Wu dialect influence.

The demonstrative forms /na5-/ and /na3-/ discussed above are not given in Y. R. Chao's list for Hangzhou in his *Studies in the Modern Wu Dialects* (100-02), only forms with a lateral initial similar to the /laq7-/ and /la3-/ we described. In contrast, Akitani only describes equivalents of /na5-/ and /na3-/ for the dialect (Kango hôgen kenkyûkai 1986, 74-75). At the same time, Cheng Yongfang, the elder of our informants, prefers the /laq7-/ & /la3/ set, while the younger Wang Lizhen favors the /na5-/ & /na3-/ set. Looked at together, these circumstances suggest that /na5-/ & /na3-/ have fairly recently come into the dialect--or at least gained greater favor among Hangzhou speakers--through the influence of the *pǔtōnghuà* demonstratives *nà* and *nǎ*, to which they exactly correspond.

Our informants categorically reject the word /li3ciã1/ 'inside' as a word in the Hangzhou vocabulary. They indicate quite precisely that it is a Shanghai expression--/lhi syang/--and that in Hangzhou the word is /li3 dei2/ or /li3 miẽ6/. However, /li3 ciã1/ is often heard in the speech of younger Hangzhou speakers and is fully entrenched in the dialect of the informant that Akitani worked with, leading him to regard the term as part of the Hangzhou lexicon (Kango hôgen kenkyûkai 1986, 76). This is striking evidence of the strong influence that nearby Wu dialects have on the speech of the younger generations of Hangzhou speakers.

Influence from the surrounding Wu dialects, especially Shanghai, and from *pǔtōnghuà* is undeniably a major cause of the mixed composition of the vocabulary of modern Hangzhou. The Wu influence may be what gives such strength to the Southern component of the dialect, while the prominence of the Northern component is well reinforced by the prestige of the standard language. Yet while an obvious mix of Northern and Southern features is clearly seen in Hangzhou, the above discussion shows that the Northern elements dominate and Northern traits most prominently characterize this dialect. Indeed, in overall perspective the grammar of the dialect provides strong evidence to

support the thesis that Hangzhou is a conservative descendant of an earlier form of Mandarin which has since been strongly influenced by the surrounding Wu dialects and is not a Wu dialect with a Mandarin overlay.

Works Cited

Akitani Hiroyuki.

    1986   "Kôshû hôgen shiryô kaiwa hen (1)." *Kai Pian* 2 (October): 68–83.

Bào Shìjié.

    1988   "Hángzhōu fāngyán yǔ běifāng huà." In Fùdàn dàxúe Zhōngguó yǔyán wénxué yánjiūsuǒ Wúyǔ yánjiūshì, ed. *Wúyǔ lùncóng*. Shànghǎi: Shànghǎi jiàoyu chūbǎnshè. 282–88.

Běijīng dàxué.

    1964   *Fāngyán cíhuì*. Běijīng: Wénzì gǎigé chūbǎnshè.

Chānglí fāngyán zhì.

    Jointly compiled by Héběi shěng Chānglí xiàn xiànzhì biānzuǎn wěiyuánhuì and Zhōngguó shèhuì kēxué yuàn yǔyán yánjiū suǒ. Shànghǎi: Shànghǎi jiàoyù chūbǎnshè, 1984.

Chao, Yuen Ren.

    1926   "Běijīng, Sūzhōu, Chángzhōu yǔzhùcí de yánjiū." *Qīnghuá xuébào* 3.2 (December): 865–917.

    1928   *Studies in the Modern Wu Dialects*. Peking: Tsing Hua College Research Institute.

    1968   *A Grammar of Spoken Chinese*. Berkeley: University of California Press.

Fāng Sōngxī.

    1988   "Zhèjiāng Yìwū fāngyán lǐ de 'n' huà yùn." In Fùdàn dàxúe Zhōngguó yǔyán wénxué yánjiūsuǒ Wúyǔ yánjiūshì, ed. *Wúyǔ lùncóng*. Shànghǎi: Shànghǎi jiàoyù chūbǎnshè. 249–55.

Richard VanNess Simmons

Fù Guótōng, et al.

1985   *Zhèjiāng Wúyǔ fēnqū.*   Zhèjiāng shěng yǔyánxué huì *Yǔyánxué niánkān*, no.
3. Zhèjiāng: Zhèjiāng shěng yǔyánxué huì biānwěihuì.

Hè Wēi, Qián Zēngyí and Chén Shūjǐng.

1986   "Héběi shěng Běijīng shì Tiānjīn shì fāngyán de fēnqū (gǎo)," *Fāngyán*: 241–52.

Kango hôgen kenkyûkai.

1986   "Kango hôgen kenkyûkai seika hôkoku (1): Kôshû hôgen yakukô sono 1--'Míng
zhū' (A)." *Waseda daigaku gogaku kyôiku kenkyûsho "kiyô"* 33: 65–77.

Lǐ Róng.

1957   *Hànyǔ fāngyán diàochá shǒucè.*   Běijīng: Kēxué chūbǎnshè.

Miyata Ichiro.

1988   *Shanhaigo jôyô dôon jiten.*   Tokyo: Kôseikan.

Norman, Jerry.

1988   *Chinese.*   Cambridge : Cambridge University Press.

Qián Nǎiróng.

1988   "Shànghǎihùa de xūcí [1A?] hé [lə?]."   In Fùdàn dàxué Zhōngguó yǔyán wénxué
yánjiūsuǒ Wúyǔ yánjiūshì, ed. *Wúyǔ lùncóng.* Shànghǎi: Shànghǎi jiàoyù
chūbǎnshè. 205–13.

Sherard, Michael.

1982   *A Lexical Survey of the Shanghai Dialect.*   Computational Analysis of Asian
and African Languages, monograph series, no. 8.   Tokyo: National Inter-Uni-
versity Research Institute of Asian and African Languages and Cultures.

Xiè Zìlì, et al.

1989   "Sūzhōu fāngyán lǐ de yǔzhuì." *Fāngyán*: 106–13, 216–23.

Xiè Zìlì.

1988   "Sūzhōu fāngyán de dàicí."   In Fùdàn dàxué Zhōngguó yǔyán wénxué
yánjiūsuǒ Wúyǔ yánjiūshì, ed. *Wúyǔ lùncóng.* Shànghǎi: Shànghǎi jiàoyù
chūbǎnshè. 84–90.

Xǔ Bǎohuá, et al.

    1988   *Shànghǎi shìqū fángyān zhì*. Shànghǎi: Shànghǎi jiàoyù chūbǎnshè.

Zhèngzhāng Shàngfāng.

    1980-81   "Wēnzhōu fāngyán ér wěi cí de yǔyīn biànhuà." *Fāngyán*: 245-62 & 40-50.

Chinese Dialects and Sino-Japanese

Margaret M. Y. Sung
Indiana University

0. Introduction

Genetically speaking, there are no linguistic ties between Chinese and Japanese. However, historically speaking, it is a well-known fact that Japanese, like Korean and Vietnamese, massively borrowed into their language Chinese characters with their pronunciation. The Japanese readings of those loan words have been called Sino-Japanese, which together with Sino-Korean (the Korean readings of Chinese characters) and Sino-Vietnamese (the Vietnamese readings of Chinese characters) have been termed by Samuel Martin as Sino-Xenic dialects (or foreign dialects).

The cultural contact between Japan and China can be traced back to as early as 57 A. D., when the Japanese emperor started to send ambassadors to China. However, according to *Nihon Shoki* (日本書紀 The History of Japane) Chinese characters were not imported into Japan until 285 A. D., when Wang Ren (王仁) from Paekche (百濟) of Korea brought *Lún-yǔ* (論語) The Analects of Confucius and *Qiān-zì-wén* (千字文 Thousand Character Text) to Japan. In Japan, Chinese characters always have different Chinese readings, namely, *Go-on* (吳音), *Kan-on* (漢音), *Tō-on* (唐音) and *Sō-on* (宋音), depending on the time and their source dialect. However, among these Sino-Japanese loan words, because of the enormous number of borrowed characters, only Go-on and Kan-on readings have had great impact on Japanese language even up to the present time.

So far, there are many scholars who have engaged in the study of Sino-Japanese. Some

---

of them have used only limited data of a couple of Chinese dialects for reference, while some have worked on Sino-Japanese without referring to any Chinese dialect. Their common approach is to list the corresponding phonological categories of Middle Chinese to Sino-Japanese, which fails to show the relationship among Sino-Japanese and Chinese dialects. In this paper, I intend to show that, based on the comparative study of the evolution of Go-on, Kan-on and major Chinese dialects, Go-on and Kan-on share more historical sound changes with Min dialects, Southern Min in particular, than other Chinese dialects. Evidence from Japanese historical records will be given to support my hypothesis that Go-on was imported from Old-Min, via Korea into Japan during the Southern dynasties (南朝), while Kan-on was directly imported from Chang-an (長安) to Japan during the Tang period.

1. Previous Studies on Sino-Japanese

Bernhard Karlgren, the most renowned Western scholar of Chinese historical phonology, had done tremendous work on Sino-Japanese, Go-on and Kan-on. In his book *Analytic Dictionary of Chinese and Sino-Japanese* (1923), he listed numerous lexical items of Go-on and Kan-on, with reference to Archaic Chinese (上古音 Old Chinese), Ancient Chinese (中古音 Middle Chinese), Mandarin and Cantonese. In *Grammata Serica* (1940), he provided the correspondences of the phonological categories of Archaic Chinese, Ancient Chinese and Sino-Japanese, and described some of their historical sound changes. However, he did not refer to other Chinese dialects, thus he missed the general features that are shared by Sino-Japanese and Chinese dialects. He did note that Kan-on reflects the language of Chang-an in Sui and the early Tang dynasty, the *Qìe-yùn* (切韻) language, and Go-on reveals ancient dialects which in many points differ considerably from the *Qìe-yùn* language and was from Eastern and South-Eastern China, but he did not propose the source dialect of Go-on.

There are many Japanese scholars who have done research on Sino-Japanese. The earlist systematic study on Sino-Japanese was Goto Asataro's (後藤朝太郎) *Kanjion no*

keito (The System of Sino-Japanese, 1909), followed by Oshima Masatake's (大島正健) *Kan-on Go-on no kenkyu* (Study on Kan-on and Go-on, 1931). Extensive studies are found in recent works by Takamatsu Masao's (高松政雄) *Nihon kanjion no kenkyu* (The Study on Sino-Japanese, 1982) and *Nihon Kanjion Gairon* (Introduction to Sino-Japanese, 1986), Numoto Katsuaki's (沼本克明) *Heian Kamakura jidai ni okeru Nihon Kanjion ni tsuite no kenkyu* (Study on the Sino-Japanese of Heian-Kamakura period, 1982) and *Nihon Kanjion no rekishi* (The History of Sino-Japanese, 1986), and Tadayuki Yuzawa's (湯澤質幸) *Tō-on no kenkyu* (Study on Tō-on, 1987). [1] In general, these Japanese scholars have best used the materials from Buddhist texts and native sources, in their studies to compare Sino-Japanese with the phonological categories of *Qìe-yùn* and *Yùn-jìng* (韻鏡). However, their approaches are very similar to Karlgren's, basically within the structural linguistic framework. Most of them maintained that Go-on was based on Wu dialect without even comparing and referring to other Chinese dialects.

So far, very few Chinese scholars have done extensive research on Sino-Japanese. Without providing any evidence, Wang Li (王力) (1957-58) claimed that Go-on was based on a dialect from southern China during the San-Guo period (200-280 A. D.) In 1984, in his paper on " *Hànyǔ duì Rìyǔde yíngxiǎng*" (漢語對日語的影響, The influence of Chinese on Japanese) he presented extensive lexical lists of Go-on and Kan-on readings corresponding to the thirty-six initials and the sixteen rhyme groups of Late Middle Chinese. However, he did point out that Go-on and Kan-on have preserved two Old Chinese characteristics--namely, dental and supradental stops merging to dental stops, and bilabials not splitting into labials and labiodentals (1984:8) --but he provided no solution to the origin of Sino-Japanese.

In his article on " *Nihongo to Minnango* " (Japanese and Southern Min), Wu Shou-li (吳守禮) claimed that both Southern Min and Sino-Japanese had been imported from the

---

1　For studies on other Sino-Xenic dialects readers are referred to Rukuro Kono's Chosen *kanjion no kenkyu* (Study on Sino-Korean, 1968) and Toru Mineya's *Otsunam kanjion kenkyu* (Study on Sino-Vietnamese, 1972)

Wu dialect from the Wu region (now Zhejian province) into their areas before the Tang period. He provides a table of the readings of ten numerals (from one to ten) of Old Chinese, Go-on, Middle Chinese, Kan-on, Recent Chinese, Literary S. Min and Colloquial S. Min, and also gives another eight example characters of S. Min. He discusses the sound correspondences of Go-on, Kan-on and S. Min, and shows the similarities between them (1984:630-641). Even though these random lexical items indeed show the closeness of Go-on, Kan-on and S. Min, they are not very convincing because it is very easy to find dozens of example words from N. Min, Cantonese, Wu, Hakka, or even Mandarin to show their similarities. His approach is not systematic and lacks generalization.

2. Different Hypotheses on the Transmission of Go-on and Kan-on

According to Numoto (1986:10), the history of Sino-Japanese can be divided into the following stages:

(1) *Ko -sō* (古層 Old Stratum), which represents *Ko-on-kei* (古音系 Old Chinese Pronunciation System)

In this stratum, some Old Chinese pronunciation of the San-guo period can be found in the *Man'yogana* (萬葉假名) in the literature of the Suiko period (推古時代).

(2) *Chu -sō* (中層 Middle Stratum), which represents *Go-on-kei* (吳音系 Wu Pronunciation System)

Go-on was the Wu dialect that had been imported from the Wu region during the Six dynasties (400-600 A. D.)

(3) *Shin -sō* (新層 New Stratum), which represents *Kan-on, Shin-Kan-on kei* (漢音，新漢音系 the phonological system of Chang-an dialect in *Yi-qie-jing-yin-yi* (一切經音義) during the mid-Tang period (788-810).

(4) *Shin -shin-sō* (新新層 the Latest Stratum), which represents *Sō-on, Tō-on kei* (宋音，唐音系 Song and the Tang System).

So-on reflects the phonological system imported into Japan during the early Kamakura period (1192-1240), while To-on reflects the phonological system imported into Japan during the Edo period (1603-1868).

However, other scholars have proposed different hypotheses on the time, route and source dialect of Go-on and Kan-on. We have summed up their hypotheses in Table 1.

Table 1

	Go-on 吳音	Kan-on 漢音
Karlgren, B. 高本漢 1923	5th–6th century directly from South- Eastern China	7th century from North China (via Korea)
1940	6th–7th century directly from S. E. China	7th–8th century from N. China (via Korea)
Iida, Toshiuki 飯田利行 1941	260–589 A. D. based on southern dialect	581–907 A. D. based on Central Plains pronunciation
Todo, Akiyasu 藤堂明保 1959	220–589 A. D. based on Six dynasties pronunciation	618–907 A. D. based on Chang-an dialect
Takamatsu, Masao 高松政雄 1982, 1986	Pre–Tang based on Wu dialect	618–907 A. D. based on Chang-an dialect
Miller, Roy Andrew 1967	4th–6th century from N. China via Korea/China	7th–8th century based on Chang-an dialect
Numoto, Katsuaki 沼本克明 1982, 1986	400–600 A. D. based on Wu dialect	790–900 A. D. based on Chang-on dialect
Wang, Li 王 力 1957–58	220–280 A. D. based on S. Chinese dialect	420–589 A. D. based on Chang-an dialect
Wu, Shou-li 吳守禮 1986	End of Six dynasties based on Wu dialect	581–907 A. D. based on Chang-an dialect

From Table 1, we note that there is a consensus that Kan-on was based on the Chang-an dialect of the Tang dynasty. Most of these scholars believed that Go-on was based on the Wu dialect. However, my study of Sino-Japanese suggests otherwise. Karlgren's hypothesis on the route and mediator of Go-on's transmission was problematic. In fact, Mitsuda (1929) had already claimed that Go-on was transmitted into Japan via Korea. Basing his conclusions on Korean historical and linguistic evidence, Eom (1990) has also refuted Karlgren's claim and proposed that Go-on was transmitted by ancient Paekche Korean, whereas Kan-on was transmitted directly from China to Japan.

3. Historical Sound Changes Shared by Go-on, Kan-on and Chinese Dialects

After examining the evolution of Go-on, Kan-on and Chinese dialects with reference to Old Chinese and Middle Chinese, we found that the following sound changes, in terms of phonological rules, are relevant to show their relationships: [2]

I. Primary rules:

Rule 1. The split of the OC dental stops:

$$**t -, **t' -, **d - \} \text{----------->} \begin{cases} *t-, \ *t'-, \ *d- \\ *t_,-, \ *t'_,-, \ *d_,- \end{cases}$$

Go-on, Kan-on and Min dialects did not undergo this rule which was a major sound change of Early Middle Chinese.

Since in Japanese aspiration is not phonemic, all of the MC aspirated and unaspirated sounds become unaspirated. We will leave out the tone marks because Sino-Japanese do not mark the tones. e.g,

	OC	MC	Go-on	Kan-on	Fu-zhou	Amoy
端	**tuan	*tuan	tan	tan	tuang	tuan
多	**ta	*ta	ta	ta	to	to
天	**t'uen	*t'ian	ten	ten	t'ieng	t'ian/t'ĩ
定	**dieng	*dieng	dʑiau	tei	ting/tiang	ting/tiã

2 OC and MC reconstructions are from Guo (1986). Readings of Go-on and Kan-on are from Kazutoshi Ueda, et al's *Daijiten*, 1968 revision. While Chinese dialects other than Xiamen and Zhangpu are from *Hanyu Fangyan Zihui* (1962).

知	**ṭie	*ṭie	ti(tɕi)	ti(tɕi)	ti	ti/tsai
哲	**ṭiăt	*ṭiEt	teti(tetɕi)	tetsu	tie?	tiat
暢	***t'iăng	*t'iang	tiau(tɕiau)	tiau(tɕiau)	t'uOng	t'iOng
茶	**dea	*ḍa	da	ta	ta	te

Rule 2. The split of bilabials into labials and labiodentals:

$$*p-, \ *p'-, \ *b-, \ *m- \ ------> \ \begin{cases} f-, \ f-, \ v-, \ M- \ / \ \_\_\_ \ u \\ p-, \ p'-, \ b-, \ m- \end{cases}$$

(重唇分裂爲輕唇重唇)

Go-on, Kan-on and Min dialects did not undergo this rule. But they are all in the process of *p----->h /___ u. e.g.

	OC	MC	Go-on	Kan-on	Fu-zhou	Amoy
本	**puən	*puən	hon	hon	puOng	pun
方	**pĭwang	*pĭwang	hau	hau	huOng	hOng
分	**pĭwən	*piuən	bun	hun	hung/puOng	hun/pun
貧	**biən	*bĭĕn	ben	pen	ping	pin
八	**pĕt	*pæt	hatɕi	hatsu	pai?	pat/pue?

II. Secondary rules:

Rule 3. Voiced obstruant initials devoicing rule:

$$\begin{cases} *b- \\ *d-/ \ ḍ- \\ *g- \\ *dz-/dẓ- \ dʒ- \end{cases} -----> \begin{cases} p- \\ t- \\ k- \\ ts- \end{cases}$$

Go-on and the Wu dialect did not undergo this rule which is the basic feature on which most of the Sino-Japanese scholars based their claim that Wu was Go-on's source dialect. e.g.,

	OC	MC	Go-on	Kan-on	Su-zhou	Amoy
皮	**bĭa	*bĭe	bi	pi	bi	p'e/p'i
跑	**beəu	*bau	beu	pau	bae	p'au
敵	**diĕk	*diek	dziaku	tsiki	diɣ	tik
代	**dək	*dɒi	dai	tai	dE	tai
大	**dãt	*dɑi	dai	tai	dA/dəu	tai/tua

Rule 4. Nasal initial denasalization rule:

4a. $\left.\begin{array}{c} *m- \\ *n- \end{array}\right\}$ ---> $\left\{\begin{array}{c} b- \\ d- \end{array}\right.$

Go-on did not undergo this rule, Kan-on and Amoy partially did.

4b. *ng- (疑母) -----> g-

Go-on, Kan-on, and S. Min have undergone this rule. e.g.,

	OC	MC	Go-on	Kan-on	Amoy
嚴	**ngĭam	*ngĭɐm	gon	gen	giam
吳	**ngɑ	*ngu	go	go	gO/ngO
五	**ngɑ	*ngu	go	go	gO/ngO

Rule 5a. Voiced velar fricative initials become stops:

* ɣ (h) (匣母) -----> g---------> k

Go-on, Kan-on and Min have undergone this rule. e.g.,

	OC	MC	Go-on	Kan-on	Fu-zhou	Amoy
下	**ɣea	*ɣa	ge	ka	ha/a	ge/ke/ha/e
號	**ɣau	*ɣau	go	ko	hO	ho/go
含	**ɣəm	*ɣɒm	gan	kan	hang	ham/kam
縣	**ɣiwan	*ɣiwen	gen	ken	kaing	kuan/kuai
懸	**ɣiwan	*ɣiwen	gen	ken	hieng	hian/kuai
學	**ɣeəuk	*ɣɔk	gaku	kaku	hou?	hak/o?
糊	**ɣɑ	*ɣu	go	ko	hu	hO/kO

Rule 5b. Voiced velar fricative initials become devoiced:

* ɣ (匣母) -----> x(h)---------> 0

Go-on and Kan-on did not undergo this rule. Min dialects partially did.

Rule 6. Voiceless velar fricative initials become stops: [3]

6a. *x- (曉母) ---------> k-

Go-on and Kan-on have undergone this rule. S. Min partially did. e.g.,

---

3 Yang (1974) reported that in Ping-jiang dialect of Hunan, *ɣ/*x --->k'.

	OC	MC	Go-on	Kan-on	Amoy
吸	**xǐəp	*xǐəp	gihu	kihu	k'ip
許	**xǐɑ	*xǐo	ko	kyo	k'O
喊	**xəm	*xɑm	gan	kan	hiam/kam
呼	**xɑ	*xɑ	ko	ko	hO/k'O
海	**xə	*xɒi	kai	kai	hai

6b. *x- （曉母）---------> ç -/ _ _ _ _ i
x / elsewhere

Most of the Chinese dialects have undergone this rule.

Rule 7. Palatalization of velar stops:

7a. { *k- } --------> tç - / _ _ _ _ i
{ *k'- }

Go-on, Kan-on, Min, Yue, Hakka, and Yan-tai and Mu-ping of Shandong tend to be resistant to this rule. [4]

7b. *g'- -------> dʑ-/_ _ _ i

Rule 8. Affrication of dental stop initials:

8a. { *t- } --------> { tç -/ _ _ _ _ i
{ *t'- }   { ts- / _ _ _ _ u

Go-on and Kan-on have undergone this rule after Japanese borrowed Chinese characters into their language. e.g.,

	OC	MC	Go-on	Kan-on	Amoy
豬	**tǐɑ	*ţio	tçio	tçio	ti
畜	**t'ǐəuk	*t'ǐuk	tçiku	tçiku	t'iOk
通	**t'ong	*t'ung	tsu	tsu	t'ong

8b. *d- ---------> { dʑ -/ _ _ _ _ i
{ dz- / _ _ _ _ u

---

4   Data of Yan-tai and Mu-ping are from my own field notes collected during the summer of 1984.

Only Go-on has undergone this rule after Japanese borrowed Chinese characters into their language. e.g.,

	OC	MC	Go-on	Kan-on	Amoy
長	**dǐɑng	*dǐɑng	*dʑiau	tɕiau	tiang/tng
程	**dǐeng	*diɛng	*dʑiau	tei	t'ing

· Rule 9. Affricates and fricatives become alveolar fricatives:

9a.
$$\left.\begin{array}{l} *ts'- \\ *tɕ'- \\ *tʃ'- \end{array}\right\} \longrightarrow s$$

Go-on, Kan-on and Zhang-pu (S. Min) have undergone this rule. e.g.,

	OC	MC	Go-on	Kan-on	Zhang-pu	Amoy
菜	**ts'ə	*ts'ɒi	sai	sai	sai	ts'ai
抄	**tʃ'eau	*tʃ'au	seu	sau	sau	ts'iau
草	**ts'əu	*ts'ɑu	sau	sau	sau	ts'au
穿	**t'ǐwan	*tɕ'ǐwɛn	sen	sen	sing	ts'ing
差	**tʃ'ea	*tʃ'au	shia	sa	se	ts'e

9b.
$$\left.\begin{array}{l} *ts- \\ *tɕ- \\ *tʃ- \\ *ɕ- \\ *ʃ- \end{array}\right\} \longrightarrow s$$

In Go-on and Kan-on, all of the MC voiceless affricatives and fricatives become voiceless fricatives /s/. e.g.,

	OC	MC	Go-on	Kan-on	Amoy
精	**tsǐeng	*tsǐɛng	shiau	sei	tsing
注	**tǐwo	*tɕiu	shiu	shiu	tsu
處	**t'iɑ	*tɕ'io	so	shio	ts'u
初	**tʃ'i	*tʃ'io	so	shio	ts'O
莊	**tʃǐɑng	*tʃǐɑng	shiau	sau	tsOng/tsng
書	**ɕiɑ	*ɕǐo	shio	shio	su
生	**ʃeng	*ʃɒng	shiau	sei	sing

9c.
$$
\left.\begin{array}{l}
*dz- \\
*d\textsubring{z}- \\
*d\textctyogh- \\
*\textsubring{z}- \\
*\textctyogh-
\end{array}\right\} \text{---------}> \quad z
$$

In Go-on, all of the MC voiced affricates and fricatives become voiced alveolar fricatives /z/, while Kan-on become voiceless /s/, e.g.

	OC	MC	Go-on	Kan-on	Amoy
從	**dzǐwong	*dzǐwong	ziu	shiou	tsiong
船	**ḓǐwan	*dʑǐwɛn	zen	sen	tsun
柴	**dʒe	*dʒai	ze	sai	ts'a
邪	**zǐa	*zǐa	zia	shia	sia
禪	**ʑǐan	*ʑǐɛn	zen	sen	sian

Rule 10. Stop endings become zero:

10a. *-p ------> (Φ) ------> h --------> u / _ _ _ _ +u#

Due to the constraint of Japanese syllable structure, all the entering syllables of Sino-Japanese have to be suffixed by a vowel.

Go-on and Kan-on are in the process of *-p ---> Φ ---> h ----> 0. While S. Min is in the process of *-p ---> -ʔ ---->0. e. g.,

	OC	MC	Go-on	Kan-on	Amoy
答	**təp	*tɒp	tahu	tahu	tap
級	**kiəp	*kǐəp	kihu	kihu	kip

10b. *-t -----> ʔ -----> 0 /_ _ _ #

S. Min is undergoing this process.

10 c. *-t ------->
$$
\left\{\begin{array}{l}
t\textctc / \_ \_ \_ \_ + i\# \\
ts / \_ \_ \_ \_ + u\#
\end{array}\right.
$$

Go-on and Kan-on have undergone this rule due to the constraint of Japanese syllable structure. e.g.,

	OC	MC	Go-on	Kan-on	Amoy
一	**ĭĕt	*ĭĕt	itçi	itsu	it/ tsit
吉	**kĭĕt	*kĭĕt	kitçi	kitsu	kiat

10d.　　*-k ----> 0 / ____ #

S. Min is undergoing the process of *-k ---> -ʔ ---> 0. While Go-on and Kan-on still retain *-k which was suffixed by –i# or –u#. e.g.,

	OC	MC	Go-on	Kan-on	Amoy
歷	**lĭĕk	*liek	ryaku	reki	lik
六	**lĭəuk	*lĭuk	roku	riku	liOk/liak

Rule 11.　Bilabial nasal endings become alveolar nasals:

　　　　*–m -----> ˙ –n

Go-on and Kan-on have undergone this rule. e.g.,

	OC	MC	Go-on	Kan-on	Amoy
林	**lĭəm	*lĭĕm	rin	rin	lim
南	**nəm	*nɒm	nan	dan	lam

Rule 12.　Velar nasal endings become vocalized:

$$*-ng \longrightarrow \begin{cases} e & / \begin{cases} i(V) \\ j(V) \end{cases} \_\_\_\_ \# \\ \begin{cases} u \\ o \end{cases} & / \quad u(V) \_\_\_\_ \# \end{cases}$$

Go-on and Kan-on have undergone this rule. e.g.,

	OC	MC	Go-on	Kan-on	Amoy
清	**ts'ĭɛng	*ts'ĭɛng	shiau	sei(see)	ts'ing
正	**ţĭeng	*tçĭɛng	shiau	sei(see)	tsing/tsia
東	**tong	*tung	tsu	too	tang
宋	**suəm	*suong	su	soo	sOng

Rule 13. Medial deletion rule:

$$\left\{ \begin{array}{c} *-j- \\ *-u- \end{array} \right\} \text{-----> } 0 / C \_\_\_ V$$

Due to the constraint of the Japanese syllable structure, all of the MC medials have been deleted in Go-on and Kan-on. e.g.,

	OC	MC	Go-on	Kan-on	Amoy
飯	**bǐwan	*bǐwɒn	bon	han	huan/ png
算	**suan	*suɑn	san	san	suan
棉	**mǐan	*mǐɛn	men	ben	bian

In order to show more clearly the linguistic ties of Go-on, Kan-on and the major Chinese dialects, I will use above mentioned Rules 1–10 as the criteria to highlight their closeness in Tables 2 and Table 3. The positive sign (+) indicates that a given language has undergone the given rule, and the negative sign (–) indicates otherwise. +/– or –/+ indicates that the sound change is still in progress.

Table 2

	R1	R2	R3	R4a	R4b	R5a	R5b	R6a
EMC	+	–	–	–	–	–	–	–
LMC	+	+	–	–	–	–	–	–
Beijing	+	+	+	–/+	–	–	+	–
Changsha	+	+	+	–/+	–	–	+	–
Shuangfeng	+	+	–	–/+	–	–	+	–
Guangzhou	+	+	+	–	–	–	+	–
Meixian	+	+	+	–	–	–	–	–
Suzhou	+	+	–	–	–	–	–	–/+
Fuzhou	–	–	+	–/+	–	–/+	+/–	–
C. Xiamen	–	–	+	+	+	+	+	+
L. Xiamen	–	–	+	–/+	+	+	+	–
C. Zhangpu	–	–	+	+	+	+	+	+
L. Zhangpu	–	–	+	–/+	+	+	+	+
Go-on	–	–	–/+	–	+	+	–	+
Kan-on	–	–	+	–/+	+	+	–	+

	R6b	R7a	R7b	R8a	R8b	R9a	R10a	R10b R10c
EMC	-	-	-	-	-	-	-	-
LMC	-	-	-	-	-	-	-	-
Beijing	+	+	-	-	-	+	+	+ +
Changsha	+	+	-	-	-	-	+	+ +
Shuangfeng	+	+	-	-	-	-	+	+ +
Guangzhou	+	-	-	-	-	-	-	- -
Meixian	+	-	-	-	-	-	-	-
Suzhou	+	+	+	-	-	-	-	- -
Fuzhou	+	-	-	-	-	-	-	- -
C. Xiamen	+	-	-	-	-	-	-/+	-/+-/+
L. Xiamen	+	-	-	-	-	-	-	- -
C. Zhangpu	+	-	-	-	-	+	+	-/+-/+
L. Zhangpu	+	-	-	-	-	+	-	- -
Go-on	-	-	-	+	+	+	+	- -
Kan-on	-	-	-	+	-	+	+	- -

Table 4. Number of shared historical sound changes

	Go-on	Kan-on
Beijing	2	4
Changsha	3	5
Shuangfeng	3	3
Guangzhou	5	4
Meixian	6	7
Suzhou	5	4
Fuzhou	6	7
C. Xiamen	10	11
L. Xiamen	9	9
C. Zhangpu	11	12
L. Zhangpu	10	9

Among major Chinese dialects, [-Rule 1] and [-Rule 2] are found only in Min dialects. These features suggest that Min dialects have preserved more Old Chinese characteristics than the other dialects. The above analyses have shown that Go-on and Kan-on not only share these two features with Min dialects, but also share more other historical sound changes with Southern Min, Xiamen and Zhangpu. Even though Go-on shares with Suzhou (Wu dialect) one important characteristic of the Wu dialect, it does not share any

primary feature with the Wu dialect. The evidence very strongly suggests that Go-on and Kan-on are much closer to Min dialects, S. Min in particular, rather than the Wu dialect. Chinese historical records have also shown that due to major events such as Wu-Hu-Luan-Hua (五胡亂華, 304-439 A. D.) and Yong-Jia-Zhi-Luan (永嘉之亂 307-312 A. D.), massive numbers of Han immigrants moved down to the Min area from the Wu region. Ting (1988, 1989), based on the material from Nan-shi (南史), has provided strong evidence to support his claim that the "Wu yu" of the Southern dynasties is the ancestor language of the modern Min, and the northern dialect of that time has become the modern Wu dialect. Eom (1990) maintained that ancient Paekche had transmitted Go-on into Japan and Sino-Paekche, as Go-on and Kan-on share two primary features [-Rule 1] and [-Rule 2] and two secondary features [+Rule 5a] and [+Rule 6a] with Min. [5] From this study, and the works of Ting and Eom, we can see the close relationship among Sino-Paekche, Go-on, Kan-on and Min dialects. Thus, it is plausible to propose the following genetic tree to show their connection:

---

5   Ik-sang Eom (嚴翼相) is my graduate student who is writing up his doctoral dissertation on the comparison of Sino-Korean and Chinese dialects at Indiana University. Data of Sino-Korean in this study are provided by him.

Old Chinese
|
Rule   1

+   −

Middle Chinese   Proto-Min
| |
| Rule 2
|
Other dialects   −   +

N. Min, Xiamen, Zhangpu   Colloquial Lishui
Sino-Paekche   (Wu)
Go-on, Kan-on
|
Rule 5a, 6a

+

N. Min, Xiamen, Zhangpu
Sino-Paekche
Go-on, Kan-on
|
Rule 9a

−   +

N. Min, Xiamen, Sino-Paekche   Zhangpu, Go-on, Kan-on
|
Rule 8a

−   +

Zhangpu   Go-on, Kan-on
|
Rule 3

−   +

Go-on   Kan-on
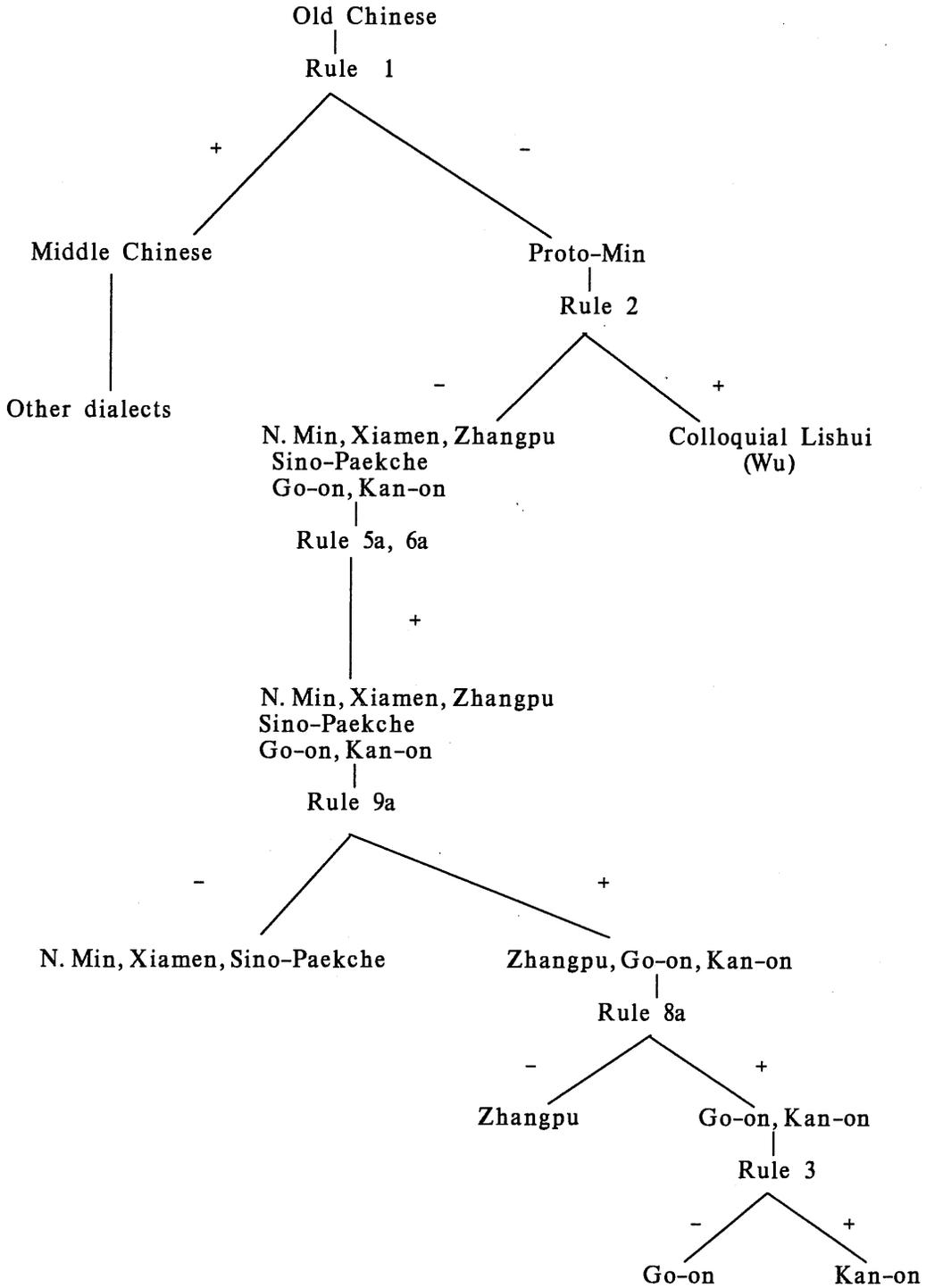
4. Conclusion

Even though the above mentioned evidence have provided us with strong arguments to buttress my claim that Sino-Paekche, Go-on, and Kan-on are closely related to Min dialects. I would only propose that the source dialect of Go-on was Old-Min which was the speech originally spoken in Wu region during the Southern dynasties. Go-on was transmitted into Japan by way of Korea. While Kan-on was transmitted directly from Chang-on, then the capital of Tang dynasty. According to *Nihon Shoki*, Japan had send Ambassador Onono Imoto (小野妹子) to China in 607 A. D., and the Chinese emperor had sent two Onhakase (音博士, Pronunciation masters) to Japan to teach their people how to read Chinese. Although in 792 A. D., Japanese emperor had decreed that Buddhist texts should be recited in Kan-on, in general society Go-on prevailed. During that time, "Government used Kan-on, while commoner used Go-on. High society people used Kan-on, while low society people used Go-on. Chinese texts were read in Kan-on, while Buddhist texts were read in Go-on. " (Oshima 1931:50) This is why Go-on and Kan-on have been co-existed side-by-side even up to the present time.

This study shows that the study of Sino-Japanese and other Sino-Xenic dialects should refer to Chinese dialects, the southern dialects in particular. As we have seen in this study that southern dialects and Sino-Japanese have preserved more Old Chinese than the other dialects. Thus thorough study on these dialects may provide us with a sounder foundation for the reconstruction of Proto-dialects and to reshape our Chinese language family tree in the future.

REFERENCES

Eom, Ik-sang (嚴翼相)

   1990 "Problem in Karlgren's hypothesis on Sino-Korean." Paper presented at the Second Northeast Conference on Chinese Linguistics, University of Pennsylbania, May 4-6, 1990.

Goto, Asataro (後藤朝太郎)

   1909 *Kanjion no keito.* (漢字音の系統 The System of Sino-Japanese) Tokyo: Sanseido.

Guo, Xiliang (郭錫良)

   1986 *Hànyǔ gǔyīn shǒucè.* (漢語古音手冊 A Handbook of Ancient Chinese). Beijing: Beijing Daxue Chubanshe.

Iida, Toshiuki (飯田利行)

   1955 *Nihon ni zanzonseru Chugoku kinseion no kenkyu.* (日本に殘存める中國近世音の研究 Study on the Modern Chinese sounds remain in Japanese). Tokyo.

Karlgren Bernhard (高本漢)

   1923 *Analytic Dictionary of Chinese and Sino-Japanese.*

   1940 *Grammata Serica: Script and Phonetics in Chinese and Sino-Japanese.* The Bulletin of the Museum of Far Eastern Antiquites Stockholm, 12: 1-471.

Kono, Rokuro (河野六郎)

   1968 *Chosen kanjion no kenkyu.* (朝鮮漢字音の研究 A Study on Sino-Korean) Tenri: Tenri jihosha.

Martin, Samuel E.

   1866 "Lexical evidence relating Korean to Japanese." in *Language* 42.185-251.

Miller, Roy Andrew

   1967 *The Japanese Language.* Chicago: University of Chicago Press.

Margaret M. Y. Sung

Mineya, Toru　(三根谷徹)

　　1972　*Otsunam kanji on no kenkyu.* (越南漢字の研究　A Study on Sino-Vietnamese)
　　　　　Tokyo: Tokyo Bunko Ronso 53.

Nihon Shoki (日本書紀　The History of Japan). 720

Numoto, Katsuaki　(沼本克明)

　　1982　*Heian Kamakura jidai ni okeru Nihon Kanjion ni tsuite no kenkyu.* (平安鎌倉
　　　　　時代に於る日本漢字音に就ての研究　A Study on the Sino-Japanese during
　　　　　Heian-Kamakura Period) Tokyo.

　　1987　*Nihon kanji on no rekishi.* (日本漢字音の歴史　The History of Sino-Japanese)
　　　　　Tokyo: Tokyodo. 1986 first print. 1987 second print.

Oshima, Masatake　(大島正健)

　　1931　*Kan-on Go-on no kenkyu.* (漢音呉音の研究　A Study on Kan-on and Go-on)
　　　　　Tokyo: Dai'ichi shobo.

Sung, Margaret M. Y.　(嚴棉)

　　1986　"Phonology of the Zhangpu dialect," in *JCL* 14.1:70–88.

　　1989　"Linguistic ties of Chinese and Japanese: a study of historical phonology." Paper
　　　　　presented at the Colloquium sponsored by the East Asian Studies Center and
　　　　　Linguistics Department of Indiana University, April 7, 1989.

Takamatsu, Masao　(高松政雄)

　　1982　*Nihon kanji on no kenkyu.* (日本漢字音の研究　A Study on Sino-Japanese)
　　　　　Tokyo: Fukanshobo.

　　1986　*Nihon kanji on gairon.* (日本漢字音概論　Introduction to Sino-Japanese)
　　　　　Tokyo: Fukanshobo

Ting, Pang-hsin　(丁邦新)

　　1988　" A Min substratum in the Wu dialect." Paper presented at the 21st International
　　　　　Conference on Sino-Tibetan Languages and Linguistics, University of Lund,
　　　　　Sweden, Oct. 7–9, 1988.

1989   "Hanyu yanjiu de zhanwang," in the *World of Chinese Language* 51:1-13.

Tung, T'ung-ho (董同龢)

1968   *Hànyǔ Yīnyùnxué.* (漢語音韻學 Chinese Phonology) Taipei: Guangwen Shuju.

Wang, Li (王　力)

1984   "Hanyu dui Riyu de yingxiang," (The influence of Chinese on Japanese) In
Beijing Daxue Xuebao 1984.5:1-26. Beijing.

Wu, Shou-li (吳守禮)

1986   "Nihongo to Minnamgo-Kango Nihon yaku on to Minnamgo to o chushin ni-" (
「日本語」と「閩南語」--漢語日本譯音と閩南字音とを中心に--, Japanese
and Southern Min--with a particular reference to Sino-Japanese readings and
Southern Min readings), in *Chugokugaku Ronshu* pp.625-43, Tokyo.

Yuzawa, Tadayuki (湯澤質幸)

1987   *To-on no kenkyu.* (唐音の研究 A Study on To-on.) Tokyo: Benseisha.

Variation in Classifier Systems Across Chinese Dialects: Towards a Cognition-Based Semantic Approach*

James H-Y. Tai
The Ohio State University

1. INTRODUCTION.

Classifier systems vary considerably across Chinese dialects. Firstly, the set of classifiers varies from one dialect to another. For example, Min, Yue, and Kejia dialects do not have the classifier *gen* (根) to refer to long objects, while other Chinese dialects do. On the other hand, only Southern Min and Kejia dialects have the classifier *rui* (蕊) in reference to flowers. Similarly, the classifier *tsang* ^{35} (叢) in reference to trees and the classifier *p'a* ^{33} (泡) in reference to lamps are found only in Southern Min dialects. The classifier mbai ^{33} (排) in reference to one of a pair is only found in the Southern Min dialects spoken on Hainan island. [1]

Secondly, the same classifier often exhibits different membership in different dialects. Thus, the classifier *tiao* (條) probably exists in all Chinese dialects, but the class

---

1 *Pinyin* romanization is used for transcribing terms in this paper except several classifiers, as in some of the examples in the first paragraph, which are given broad phonetic transcription with superscripting of tone numbers.

of nouns with which it co-occurs varies greatly from one dialect to another. For example, the classifier *tiao* collocates with *cao* (草) and *qiao* (橋) in the Guangzhou dialect, with *toufa* (頭髮) in the Kejia dialect of Sixian, and with *zhen* (針) in the Fuzhou dialect. Tiao cannot collocate with these nouns in Mandarin dialects, however. Even within Mandarin dialects, *tiao* varies greatly with respect to the class of nouns with which it is associated. Thus, instead of *tiao* , the classifier *gen* is used for animals of long shape such as *niu* (牛) , *yang* (羊) , *zhu* (豬) and *she* (蛇) in the Mandarin spoken in Neijiang (Sichuan) and Yuncheng (Shanxi) .

Thirdly, different dialects may use different classifiers for the same object. For example, for *yu* (魚) , *tiao* is used in most of Mandarin, Gan, Kejia, Wu, Xiang and Yue dialects. However, *gen* is used in many Mandarin dialects in Sichuan, and some dialects in Shaanxi and Shanxi; *wei* (尾) is used in most of Southern Min dialects; *tou* (頭) is used in Northern Min including Fuzhou dialect and in Southern Wu including Wenzhou dialect; *zhi* (隻) is used in Nanchang; *ge* (個) is used in Qionghai on Hainan island.

Fourthly, speech patterns vary in accordance with age, education, family background, profession, and other sociolinguistic factors. The use of classifiers is no exception. Thus, among native speakers of Beijing, in reference to *gou* (狗) , tiao is preferred to *zhi* for older speakers, while the reversed preference is true for younger speakers, especially those under the age of twenty. [2]

Variation in classifier systems across Chinese dialects is indeed crisscrossing confusingly, presenting a seemingly insoluble enigma to Chinese dialectologists. The main purpose of this paper is to propose a cognition-based semantic approach in order to identify some systematic differences among Chinese dialects with regard to classifiers. I hope the present pilot study will draw Chinese linguists' attention to the importance of collecting more data on classifiers in Chinese dialects, and the need of such data for a further understanding of the affinity among Chinese dialects either from synchronic or diachronic

2　See Wang (in preparation) for a detailed discussion.

points of view.

2. METHODOLOGY.

2. 1. Categories of classification.

Having examined classifiers in more than fifty languages, Allan (1977) proposes seven cognitively-based categories of classification as the bases for noun classification in natural languages. Every classifier is considered belonging to one or more of the seven categories of classification. These seven categories, with their key semantic features, are succinctly summarized in Lee (1987) as given in Table 1.

The first four categories in Table 1 will be of particular relevance to the treatment of Chinese classifiers in this paper. And concerning (i), only animacy will be dealt with here. An additional category in which attributes of parts are extracted is included, since it is relevant to Chinese classifiers.

Table 1. Semantic Features of Noun Classification.

(i)   Material

a. animacy

b. abstract nouns

c. material

(ii)   Shape

a. saliently one-dimensional

b. two-dimensional

c. three-dimensional

(iii)   Consistency

       a. flexible

       b. hard or rigid

       c. non–discrete

(iv)   Size

(v)   Location

       a. inherent location

       b. contingent location

(vi)   Arrangement

       a. objects in specific, non–inherent configuration

       b. position

       c. objects in non–inherent distribution

(vii)   Quanta

2. 2. Classifiers versus measure words.

    In the literature on general linguistics as well as Chinese linguistics, classifiers are often treated on a par with measure words. For example, Allan has treated measure words as classifiers. Among the seven categories he has identified, the last two, i. e, arrangement and quanta listed in Table 1, primarily involve measure words. As noticed by Allan himself, the last two categories occur in languages like English which are not classifier languages. On the other hand, Chao (1968:584-620) has treated classifiers as ' individual measures. ' Li and Thompson (1981:106) has blended classifiers with measure words and stated that "any measure word can be a classifier. " Thus, they treat *bang* in *shi bang rou* (十磅肉) and *qun* in *yi qun yang* (一群羊) on an equal footing as *tiao* in *yi tiao yu* (一條魚) and

zhang in *yi zhang zhi* (一張紙) .

However, in order to better understand the cognitive bases underlying the different classifier systems in Chinese dialects, it is not only feasible but also desirable to differentiate classifiers from measure words. Tai and Wang (1990:38) propose the following distinction between classifiers and measure words.

Classifier and Measure Word Distinction:

A classifier categorizes a class of nouns by picking out some salient perceptual properties, either physically-or functionally-based, which are permanently associated with the entities named by the class of nouns; a *measure word* does not categorize but denotes the quantity of the entity named by a noun.

In essence, this distinction amounts to saying that while a classifier is to 'categorize' an object in terms of its permanent salient property, a measure word is to 'measure' the quantity of an object or a collection of objects. This distinction between classifiers and measure words has a cognitive basis in that while classifiers refer to relatively 'inherent' or 'permanent' properties of an entity, measure words refer to 'contingent' or 'temporary' properties.

On this view, Chao's 'individual measures' are classifiers *par excellance*. His group measures, partitive measures, container measures, temporary measures, and standard measures are all measure words. However, some measure words also have the function of a classifier with respect to certain nouns. For instance, the group measure *dui* (對) functions like a classifier for nouns *fufu* (夫婦) and *yuanyang* (鴛鴦) , since 'being a pair' is more or less a permanent property of the nouns in question. Similarly, partitive measures such as *kuai* (塊) and *pian* (片) can function as classifiers as well. In *yi kuai rou* (一塊肉) and *yi pian rou* (一片肉) , they are partitive measures. However, in *yi kuai shitou* (一塊石頭) and *yi pian yezi* (一片葉子) , they can be treated as classifiers. [3]

---

3   Therefore, some classifier/measure words can be ambiguous in some contexts in that they can be either interpreted as classifiers or measures. For instance, *yi ba daozi* (一把刀子) can mean either 'one knife' or 'one handful of knives'.

The distinction between classifiers and measure words has a desirable consequence in describing different languages or different dialects of the same language. Thus, every language including English has measure words, but only some languages like Chinese have classifiers. Like Chinese, English has measure words such as pound and pile which are equivalent to *bang* (磅) and *dui* (堆) in Chinese; but, unlike Chinese, English does not have classifiers such as *tiao* (條) for counting fishes and *ke* (棵) for counting tress. Furthermore, many measure words such as pile and group presumably have similar, if not identical, meanings across languages. Thus, *dui* (堆) in Chinese has roughly the same meaning as *pile* in English; *qun* (群) in Chinese is semantically equivalent to *group* in English. In the same vein, we should not be surprised to find that measure words do not vary much in meaning from one Chinese dialect to another, while classifiers vary greatly across Chinese dialects.

This paper will be concerned with classifiers proper, and not with measure words.

2. 3. Objectivist versus experientialist view of categorization.

The classical view of categorization holds that categories are formed by certain objective properties inherent to the entities in the world, and that these properties are discrete, serving as necessary and sufficient criterial conditions for cate-gorization. This view of categorization has been referred to as the objectivist view of categorization by Johnson (1987) and Lakoff (1987). This view of categorization is fundamentally important in the development of many branches of natural and social sciences. Mathematics, logic, and formal semantics and syntax totally depend on this classical view of categorization.

The objectivist view of categorization has been challenged in recent years by a wealth of new data on human categorization. Of special relevance to the study of classifiers in natural languages is the study of color categories in anthropological linguistics (Berlin and Kay 1969, Kay nad McDaniel 1978), the study of categorization of concrete objects in cognitive psychology (Rosch 1975, 1978; Tversky and Hemenway 1984), and the study of lexical categories in linguistics (Ross 1972, Hopper and Thompson 1984). From these

studies, a new theory of categorization, known as prototype theory, has emerged, influencing the thinking of many linguists. Departing from the classical objectivist view of categorization, the prototype theory holds that categorization can be achieved through associated with the prototypes or the central members. Members of a category may be associated with another in *family resemblance* (à la Wittgenstein). It is thus not necessary for all members of a category to possess a common objective property which criterially defines that category. In the portotype theory, categorization intimately ties with the notions of 'centrality' and 'gradation.' Thus, some members of a category, being prototypes, may serve as 'typical' or 'better' examples of that category than others. Rosch (1973, 1975) has shown that people regard some birds as more typical and better examples of the category than other birds. For example, robins and sparrows are judged as better examples of birds than pelicans and penguins.

The experiential view of categorization as advocated by Johnson (1987) and Lakoff (1987) incorporates the prototype theory of categorization. This view also holds that human categorization results primarily from the interaction between the human body and the physical environment in different socio-cultural contexts. Thus, objects can be grouped together through the same domain of experience. For example, in Dyirbal (Dixon 1982), fish and fishing implements both are in the same class, even though they might be expected to be in different classes, since fish are animate and fishing implements are neither animate nor food. Furthermore, Johnson and Lakoff have observed that human imagination plays a crucial role in categorization. Thus, metaphor, metonymy, and imagination all enter into the formation of a category, as clearly demonstrated by Lakoff (1986) in his explication of Dyirbal classifiers and the classifier *hon* in Japanese.

In this paper, we will show that the experiential view of categorization provides some useful perspectives for the explication of classifier systems in Chinese dialects.

2. 4. Data base.

The data base for the present study comprises the following sources:

(A) **Hanyu Fangyan Cihui** (漢語方言詞彙)

(B) **Hanyu Fangyan Gaiyao** (漢語方言概要)

(C) Survey conducted in Columbus, Ohio by Wang Lianqing during 1990 of classifiers at various sites in different dialect areas including Beijing.

(D) Descriptions of classifiers in different dialects: Chao (1968) for Mandarin, Gao (1980) for Guangzhou, Luo (1984) for Kejia of Sixian, Liang (1982) for Sichuan, Zhang (1983) for Southern Min of Taiwan, Zhan and Cheung (1988) for dialects spoken in the Pearl River Delta, and Ye (1988) for Suzhou.

(E) Relevant publications in *Zhongguo Yuwen* (中國語文) and *Fangyan* (方言).

3. RELEVANT COGNITIVE CATEGORIES IN CHINESE CLASSIFIER SYSTEMS.

3. 1. Animacy.

In the great majority of Chinese dialects, animals are distinguished from inanimate objects and organisms. The general classifier for the category of animals is *zhi* (隻) . The specific classifiers are *pi* (匹) for *ma* (馬) ; *tiao* (條) for *gou* (狗) and *niu* (牛) ; *tou* (頭) for *niu, ma* and *zhu* (豬) ; and *kou* (口) for *zhu*. Also, as noted in the introduction, the classifier *gen* (根) is used for animals with a long shape in some dialects, and the classifier *wei* (尾) is used in Southern Min for *yu* (魚) , *she* (蛇) and other animals and insects with a 'rope-like' shape. Except for the classifier *pi* , these specific classifiers clearly refer to the salient features of different animals. [4] They overide the general animal classifier *zhi* (隻) . In some dialects, *ge* (個) , the general classifier for all sorts of entities, is also used for some animals; for example, Xinhui, Kaiping, and Enping in Guangdong, as well as Qionghai in Hainan.

4　See Liu (1965:184-187) for a detailed discussion of the historical origin and the development of the classifier *pi* (匹) in reference to animals. In many dialects, in reference to *ma* (馬), the classifier *zhi* (隻) or *tou* (頭) is used in the colloquial speech, with the classifier *pi* as a more literary expression.

There seems to be no general classifier for inanimate objects. One might be tempted to consider the general classifier *ge* as marking the category inanimacy. However, it makes more sense to treat *ge* as a general classifier with a default value signalling simply existent entities. Specific classifiers for inanimate objects in Chinese dialects are preponderant in number. Just for *shu* (樹) alone, there are at least eight classifiers used across different dialects: *ke* (棵), *gen* (根), *zhu* (株), *tou* (頭), *po* (頗), *dou* (兜), *cong* (叢), and *tiao* (條). The semantic basis of each of the eight classifiers is nevertheless discernible, if not readily transparent. Thus, *tiao* and *gen* associate the 'tree' with the class of long objects; *tou* with the salient 'head-like' leafed part of a plant; *ke, zhu,* and *po* with the trunk of a plant; *dou* with the stem of a plant; and *cong* with the collection of leaves on the trunk of a plant.

A general observation can be made. In Chinese dialects, while there is a general classifier *zhi* for animals, there is no clear corresponding general classifier for plants.

In most of the Chinese dialects, human beings (人) are classified separately from animals by means of the general classifier *ge*. [5] However, in some of the Kejia dialects in the Pearl River Delta region, the animal classifier *zhi* is used for human beings as well.

3. 2. Shape.

The category of shape has traditionally been divided into the three major subcategories: long, flat, and round. Allan (1977) prefers to replace them with one-dimensional, two-dimensional, and three-dimensional, his reasons being that the latter terms are more precise and suitable in accounting for some cross-linguistic classification of nouns better than the former terms. However, it will be seen in the discussion below that both sets of terms are needed in order to adequately describe the salient cognitive features underlying the Chinese classifier systems.

---

5 The classifier *kou* (口) is also used for *ren* (人) in reference to the number of a household as in *yi jia si kou ren* (一家四口人) 'a household of four persons'.

James H-Y. Tai

3. 2. 1 Longness.

In Tai and Wang's (1990) semantic study of the classifier *tiao* in Mandarin Chinese, longness of shape is identified as the cognitive basis of that classifier. However, there are many nouns referring to long objects which do not take *tiao* as the classifier. In section 3. 1, we noted that many nouns referring to animals with a long shape take *zhi* (隻) rather than *tiao*, *zhi* being the default marker for the cognitive category 'animacy'. But to account for the distribution of *tiao* along with *gen* (根) and *zhi* (枝), Tai and Wang propose that each of the three classifiers has its own salient perceptual property which serves as the typicality condition for categorization: namely, one-dimensional extension in length for *tiao*, three-dimensionality of a long, rigid object for *gen*, and the cylindricity of a long, rigid object for *zhi* (枝). The three-way distinction can be illustrated by the following examples:

(1)　yi tiao she　　　　　一條蛇

　　　yi tiao yu　　　　　一條魚

　　　yi tiao huanggua　　一條黃瓜

　　　yi tiao dengzi　　　　一條櫈子

(2)　yi gen gunzi　　　　一根棍子

　　　yi gen huochai　　　一根火柴

　　　yi gen zhen　　　　一根針

　　　yi gen ganzhe　　　一根甘蔗

(3)　yi zhi bi　　　　　　一枝筆

　　　yi zhi lazhu　　　　一枝蠟燭

　　　yi zhi qiang　　　　一枝槍

　　　yi zhi xiangyan　　　一枝香烟

Tai and Wang recognize that the distribution in (1) to (3) represents the norm for educated Mandarin speakers. However, for some individuals, there is overlapping between

tiao and *gen* on one hand, and between *gen* and *zhi* on the other hand. For example, for some Mandarin speakers, *gen* instead of *tiao* is used for *huanggua,* and for some other speakers *gen* instead of *zhi* is used for *qiang* and *xiangyan.* For *qiang,* the classifier *gan* (桿) is also used. Regardless of this kind of variation among speakers, the three-way cognitive distinction among *tiao, gen,* and *zhi* which Tai and Wang propose can be regarded as a *typicality* condition restricting the variation.

One striking fact of categorization involving the three classifiers mentioned above is that only *tiao* can be used to refer to nouns like *lu* (路) , *he* (河) and *jie* (街). This kind of extension can be explained by the assumption that the salient perceptual feature of *tiao* involves only the one-dimensional extension in length. This assumption can also account for the difference between *yi tiao* xian (一條線) and *yi gen xian* (一根線) . The expression *yi tiao xian* denotes a one-dimensional 'line' on a two-dimensional plane. The expression *yi gen xian* denotes 'thread', a three-dimensional object. Therefore, in spite of the fact that the classifier *tiao* is used for three-dimensional objects such as *huanggua, yu* and *she,* the salient perceptual feature of the noun class categorized by *tiao* is still that of one-dimensional extension in length.

In most dialects of Mandarin Chinese, among the *gua* (瓜) class, only those with a long shape take the classifier *tiao*; for example, *huanggua* (黃瓜) and *sigua* (絲瓜) . Those which do not have a long shape take the general classifier *ge*; for example, *xigua* (西瓜) and *donggua* (冬瓜) . Similarly, only long-shaped *maojin* (毛巾) and *dengzi* (凳子) take *tiao* . Otherwise, the classifier *kuai* (塊) is used for *maojin* and the classifier *zhang* (張) or *ge* (個) is used for *dengzi.*

I have earlier noted that for long-shaped objects, some Mandarin dialects in Sichuan, Shaanxi and Shanxi prefer *gen* to *tiao* even in reference to animals such as *niu* (牛) , *yu* (魚) , and *she* (蛇) . In these dialects, *tiao* is nevertheless used to refer to *he* (河) and *jie* (街) . The cognitive distinction between *tiao* and *gen* proposed by Tai and Wang fits well with the use of *gen* in these dialects, since animals are three-dimensional after all.

In most dialects of Yue, Min, and Kejia, the classifier *gen* is not used. In these dialects, there is no contrast between *tiao* and *gen*. Instead, the distinction is between *tiao* and *zhi*. While Yue dialects use *tiao* for a large number of three-dimensional objects (e. g. *yi tiao chai* (一條柴) and *yi tiao zhugan* (一條竹竿)), Min dialects use *zhi* to refer to these objects. In reference to *he* (河) and *jie* (街), these dialects consistently use *tiao*.

Based on the above observations, it is safe to conclude that across Chinese dialects, the cognitive basis of *tiao* is the salient one-dimensional extension in length and that *gen* or *zhi* is the three-dimensionality of long objects. For those dialects which have all of the three classifiers, a further distinction is made between *gen* and *zhi* with respect to the salient perceptual feature of cylindricity.

It is interesting to note here that the classifier *wei* (尾) is used for nouns such as *yu* (魚), *she* (蛇) and *niqiu* (泥鰍) in most of the Southern Min and Kejia dialects.[6] The class of nouns categorized by *wei* refers to animate, movable, living beings which have the long shape of a rope and which do not have legs to stand up.

3. 2. 2. Flatness.

It is a well known fact that Mandarin Chinese use the classifier *zhang* (張) to categorize *zhi* (紙), *zhuozi* (桌子), and *chuang* (床). For many native speakers of Mandarin, the category of *zhang* extends to cover *yizi* (椅子) and *dengzi* (凳子), since they all have a flat surface like *zhuozi*.

In most Yue dialects and some Kejia dialects the classifier *zhang* is also used to refer to *bei* (被) and *dao* (刀). In Mandarin dialects, either *tiao* or *chuang* (床) is used for *bei*, and *ba* (把) is used for *dao*.

In Southern Min dialects, the classifier *zhang* is also used for *xin* (信) and *jiqi* (機器). The difference between the classifier *feng* (封) for *xin* in Mandarin and *zhang* in Southern Min can be interpreted as reflecting two salient features of a letter, the envelope of a

---

6　Further examples include *yi wei huichong* (一尾蛔蟲) 'one roundworm', *yi wei xia* (一尾蝦) 'one shrimp', and *yi wei long* (一尾龍) in Southern Min.

letter in Mandarin but that of the letter paper itself in Southern Min. The use of *zhang* for *jiqi* in Southern Min can also be properly interpreted, since the basic meaning of *zhang* is 'to extend.'

In most Yue dialects including Guangzhou, a distinction is made between *kau* ^{22} (舊) and *fa : i* ^{33} (塊) . Both correspond to *kuai* (塊) in Mandarin. However, *fa : i* ^{33} refers to objects with a flat surface.

3. 2. 3. Roundness.

In Southern Min dialects, regardless of the size, nouns with reference to roundish objects take the classifier *li* (粒) . Thus, *xigua* (西瓜) , *donggua* (冬瓜) , *qiu* (球) , *dan* (蛋) , and *mi* (米) form a class under the classifier *li*. However, in Mandarin, Yue, Kejia and other dialects, only the relatively small roundish objects such as *mi* (米) and *shazi* (砂子) take the classifier *li* . Furthermore, Mandarin dialects, more than Yue and Kejia dialects, use *ke* (顆) instead of *li* for small roundish objects.

3. 3. Size.

We now turn to size, and discuss consistency later. We noted in the preceding section that in reference to the roundish objects in Mandarin, Yue, Kejia and other dialects, only those of relatively small size use the classifier *li* (粒) . Also in many Chinese dialects, the classifier *tou* (頭) is used for relatively large animals such as *niu* (牛) and *ma* (馬) but not for *gou* (狗) and *mao* (貓) . The classifier *zuo* (座) in most Chinese dialects also refer to massive and solid objects such as *shan* (山) , *qiao* (橋) , and *dalou* (大樓) .

3. 4. Consistency.

We use the perceptual feature 'rigidity' to distinguish *gen* and *zhi* from *tiao*. In most Chinese dialects, *tiao* usually refers to more flexible objects, while *gen* or *zhi* refer to more rigid objects. But the flexibility/rigidity distinction seems to be secondary to the shape distinction. Thus, in many dialects in Sichuan, Shaanxi and Shanxi, long shape is the central determining perceptual feature; long things, whether flexible or rigid, take *gen*. In these dialects, *tiao* is used for *he* (河) and *jie* (街) , of which the salient perceptual feature is the

one-dimensional extension in length.

In many Chinese dialects, while the classifier *kuai* (塊) is used for hard objects, the classifier *tuan* (團) is used for objects of mushy substance. For example, the contrast between *yi kuai tie* (一塊鐵) and *yi tuan mianhua* (一團棉花) holds good in most dialects. The distinction between hard and mushy consistency again seems to be secondary to the shape. Thus, *tuan* usually refers to roundish objects of mushy substances, particularly with respect to its convex shape, while *kuai* refers to hard objects which are not roundish.

3. 5. Attributes Referring to Parts of Objects.

The classifiers *tiao, gen* and *zhi* all have their nominal origins referring to parts of the tree. It is obvious that they have been generalized to refer to many objects other than trees and plants. The classifier *ba* (把) for nouns such as *daozi* (刀子), *jian* (箭) and *yizi* (椅子) is still limited to those objects with a handle. Other parts classifiers in Chinese dialects include: *wei* (尾) in reference to *yu* (魚) and *ling* (領) in reference to *shan* (衫) in Southern Min and Hakka dialects, *tou* (頭) in reference to large animals in many dialects. In some Yue dialects and many Kejia dialects, the classifier *tou* is also used for plants. Similarly, *kou* (口) and *yan* (眼) are used as classifiers in many Chinese dialects. For example, in Mandarin Chinese *yi kou zhu* (一口豬) and *yi kou jing* (一口井) and in Yue dialects *yi yan jing* (一眼井) and *yi yan zhen* (一眼針).

4. SOME PROTOTYPES AND THEIR EXTENSION.

In most dialects, through metaphorical extension, the classifier *tiao* is used to classify not only concrete objects but also entities which are invisible and abstract. For example,

(4)　　yi tiao xinwen　　　　一條新聞

　　　　yi tiao falu　　　　　一條法律

　　　　yi tiao hetong　　　　一條合同

　　　　yi tiao yijian　　　　一條意見

　　　　yi tiao liyou　　　　　一條理由

yi tiao mingling　　　一條命令

The metaphorical extension in (4) is structured on a domain of experience to which most native speakers can still relate, namely, the fact that news items, legal articles, agreements, opinions, and so forth, are traditionally written down on a page. It is significant to observe that the metaphorical extension is based on the long shape of an entity as imagined by the creative mind of human beings.

The use of the classifier *pi* (匹) for *ma* (馬) in many dialects was based on the 'matching-coupling' relationship between humans and horses in ancient China (Cf. Liu 1965 and Yau 1988). It is nevertheless arbitrary to native speakers of these dialects. Based on the survey conducted by Wang Lianqing of fifty native speakers from Beijing, some native speakers also use *pi* to classify *luo* (騾) and *luotuo* (駱駝), but only one young speaker uses it for *lü* (驢). Thus, while *ma* is the central member for the classifier *pi, luo* and *luotuo* are less central, and *lü* is marginal. The graded extension is interesting and can be neatly accounted for by the prototype theory. *Luo,* being the hybrid of *ma and lu*, has a body shaped like a horse. *Luotuo,* though very different from *ma* in body shape, has a function like *ma* in human activities. [7]

Also based on Wang's survey, *gou* (狗) appears to be a prototype for *lang* (狼), for which only a few native speakers use *tiao*. In Beijing dialect, *tiao* is almost never used for *mao* (貓), but is used by some speakers for *huli* (狐狸).

In most dialects, *she* (蛇) serves as the prototype for the legendary animal *long* (龍). Thus, *tiao* is used for both *she* and *long* in most Mandarin and Yue dialects; *wei* is used for both in many Kejia and most Southern Min dialects; *gen* is used for both in many Sichuan dialects.

On the other hand, almost no dialect classifies *eyu* (鱷魚) with *yu* (魚) under the same classifier.

7　In Chao (1968:590), *ma* 馬, *luozi* 騾子, and *lü* 驢 are the three examples listed under the classifier *pi* 匹. It appears that Chao would rather treat the three nouns on an equal footing than choose *ma* as the core member of the *pi* category.

5. CONCLUDING REMARKS.

It is obvious that classifiers in Chinese dialects categorize nouns into different classes. However, it is not immediately clear whether they represent some kind of conceptual structures or are merely arbitrary forms without a conceptual basis. It is shown here that Chinese classifiers, to a great extent, reflect human categorization in Chinese culture and subculture in different geographical regions. They are arbitrary only in those cases where the original salient conceptual basis has become conventionalized and the semantic motivation has fallen into oblivion.

We have observed that the classifier systems in Chinese dialects exhibit great differences. And we have shown that these differences can properly be understood in terms of different choices of certain cognitive categories underlying the different classifier systems of more than fifty languages studied by Allan (1977). To the extent we have succeeded in accounting for the differences as well as the similaries in classifiers across Chinese dialects in terms of cognitive-based categories, we have shown that the Chinese classifier systems are not merely arbitrary systems of classification but are, rather, cognition-based and semantically motivated. Within a universal set of cognitive categories, different dialects choose different salient perceptual properties for an object. Thus, for *yu*, in addition to the long shape (條) , either the tail (尾) or the head (頭) can be chosen as the salient perceptual property of a fish. By the same token, in addition to *tiao,* the other seven classifiers for trees used in Chinese dialects are based on the imputed attributes of parts of a tree.

Like linguistic signs in general, a classifier can become 'fossilized' and become arbitrary by losing its original semantic motivation. The classifier *pi* (匹) for *ma* is a case in point. A classifier can also be borrowed from other dialects and presents an appearance of arbitrariness. On the other hand, in the face of continuous fossilization and abstraction, it is also human nature to counter abstraction and arbitrariness by reinterpreting abstract and arbitrary symbols with natural associations (Haiman1977, Joseph1989). Reinterpretation and restructuring of the Chinese written symbols on the basis of 'folk

etymology′ by ordinary people are quite common occurrences (Hsueh 1987). In the case of the Chinese classifier systems, Tai and Wang (1990) observe that even though the classifier system in the Standard Mandarin Chinese has a certain degree of dialectal mixture, speakers of *guoyu* or *putonghua* tend to interpret this mixed system with some cognitive strategies.

Very recently Hsin-I Hsieh (1989a, 1989b, 1990) proposes to view language structure and language change as a result of continuous competition between natural iconic principles and abstract grammatical principles. Based on Hsieh′s theory, Claire Chang (1989a, 1989b) demonstrates that several important aspects of Chinese grammar, including serial verb constructions, can better be understood as a result of interaction between the iconic principles proposed by Tai (1985, 1989a, 1989b) and the abstract grammatical principles proposed by James Huang (1982) within the framework of GB and Chu-Ren Huang (1989) within LFG and GPSG. The interactionalism advocated by Hsieh and Chang has thus presented a plausible view of human languages as systems comprising of different degrees and forms of interaction between natural and arbitrary principles. Both Hsieh and Tai have opted for the view that Chinese is more iconic than European languages in that it contains more natural iconic principles. The present study of the classifier systems in Chinese dialects thus provides another important evidence for the view shared by Hsieh and Tai.

A fundamentally important task of Chinese dialectology has to do with the grouping and subgrouping of Chinese dialects. Traditionally, the grouping and subgrouping have been primarily based on the distribution of some distinctive phonological features. This is perhaps partly due to the focus of tradition of Chinese linguistics on historical phonology, and partly due to the misconception that ″there is practically one universal Chinese grammar ″ (Chao1968:13). The preliminary investigation of classifier systems in this paper shows the great divergencies among Chinese dialects. One important question naturally arises: to what extent do the divergencies reflect the traditional grouping and subgrouping

based on phonology? Perhaps we can answer this question by adopting the quantification method developed by Chin-chuan Cheng (1987, 1988) in his important study of Chinese dialect affinity. However, the data base is quite limited, especially for non-Mandarin Chinese dialects. More data on classifiers is needed before we can apply Cheng's method to answer the question posed above.

In concluding this paper, we wish to emphasize that the classifier systems in Chinese dialects offer a wealth of data for the study of interaction between cognition and language, between form and function, between symbolization and reality , and above all, between culture and language in the long history of China. It is important for Chinese dialectologists to methodically collect as much data as possible from as many localities as possible for answering many important questions regarding dialect affinity in China and the cognitive basis of the Chinese language in its dialectal variation. Furthermore, with enough synchronic data base on classifiers across different Chinese dialects on the one hand, and historical data such as those provided by Liu (1965) and others on the other hand, we can begin to study the correspondence relationship between historical development and dialectal variation with respect to classifiers. [8]

REFERENCES

Allan, Keith.

1977   'Classifiers'. Language53. 2:285-311.

Berlin, B. and P. Kay.

1969   *Basic Color Terms: Their Universality and Evolution*. Berkeley: University of
        California Press.

---

8   A good case in point is the set of classifiers used for *yu* (魚) across Chinese dialects. Among the five classifiers for *yu,* that is, *tiao* (條) , *tou* (頭) , *zhi* (隻) , wei (尾) , and *ge* (個) , *tiao* and *wei* were not used for *yu* in Nanbeichao according to Liu's (1965) documentation. The use of *wei* for *yu* in Southern Min indicates that the classifier system of Southern Min may not have developed directly from the classifier system in Nanbeichao. The use of *tiao* for *yu* in so many modern Chinese dialects indeed poses an enigma for the search of historical and dialectal correspondence in classifiers.

Chang, Claire.

1990a 'Complex verbs and argument structure: interaction between syntax and mor-
phology. ' Paper presented at the Second Northeast Conference on Chinese Lin-
guistics, The University of Pennsylvania, Philadelphia, May4-6, 1990.

1990b 'On serial verbs in Mandarin Chinese: V-V compounds and coverbial phrases.'
Paper persented at The Ohio State University Conference on Serial Verbs, Co-
lumbus, Ohio, May26-27, 1990.

Chao, Yuen Ren.

1968 *A Grammar of Spoken Chinese.* Berkeley: University of California Press.

Cheng, Chin-chuan.

1987 'A quantification of Chinese dialect affinity.' Wang Li Memorial Volumes: En-
glish Volume. 73-100. Hong Kong: Joint Publishing Co.

Craig, Colette, ed.

1986 *Noun Classes and Categorization.* Amsterdam: John Benjamins Publishing
Company.

Dixon, R. W.

1982 *Where Have All the Adjectives Gone and Other Essays in Syntax and Seman-
tics.* The Hague: Mouton Publishers.

Haiman, John.

1977 'Reinterpretation.' Language 53. 2:312-328.

Hopper, Paul and Sandra Thompson.

1984 'The discourse basis for lexical categories in universal grammar.' Language 60.
4:703-752.

Hsieh. Hsin-I.

1989a 'Time and imagery in Chinese.' In James Tai and Frank Hsueh, eds., pp. 45-94.

1989b 'History, structure, and competition.' Paper presented at the Eighth
International Workshop on Chinese Linguistics, Berkeley, California, March

James H-Y. Tai
_____

   20-21, 1989.

1990 'Competition and grammatical rules.' To appear in the *Proceedings of The Twelfth International Symposium on Asian Studies*.

Huang, James.

1982 *Logical Relations in Chinese and the Theory of Grammar*. Ph. D dissertation, MIT.

Huang, Chu-Ren.

1989 'Mandarin Chinese and the lexical mapping theory.' manuscript. Academia Sinica, Taipei.

Johnson, Mark.

1987 *The Body in the Mind: The Bodily Basis of Reasons and Imagination*. Chicago: University of Chicago Press.

Joseph, Brian.

1989 'On the arbitrariness of linguistic signs.' College of Humanities Inaugural Lecture, The Ohio State University.

Kay, Paul and C. K. McDaniels.

1978 'On the Linguistic Significance of the Meanings of Basic Color Terms.' *Language* 54.3:610-647. Lakoff, George.

1986 'Classifiers as a reflection of mind.' In Craig, ed. , pp13-52.

1987 *Women, Fire, and Dangerous Things: What Categories Reveal about the Mind*. Berkeley: University of California Pr.

Lee, Michael.

1987 *'The cognitive basis of classifier systems.'* Proceedings of theThirteenth Annual Meeting of Berkeley Linguistic Society. pp. 395-407.

Li, Charles and Sandra Thompson.

1981 *Mandarin Chinese: A Functional Reference Grammar*. Berkeley: University of California Press.

Rosch, Eleanor.

   1973   'Natural categories.' *Cognitive Psychology* 4:328-350.

   1975   'Cognitive reference points.' *Cognitive Psychology* 7:532-547.

   1978   'Principles of categorization.' In Eleanor Rosch and B. Lloyd, eds., *Cognition and Categorization.* pp27-48. Hillsdale, New Jersey: Lawrence Erlbaum Associates.

Ross, John.

   1972   'The category squish: endstation hauptwort.' *In Papers from the Eighth Regional Meeting of Chicago Linguistic Society.* pp. 316-28.

Tai, James.

   1985   'Temporal sequence and Chinese word order.' In John Haiman, ed. , *Iconicity in Syntax.* pp. 49-72. Amsterdam: John Benjamins Publishing Company.

   1989a   'Toward a cognition-based functional grammar of Chinese.' In James Tai and Frank Hsueh, eds. , pp. 187-226.

   1989b   'Iconicity: motivation in Chinese syntax.' Paper persented at the Second Northeast Conference on Chinese Linguistics, Columbus, Ohio. May 5-7, 1989.

Tai, James and Frank Hsueh.

   1989   *Functionalism and Chinese Grammar.* Chinese Language Teachers Association Monograph Series No. 1.

Tai, James and Lianqing Wang.

   1990   'A semantic study of the classifier *tiao.*' *Journal of the Chinese Language Teachers Association* 25. 1:35-56.

Tversky, Barbara and Kathleen Hemenway.

   1984   'Objects, parts, and categories. ' *Journal of Experimental Psychology* 113. 2:169-193.

Wang, Lianqing.

   In preparation. *A Semantic Study of the Chinese Classifier System.* Ph. D. Dissertation. Ohio State University.

References in Chinese

北京大學中文系Beijing Daxue. 漢語方言詞彙。文字改革出版社。北京1964

鄭錦全　Cheng, Chinchuan. 漢語方言親疏關係的計量研究。中國語文。1988第二期,
　　　87-102頁。

薛鳳生　Hsueh, F. S. Frank. 現代漢語中的'假借字'問題。第二屆國際漢語教學討論會論
　　　文選。北京語言學院出版社。1988, 481-490頁。

高華年　Gao, Huanian. 廣州方言研究。商務印書館。1980

梁德曼　Liang, Deman. 四川方言與普通話。四川人民出版社。1982

劉世儒　Liu, Shiru. 魏晉南北朝量詞研究。中華書局。1965

呂叔湘　Lü , Suxiang. 現代漢語八百詞。商務印書館 · 1981

羅肇錦　Lo, Chaochin. 客家語法。學生書局。1984

游順釗　Yau, Shun-chiu. 從認知角度探討上古漢語名量詞的起源。中國語文。1988第
　　　五期, 361-369頁。

葉祥苓　Ye, Xiangling. 蘇州方言記略。江蘇教育出版社。1988

袁家華　Yuan, Jiahua. 漢語方言概要。文字改革出版社。北京1983 (第二版) 。

詹伯慧、張日昇等　Zhan Bohui, Risheng Zhang. 珠江三角洲方言詞彙對照。新世紀出
　　　版社。1988

張振興　Zhang, Zhenxing. 台灣閩南方言記略。福建人民出版社。1983

Diversification and Unification of Negation in Taiwanese

Shou-hsin Teng
University of Massachusetts, Amherst

A. Introduction.

This paper presents a synchronic, lexical-semantic study of negation in modern Taiwanese.[1] As is well-known, especially in the field of Chinese comparative dialectology, Taiwanese has an unusually large stock of negative elements, as compared against the paucity of the negative system of modern Mandarin. However, this paper deals only with the negation with 唔, 勿會, and 無, while Mandarin will remain in the background for comparative purposes.

In syntactic or lexical-semantic studies, there are usually two legitimate approaches to a problem such as presented in this paper. One approach can be referred to as 'maximal differentiation', when an element occurring in various contexts is given a definition for each of the contexts. The other approach can be referred to as 'maximal generalisation', when an element is given one definition that can be applied to any context. This paper starts in the former approach and then concludes in the latter. Specifically, 唔 defines 'intention not to' with action verbs but primarily 'contrary' with state verbs; 勿會 defines 'unlikelihood' with action verbs but primarily 'contradictory' and secondarily 'contrary' with state verbs; and finally 無 defines 'non-existence' with both action and state verbs.

B. Diversity of Negation in Taiwanese.

Taiwanese has a fairly large stock of negative elements, especially when compared with Mandarin which has only 不 'bu' and 沒 'mei', as listed and illustrated in (1).

---

1 The data used in this paper are from the near-native speech of the author, who grew up mainly in Taipei and Keelung among heavily Mandarin-speaking communities. The speech can be acceptable as 'general northern Taiwanese'.

(1) a. 唔 'm' [2]

      昨方你若的唔去？[3]

      cha-hng li na-e m khi?

      (Why didn't you go yesterday?)

   b. 無 'bo'

      魚三工無吃啊。

      hi saN-kang bo chia a.

      (The fish have not been fed for 3 days.)

   c. 勿會 'be'

      明仔早應該勿會落雨。

      min-a-chai ing-kai be lo-ho.

      (It shouldn't rain tomorrow.)

   d. 未 'boe'

      便當猶未準備好。

      pian-tong ia-boe chun-pi ho.

      (The lunch box is not ready yet.)

   e. 免 'bian'

      無頭路的人免納稅。

      bo thau-lo e lang bian lap-soe.

      (Jobless people need not pay taxes.)

   f. 勿愛 'mai'

      你勿愛講甲彼壞聽！

---

2 The romanisation of Taiwanese in this paper follows that of the 'Church' system as revised in Cheng et al (1990) with the following exceptions for ease of typing. Nasalisation of finals is indicated by a final -N; 'O' and 'O"' are not differentiated except in cases where ambiguity may result in this paper, when 'O"' is represented as 'ou'. No tone marks are included. The romanisation of Mandarin is that of the PinYin system.

3 Logographs provided for Taiwanese sentences are for ease of reference only and will not be defended by the author.

li mai kong-ka hiap-phai thiaN!

(Don't talk so nastily!)

g. 莫 'mmo'

莫住病院喇！

mmo toa peN–iN la!

(Don't stay in the hospital!)

Some of these are mono-morphemic, e.g. 唔, 未, and 免, while others are bi-morphemic, e.g. 無, 勿會, 勿愛, and 莫. Furthermore, we can postulate that 唔 is the primitive negative morpheme in modern Taiwanese, and the bi-morphemic negatives can be analysed as given in (2).

(2) a. 唔 m + 有 u ==> 無 bo
    b. 唔 m + 會 e ==> 勿會 be
    c. 唔 m + 愛 ai ==> 勿愛 mai
    d. 唔 m + 好 ho ==> 莫 mmo

The negative marker /m/ is denasalised into /b/ when preceding vowels, with the exception of 勿愛, which may relate to a different kind of juncture. The synchronic account also correctly reflects the fact that nasality has historically been a rather unstable feature in colloquial Taiwanese. Some examples in this regard are given in (3).

(3) a. m ==> b
    馬，慢，蠻，面
    b. n ==> l
    奶，努，納，農
    c. ng ==> g
    牛，我，銀，五

The derivations given in (2) are also semantically plausible, as the meanings of the negative elements are entirely predictable from their positive counterparts. For example, in (2b) 會 refers to 'likelihood' and its negative counterpart 勿會 refers to 'unlikelihood'.

C. The Primitive Negative 唔.

On the basis of the derivations given in the last section, 唔 is the true and only nega-

tive element in modern Taiwanese, unlike in Mandarin, where there are two negative elements, i.e. 不 and 没, neither of which can be derived from the other. Furthermore, 唔 is the equivalent of neither 不 nor 没, either in terms of phonology or of semantics.

The syntactic properties of 唔 will be specified first. Following the three-way verb classification of Teng (1975), 唔 can occur with action verbs, state verbs, but not with process verbs, as illustrated in (4).

(4) a.　壞行的路，伊唔駛。(Action)

　　　phai kiaN e lo, i m sai.

　　　(He doesn't want to drive on poor roads.)

　　b.　小台車唔好喇！(State)

　　　se tai chhia m ho la!

　　　(Small cars are no good!)

　　c.　*日本車較唔壞。(Process)

　　　jit-pun chhia khah m-phai.

　　　(Japanese cars don't break down easily.)

In this regard, 唔 behaves like Mandarin 不, e.g. 不開, 不好, *不破.

In the function above, 唔 can be defined as an adverb, following the traditional framework of definition, but it is not always 'bound' to verbs. It is 'free' in the following sentences.

(5) a.　我叫伊睏，唔過伊唔。

　　　goa kio i khun, m-ko i m.

　　　(I told him to go to bed, but he wouldn't.)

　　b.　復飲一些酒！...唔囉！

　　　koh lim chit-koa chiu! ... M lo!

　　　(Have more wine! ... No, thanks.)

However, it cannot occur as a complement, as some other negatives can, e.g.

(6) a.　老師寫的字，我攏看無。(*唔)

lau-su sia e ji, goa long khoaN-bo.

(I can't read what the teacher wrote.)

b. 彼個囝仔，攏叫勿會震動。(＊唔)

hi-le gin-a, long kio be tin-tang.

(I can never make that child do anything.)

With action verbs, 唔 always carries an element of volition on the part of the agent, e.g. in

(7) a. 唔讀冊的囝仔，欲按怎？

m thak-chheh e gin-a, be an-chuaN?

(What can be done about a child who doesn't like school?)

b. 你昨方若的唔來付我請？

li cha-hng na-e m lai ho goa chhiaN?

(Why didn't you come as my guest yesterday?)

c. 伊唔給我講伊的名。

i m ka goa kong i-e miaN.

(He wouldn't tell me his name.)

the verbs negated by 唔 are to be interpreted in terms of 'refusal to, intention of not to'. 唔 negation in Taiwanese does not involve the generic interpretation, as Mandarin 不 does. Compare the following sentences.

(8) a. 謝謝，我不抽煙。(Mandarin)

Xiexie, wo bu chouyan.

(Thanks, I don't smoke.)

b. ＊多謝，我唔吃薰。(Taiwanese)

to-sia, goa m chia-hun.

(Thanks, I don't smoke.)

Genericness in Taiwanese is a property of 無 negation, as will be discussed below.

唔 can only occur with a few state verbs, e.g.

(9) a.   此款鞋唔好。

chit-khoan e m ho.

(Shoes of this kind are no good.)

b.   囝仔攏唔驚寒。

gin-a long m kiaN koaN.

(Children don't mind cold weather.)

c.   眞多人唔敢吃辛。

chin choe lang m kaN chia hiam.

(Many people don't like chilly things.)

d.   彼齣電影唔是外國片。

hit-chhut hi m si goa-kok phiN.

(That is not a foreign movie.)

(9a) and (b) are examples of adjectives, (c) auxiliary/modal verbs, and (d) the copula verb. Moreover, (a) illustrates an instance of contrary negation and the others of contradictory negation. Mandarin 不, when negating state verbs, can also be either contrary, e.g. 不好 and 不喜歡, or contradictory, e.g. 不高 and 不紅. These properties will be examined in greater datails below.

唔, just like Mandarin 不, cannot occur with process verbs, as mentioned above, e.g. *唔沉 (m tim, not sink), *唔破 (m phoah, not break), and *唔醒 (m cheN, not wake up).

In this section, we have detailed the syntactic as well as semantic properties of the basic negative 唔 in Taiwanese. In the sections to follow, we shall investigate the complex network of interactions among the various bi-morphemic negatives as well as between them and the basic 唔. However, we shall concentrate on 唔, 無, and 勿會 only.

D. Generic and Non-generic Negation in Taiwanese.

As a general rule, generic sentences in Taiwanese, and probably in all Chinese dialects, have a zero marking on the main verb. We shall in this section concentrate on sentences

with action verbs. Some examples are given below.

(10) a.　你駛什麼車？

　　　li sai sia-me chhia?

　　　(What kind of car do you drive?)

　　b.　伊一個月上班二十工。

　　　i chit-ko goe siong-pan ji-chap kang.

　　　(He works 20 days out of a month.)

　　c.　怹較早攏是賣米的。

　　　in khah cha long si boe bi e.

　　　(They were selling rice before= in the rice-selling business.)

(10a) refers to a present, current situation, while (c) refers to a past, no-longer relevant situation, but both situations are zero-marked in Taiwanese.

In addition to zero-marking, generic sentences can also take 有 preceding the main verb, as shown in (11).

(11) a.　伊達日攏有去市場。

　　　i tat-jit long u khi chhi-tiuN.

　　　(He goes to the market everyday.)

　　b.　伊達頓攏有煮湯。

　　　i tat-tng long u chu thng.

　　　(He makes some soup for every meal.)

　　c.　我攏有睏畫。

　　　goa long u khun-tau.

　　　(I always take a nap.)

This is especially true in interrogative sentences. e.g.

(12) a.　伊有上班無？

　　　i u siong-pan bo?

　　　(Does he have a job?)

b. 你有做生理無？

li u cho seng-li bo?

(Do you run a business?)

c. 您有送便當無？

lin u sang pian-tong bo?

(Do you deliver boxed lunch?)

In negative sentences, 無 is used for both the present and the past generic situations, whether or not their positive counterparts contain 有, e.g.

(13) a. 伊無吃薰。

i bo chia hun.

(He doesn't smoke.)

b. 伊一個月有十工無上班。

i chit-ko goe u chap-kang bo siong-pan.

(He has 10 days off every month.)

c. 思小漢的時攏無讀冊。

in se-han e si long bo thak-chheh.

(None of them went to school when young.)

In fact, such 無 sentences can also be interpreted in the perfective aspect, if the temporal frames are appropriate. Compare the English translation in (13) with that in (14).

(14) a. He didn't smoke any cigarettes (at the party last night).

b. He didn't work for ten days out of one month (last June).

c. They didn't go to school (last week).

Taiwanese 無 in (13) corresponds to Mandarin 不 and that in (14) to Mandarin 没. Even though Mandarin 不 and 没 are not relatable in any meaningful way, there are reasons to relate the generic 無 and perfective 無 in Taiwanese, as will be discussed below.

How are genericness and perfectivity to be reconciled? Or perhaps the question should be revised as "How can 無 in Taiwanese define genericness and perfectivity at the same

time?" However, there is evidence that 無 is not related to the perfective aspect. It has to do with the fact that its positive counterpart 有 does not define the perfective aspect (cf. Teng 1973), which is also zero in Taiwanese. Compare the following sentences, whose Mandarin counterparts require the perfective 了.

(15) a.　我昨方看三場電影。

　　　goa cha-hng khoaN saN-tiuN tian-iaN.

　　　(I went to 3 movies yesterday.)

　　b.　伊頂禮拜賣三百本冊。

　　　i teng le-pai boe saN-pah-pun chheh.

　　　(He sold 300 books last week.)

　　c.　我今仔日早起吃兩粒卵。

　　　goa kin-a-jit chai-khi chia nng-liap nng.

　　　(I had 2 eggs this morning.)

When these sentences are further modified by 有, there is an added element of 'assertion', of the existence of an event. Typically, this element of assertion is in response to or dispute with a previous, counter situation or statement, so that, for example, the sentence,

(16)　我有買報紙。你若的欲復買？

　　　goa u boe po-chua. li na-e beh ko boe?

　　　(I GOT some newspaper. Why do you want to buy more?)

is uttered only when one's situation is challenged. The sentence without 有 would have been inappropriate. Thus, 有 is not related to simple perfectivity, nor is its negative counterpart 無. Rather, we shall refer to the 無 interpretation in (14) as 'past'.

This property of stating the absence of something is also applicable to the generic interpretation of 無. When one doesn't smoke (cf. 13a), (the fact that someone smokes does not exist), i.e. it is absent.

If the postulation above is plausible, the fact that 無 sentences can be interpreted as either generic or past (cf. 13 and 14), is also easily explained. The only difference is in the

temporal frames, either non-specific (for generic) or specific past (for past). The difference has nothing to do with the property of 無.

This approach also explains, in a natural fashion, some syntactic characteristics of 無 sentences. Quantified objects, whether indefinite or definite, can not occur in the so-called generic sentences, e.g. the sentences,

(17) a.　伊無吃三枝薰。

　　　　i bo chia saN-ki hun.

　　　　(He didn't smoke 3 cigarettes.)

　　b.　伊無吃彼枝薰。

　　　　i bo chia hit-ki hun.

　　　　(He didn't smoke that cigarettes.)

can only be interpreted as past, as quantification is incompatible with genericness in Chinese (cf. Mandarin *鯨魚是一隻哺乳動物 vs. English 'The whale is a mammal.')

In this section, we have given a unified analysis of 無 sentences, which could be interpreted as generic or perfective if we simply follow the usual approach as in Mandarin. Even though this unified property of 'absence of existence' has been applied to action verbs in this section, it will be shown that the same property can also be applied to state verbs in the next section.

E. Contrary and Contradictory Negation.

It has been the tradition to characterise negation of state verbs in terms of contrary and contradiction (cf. Jespersen 1924 and Teng 1975). Examples in (18) and in (19) illustrate the respective characteristics.

(18) Contrary.

　　a.　你講的話唔對。

　　　　li kong e oe m tio.

　　　　(What you said is incorrect.)

　　b.　莊腳的學校唔好。

chng-kha e hak-hau m ho.

(Schools in the village are no good.)

    c.   彼攤的肉粽勿會壞！

hit taN a bah-chang be bai!

(They sell good tamales at that stand!)

    d.   你一個月賺的錢勿會少嘛！

li chit-ko goe than e chiN be chio ma!

(You earn quite a bit of money every month!)

(19) Contradictory.

    a.   即嗎勿會熱，若得開冷氣？

chi-ma be joa, na tio khui leng-khi?

(It's not too hot. Why do you want the air-conditioning on?)

    b.   此枝刀仔無利，用彼枝！

chit-ki to-a bo lai, iong hit-ki!

(This knife is blunt. Use that one!)

    c.   此個問題無簡單，去問伊！

chit-e bun-te bo kan-tan, khi mng i!

(This is a tough question. Go ask him!)

Note in (18) above that both 唔 and 勿會 can define contrary and in (19) that 勿會 and 無 can define contradictory.

As a rule, 'contrary' entails opposite states, states that are in a sense absolute, i.e. non-scalar, e.g. in English 'correct vs. incorrect', 'like vs. dislike', and 'accurate vs. inaccurate'. There are not many such non-scalar states in any language, and this is very true of 唔 and 勿會 in Taiwanese, which can occur with very few state verbs, particularly adjectives. This is a lexical, unpredictable fact. Consult the list given below.

It has often been noted that adjectives are lexically comparative. What it means is that most adjectives are scalar. To specify contradiction, 勿會 does not combine with as many state verbs as 無, and 唔 does not figure in this instance. Consult the list below.

(20) Negation of State Verbs

			唔	勿會	無
Copula	是	si; be	V	X	X
Optatives	肯	kheng; willing	V	V	X
	敢	kaN; dare	V	X	X
	想（欲）	siuN-beh; like to	X	V	V
Psychologicals	愛	ai; love	X	X	V
	驚	kiaN; afraid	V	V	X
	惜	sioh; care for	X	V	V
Adjectives	好	ho; good	V	X	V
	對	tio; correct	V	X	X
	滿	boan; content	V	X	X
	痛	thiaN; painful	X	V	X
	熱	joa; hot	X	V	X
	寒	koaN; cold	X	V	X
	重	tang; heavy	X	V	X
	壞	phai; bad	X	V	X
	少	chio; few	X	V	X
	疼	thiaN; love	X	X	V
	高	koan; tall	X	X	V
	帥	sui; pretty	X	X	V
	光	kng; bright	X	X	V
	多	che; many	X	X	V
	長	tng; long	X	X	V
	夠	kau; enough	X	X	V
	紅	ang; red	X	X	V
	閑	eng; non-busy	X	X	V
	值	tat; worthy	X	X	V
	肥	pui; fat	X	V	V
	燒	sio; hot	X	V	V
	臭	chhau; stinking	X	V	V
	餓	iau; hungry	X	V	V
	準	chun; accurate	X	V	V
	甜	tiN; sweet	X	V	V
	貴	kui; expensive	X	V	V
	遠	hng; far	X	V	V
	涼	liang; cool	X	V	V
	明	beng; clear	X	V	V
Di-syllabic Adjectives	歡喜	huaN-hi; happy	X	X	V
	簡單	kan-tan; simple	X	X	V
	緣投	en-tau; handsome	X	X	V
	清氣	chheng-khi; clean	X	V	V
	清楚	chheng-chho; clear	X	V	V
	生氣	siuN-khi; angry	X	V	V

There are several points worthy of mention concerning the chart given in (20). First, when an adjective is to be negated solely by 唔, 勿會, or 無, both the syntactic co-occurrence and the semantic interpretation are unpredictable. Second, when an adjective can be negated by either 唔, or 勿會, the meaning of the latter combination is predictably that of 'unlikelihood'. For instance, 唔驚 'm kiaN' means 'unafraid' (contrary) but 勿會驚 'be kiaN' means 'not likely to be afraid' (contradictory). Third, when an adjective can be negated by either 勿會 or 無, the meaning of the former combination is predictably that of 'unlikelihood', so that 勿會餓 'be iao' means 'not likely to be hungry' but 無餓 'bo iao' means 'not hungry'. Lastly, when an adjective can be negated by either 唔 or 無, the former combination is to be interpreted as 'contrary' and the latter 'contradictory', so that 唔好 'm ho' means 'no good=bad' but 無好 'bo ho' means 'not (very) good'.

There is no direct connection between the occurrence of negative elements and the so-called A-not-A questions. The closed A-not-A (cf. Chao 1968) will be referred to here as the sentence-initial A-not-A and the open A-not-A as the sentence-final A-not-A. The first thing to note here is that only a state verb that can be negated by 唔 can occur in the sentence-initial A-not-A form, e.g.

(21) a. 伊是唔是此的學生？

　　　 i si-m-si chia e hak-seng?

　　　 (Is he one of our students?)

　 b. 你敢唔敢吃牛肉？

　　　 li kaN-m-kaN chia gu-bah?

　　　 (Do you eat beef?)

　 c. *你想唔想欲去泗水？

　　　 li siuN-m-siuN beh khi siu-chui?

　　　 (Would you like to go swimming?)

In a sense, this 唔 is predictable.

Second, in the sentence-final A-not-A form, the negative element may occur alone in

the sentence-final position and this negative is predictable from the positive form of the verb, e.g.

(22) a. 伊有生氣無？

       i u siuN-khi bo?

       (Is he angry?)

   b. 伊有疼囝仔無？

       i u thiaN gin-a bo?

       (Is he fond of children?)

   c. 你有想欲跟我去無？

       li u siuN-be ka goa khi bo?

       (Would you like to go with me?)

   d. 明仔早會寒勿會？

       min-a-chai e koaN be?

       (Is it going to be cold tomorrow?)

   e. 你的錶仔會準勿會？

       li e pio-a e chun be?

       (Does your watch keep good time?)

   f. *你驚熱唔？

       li kiaN joa m?

       (Do you mind hot weather?)

   g. *大陸的飛機會壞勿會？

       tai-liok e hui-ki e bai be?

       (Are planes from the mainland any good?)

The occurrence of 無 in (a-c) is predictable on the basis of the occurrence of 有 in the sentences and that of 勿會 in (d-e) on the basis of the occurrence of 會 in front of the state verbs. This is entirely regular in the A-not-A structure. The ungrammatical (f-g) indicate that the sentence-final A-not-A can be used only for contradictory negation.

Third, there are cases of sentence-final A-not-A in Taiwanese where the negative element is always 無 which cannot be predicted in the same manner as detailed in (21) and (22). For instance, in

(23) a.　伊是大學生無？

　　　　i si tai-hak seng bo?

　　　　(Is he a university student?)

　　b.　伊肯跟你住無？

　　　　i kheng ka li toa bo?

　　　　(Is he willing to stay with you?)

　　c.　你得傷的腳會痛無？

　　　　li tio-siong e kha e thiaN bo?

　　　　(Does your injured foot hurt?)

　　d.　你的行李會重無？

　　　　li e heng-li e tang bo?

　　　　(Is your luggage heavy?)

　　e.　台北的厝會貴無？

　　　　Tai-pak e chhu e kui bo?

　　　　(Are houses in Taipei expensive?)

Following the co-occurrence chart (20), we would predict 唔 in (a-b) and 勿會 in (c-e) as the final negative element, but instead we find 無 in all cases. It will not be necessary to postulate that this 無 is different from the 無 in (22) and rewrite it as 否 or something like it, if we define the property of 無 as below.

無 characterises contradictory negation in all cases, and contradiction defines absence, i.e. non-existence, of states. It follows from this that the only difference between 無 in (22) and that in (23) is in the different derivations of the negative element; 無 in the former is the negative form of 有 and that in the latter is the negation of an entire sentence. Compare the structures given in (24).

(24) a.（=22a）


```
              S
            ╱   ╲
          S       S
        ╱─╲      ╱─╲
       伊有生氣   伊無生氣
     i u siuN-khi   i bo siuN-khi
     (He is angry)  (He is not angry)
```

b.（=23a）


```
                S
              ╱   ╲
            S       S
          ╱─╲      ╱  ╲
         伊是大學生  無    S
        i si tai-hak seng   ╱─╲
        (He is a university  伊是大學生
          student)        i si tai-hak seng
```
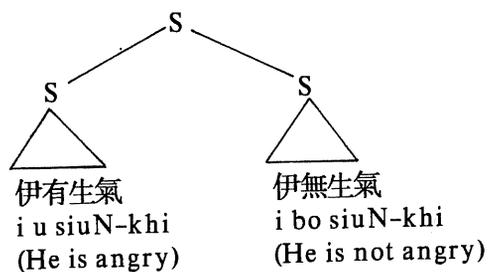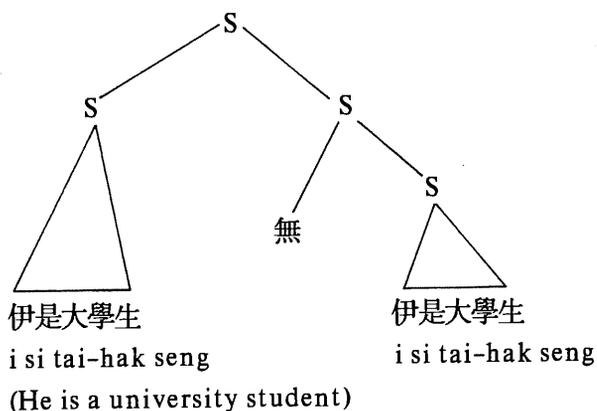
無 as a sentential negation is also seen in the following sentences.

(25) a.　你比老師較優哦！

　　　　li pi lau-su kah gau o?

　　　　(So you think you are better than your teacher?)

　　　　.....無喇！

　　　　　bo la!

　　　　　(No....)

　　b.　我的車壞去啊！

　　　　goa a chhia phai-khi a!

　　　　(My car has broken down!)

.....無，你勿愛去哦！

bo, il mai khi o!

(Well, don't go then!)

c. 你得較早起來；無你會勿會赴。

li tio kah cha khi-lai; bo li e be hu.

(You'd better get up early; otherwise you would be late.)

F. States and Events: A Unified Approach to 無 Negation.

In the last two sections, we have presented one systematic analysis of 無 in the context of action verbs, that 無 defines absence of events, as well as one systematic analysis of 無 in the context of state verbs, that 無 defines absence of states. In this section, we shall reconcile the two and attempt one unified analysis of events and states when negated by 無.

In English, as is well-known, gerunds are means of converting events into states, and past participles are used both as adjectives and as past perfects of verbs. In the latter case at least, the line between events and states is indeed very thin. Even in Mandarin, events and states are in some cases negated by the same elements, i.e. 沒. Sentences in (26) illustrate 沒 negation of states.

(26) a. 我昨晚去找他，他沒在。

wo zuo-wan qu zhao ta, ta mei zai.

(I went to see him, but he wasn't at home.)

b. 他昨晚有事沒能來。

ta zuo-wan you shi mei neng lai.

(He was busy last night and couldn't come.)

and the verbs in (27) are first 'stativised' or 'deactivated' by 著 and then the derived states are negated by 沒 in Mandarin.

(27) a. 我進來的時候，門並没鎖著。

      wo jin-lai de shihou, men bing mei suo-zhe.

      (When I came, the door wasn't locked.)

   b. 他嘴裡並没含著什麼東西啊！

      ta zui-li bing mei han-zhe shenme dongxi a!

      (He didn't have anything in his mouth!)

In Taiwanese, there are cases of action verbs which, when negated by 勿會, border on states rather than events, e.g.

(28) a. 水道水勿會飲的。

      chui-to chui be lim e.

      (The tap water is unpotable.)

   b. 過頓的菜勿會吃的啊。

      koe-tng e chhai be chia e a.

      (Left-over food is inedible.)

   c. 此款生理勿會做的。

      chit -khoan seng-li be cho e.

      (This kind of business is not worth doing.)

In addition to the occurrence of 勿會, the final 的 is obligatory for this type of interpretation. These cases rather resemble the adjectival derivation of verbs in English, e.g. 'inedible' and 'unwashable'. 勿會in these sentences does not carry the meaning of unlikelihood at all.

When both events and states are negated by 無 in Taiwanese, it is events that are 'deactivated' and presented as states, thus retaining the basic lexical property of 無, which is defined as the negation of 'to have, to exist'. In terms of structures, this property can be defined as the negation of the entire sentence, as shown below.

(29) a.

```
            S
          /   \
        Neg    S'
       無 'bo'   △
```
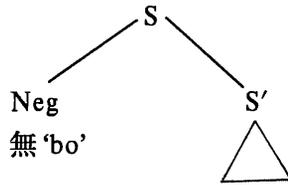
S' can be an event sentence or a state sentence.

唔 and 勿會, on the other hand, are not sentential negatives. They are associated with VP-negation, as shown below.

b.

```
            S
          /   \
        NP     VP
              /   \
            Neg    VP
           唔 'm'    △
```

c.

```
            S
          /   \
        NP     VP
              /   \
            Neg    VP
          勿會 'be'   △
```
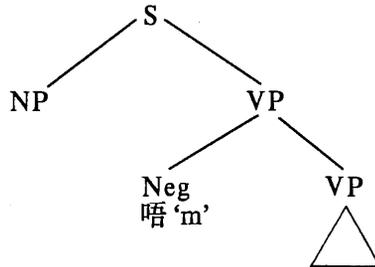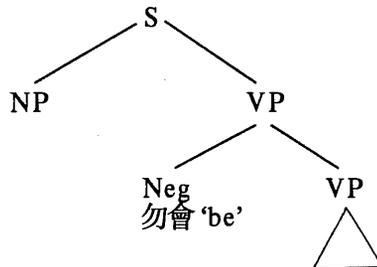
G. Conclusion.

This paper has presented a systematic analysis of negation with 唔, 勿會, and 無 in relation to various classes of verbs. In particular, we have attempted a unified analysis of 無 negation in all syntactic environments. 無 in all cases defines absence, non-existence of an entity.

This analysis is not only language-particular but dialect-particular as well. For instance, there can be no unified analysis of negation in Mandarin in a similar framework. Therefore, this paper can serve as the starting point for cross-dialectal studies in this and other areas of syntactic structures. It has not been the intention of this paper to present all relevant issues of negation in modern Taiwanese. There are a number of important syntactic characteristics in relation to 唔, 勿會, and 無 in Taiwanese that have not been included. For instance, 無 serves as resultative complements in the following sentences.

(30) a. 此本冊彼呢淺，你若的看無？

chit-pun chhen hia-ni chhen, li na-e khoaN-bo?

(This is an easy book; how come you don't understand it?)

b. 伊彼款人絕對娶無新婦。

i hit-khoan lang chuat-tui chhoa-bo sim-pu.

(Nobody can stand being a daughter-in-law to a man like that.)

c. 伊的電話，我攏問無。

i e tian-oe, goa long mng-bo.

(Nobody could tell me what his telephone number is.)

無 is also one of the most pervasive elements in the making of the so-called 'Taiwanese Mandarin'. It is involved, for example, in the A-not-A questions (e.g. 有没有來？'you mei you lai; did you come?'), in the resultative complement (e.g. the joke 有看没有到 'you kan mei you dao; looked but didn't see'), and in the extent complement (e.g. 死没有很久 'si mei you hen jiu; not long after one died'). There is extensive literature in this regard (cf. Kubler 1975), which will not be repeated here.

REFERENCES

Chao, Yuen Ren.

1968　A Grammar of Spoken Chinese. Berkeley: Univ. of California Press.

Cheng, Liang-wei et al. 鄭良偉等

    1990   生活台語，台北：自立報社。

Jespersen, Otto.

    1924   Philosophy of Grammar. Norton.

Teng, Shou-hsin.

    1973   Aspects and Negation in Chinese. Journal of Chinese Linguistices 1.

    1975   A Semantic Study of Transitivity Relations in Chinese. Berkeley: Univ. of California Press.

    1976   Negation in Mandarin and Amoy. Journal of the American Oriental Society.

Kubler, Cornelius. 顧百里

    1975   國語在台之演變，台北：學生書局。

Three Ways of Treating Nasality in South Min

Jeffrey C. Tung

Keio University, Tokyo, and Taiwan Normal University, Taipei

It is a fact few people would dispute that the learning of the first phonological contrast in language acquisition by the child typically occurs when it begins to distinguish between *Ma Ma* and *Pa Pa* , which to the child at this stage undoubtedly differ in just the presence and absence of NASALITY, that is, in the lowering of the velum to permit air passage through the nose in one form as opposed to raising the velum to block air passage through the nose in the other. NASALITY, therefore, is understandably a major phonological feature for all known languages. [1] The concern of this paper is the behavior of that phonetic feature in South Min, or Taiwanese (following the widespread current practice based on geographic concentration of speakers), in which it seems to be more dominant than in many well-known languages, with the result of posing more intriguing problems for scholars concerned with descriptive studies of languages.

At the phonetically apparent level of vowels and consonants, we hear in Taiwanese both NASAL consonants and NASAL vowels, as is usual in many languages. Besides, NASAL consonants occur syllable-initially as well as syllable-finally, as in English or Mandarin. But, while the contrast between NASAL and ORAL vowels is indisputable, the contrast between NASAL consonants and corresponding ORAL consonants is always predictable, suggesting that the contrast is nonexistent at a level phonetically less apparent but psychologically real to the native speaker.

Phonetically, it is possible in Taiwanese to identify a total of 18 *initials*. They consist of 12 stops, 2 affricates, 2 spirants, and 2 glottals.

---

1 But Paul Jen-kuei Li has brought to my attention the remarks by Hockett (1955, p.119), also cited by Ferguson (1966, p. 56), that some dialects of Salishan, an American Indian language of North America, are reliably reported to have no nasals.

The 2 glottals are the *zero initial*, which is the traditional name for the glottal stop when it serves as an *initial*, and the *h*, which some people misleadingly refer to as the *glottal fricative*. Incidentally, *The Sound Pattern of English* (Chomsky & Halle 1968) considered both [–consonantal].

Our primary concern, however, are the stops, for which the point of articulation is LABIAL, DENTAL, or VELAR, and the manner of articulation is ASPIRATED VOICELESS that, UNASPIRATED VOICELESS, VOICED ORAL, or VOICED NASAL. It must be emphasized that, as noted by Tung (1957), the VOICED ORAL series are quite lenis, so that the VOICED DENTAL ORAL stop is always something intermediate between the English *l* and *d*.[2]

Then, for syllables that are not OPEN but CLOSED, it is also phonetically possible to identify a total of 6 stops serving as *endings* and forming 3 NASAL/ORAL pairs, each pair corresponding to one of the three points of articulation for the syllable–initial stops. In addition, a syllable may also end in the glottal stop, which can be treated as a tonal feature (as Li 1989 did), with the syllable considered OPEN rather than CLOSED.

As for the vowels, there are a total of 6 (or more) ORAL vowels in OPEN syllables, with the vowel space divided into something like Chart 1, where OV 2 and OV 5 are rounded though, in some variety of the language, there is an additional unrounded variant for OV 2, bringing the total inventory to more than 6.

This maximal vowel opposition is reduced to something like Chart 2 in CLOSED syllables, where the syllable ends in one of the 6 stops.[3] Similarly, the NASAL vowels show fewer oppositions in general than the ORAL vowels, some of which lack true NASAL counterparts, as may be clear from a cursory examination of all the charts.

---

2   In the Church Romanization (see Cheng & Cheng 1977), the nine stop *initials* are /ph-, th-, kh-, p-, t-, k-, b-, l-, g-, m-, n-, ng-/.

3   Thus, of the 36 (6 ×6 = 36) combinations that are mathematically possible if the six–way vowel opposition is maintained, only 18 are actually possible in this environment, namely (in the Church Romanization): *ip, im, op, om, ap, am, it, in, ut, un, at, an, ek, eng, ok, ong, ak, ang.* That is, there are 18 combinations missing, such as *ik or *em, even though they are possible combinations in a six–way vowel opposition.

OV 1	OV 2	
OV 3	OV 4	OV 5
OV 6		
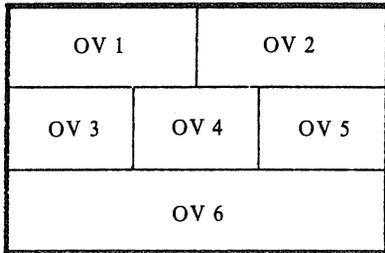
Chart 1

. oral monophthongs
(open syllable)

OV C1	OV C2
OV C3 (= OV 6)	
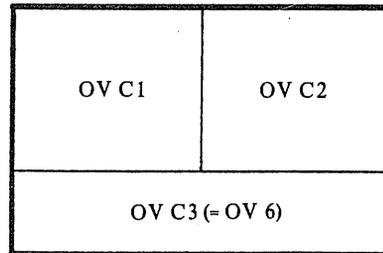
Chart 2

oral monophthongs
(closed syllable)
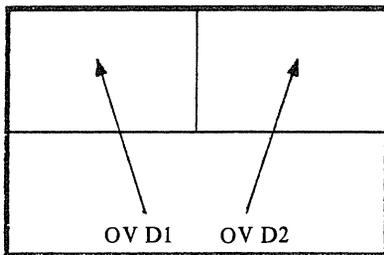
Chart 3

oral diphthongs
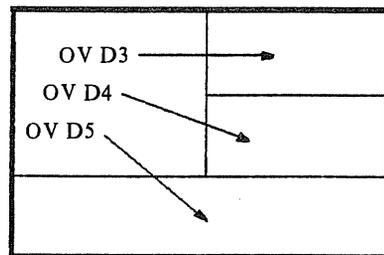
Chart 4

oral triphthongs
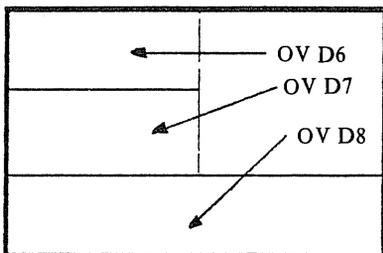
Chart 5

oral diphthongs
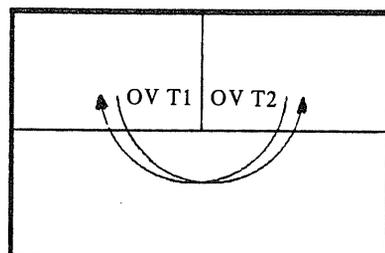
Chart 6

oral triphthongs
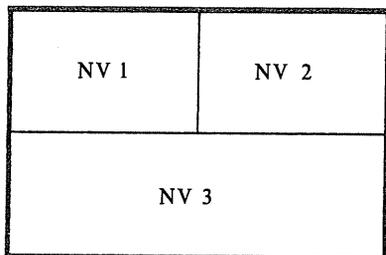
Chart 7

nasal monophthongs
(open syllable)
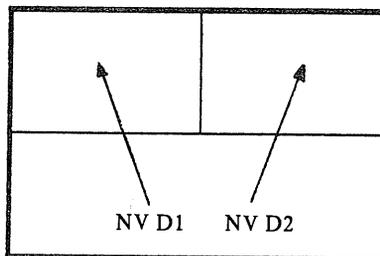
Chart 8

nasal diphthongs
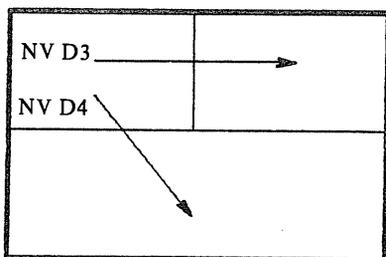
Chart 9

nasal diphthongs
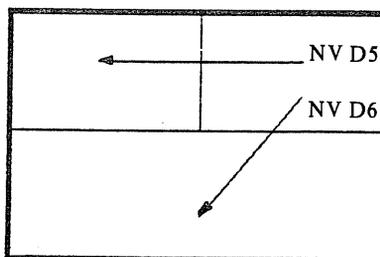
Chart 10

nasal diphthongs
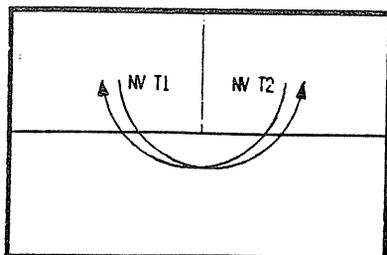
Chart 11

nasal triphthongs

LABIAL	PALATAL	VELAR

Chart 12

consonantal nasal syllabics

Now, though not observable from these charts, a well-known case of complementary distribution in Taiwanese is the distribution of VOICED stop *initials* with respect to ORAL and NASAL syllabics. That is, while other *initials* freely occur with both ORAL and NASAL syllabics, a VOICED stop *initial* is ORAL only where the syllabic is ORAL, and NASAL only where the syllabic is NASAL (Cheng & Cheng 1977, Li 1985, T. Tung 1957, etc.). [4] Another major distributional hole, as may be seen from the charts, is the total lack of phonetic NASAL counterparts in the environment of Chart 2, namely in, CLOSED syllables, or syllables ending in one of the 6 stops. [5]

Given these phonetic facts, one of the possible descriptive treatments (treatment A) is to take the NASAL and ORAL consonants and vowels at their face values, using /b, l, g, m, n, ng/ (or /p, t, k, m, n, ng/), for example, to represent the 6 syllable-final stops and 6 of the 12 syllable-initial stops (T. Tung 1957, Luo 1931, Cheng & Cheng 1977, etc.). [6] That is admittedly straightforward but obviously wasteful, not to mention whether it is faithful to native speaker intuition.

An alternative treatment (treatment B) is to take the systematic holes more seriously, unifying the 6 syllable-final stops and corresponding *initials* as something represented by /B, L, G/ (or simply /b, l, g/), for example, and deriving NASAL stops by assimilation

---

4   In the Church Romanization, while syllables like *pe* and *pe*ⁿ are both allowed, syllables like *be* are not matched by syllables spelled **be*ⁿ, nor are syllables like *me* by syllables spelled **me*ⁿ, as the vowel after *b-* is always ORAL and that after *m-* is always NASAL.

5   This of course cannot mean complete absence of NASALITY from the vowel for its duration in any CLOSED syllable. In particular, when the vowel is followed by a NASAL consonant, this can only mean insufficient NASALITY for the vowel to be classified as a NASAL vowel distinct from an ORAL vowel, as it is then physically inevitable, due to anticipatory lowering of the velum, for any vowel to carry some NASALITY, at least in the later part of its duration. At all events, the following statement in the pronunciation drills by Taipei Language Institute (1965a: 14) is worthy of note: ' In English a vowel before "m", "n", "ng" will be nasalized. This must be avoided in Taiwanese. To get this try saying the *a* as if there were no final consonant and then add the *m, n,* or *ng* as a sort of afterthought. '

6   Although the 6 syllable-final stops are represented by /-p, -t, -k, -m, -n, -ng/ in the Church Romanization (and essentially the same set of symbols in most known phonological descriptions of the language), they could just as well be /-b, -l, -g, -m, -n, -ng/ because, as pointed out in C. Tung (1968, 1988), the syllable-final oral stops are not released as a rule but, when released (as when followed by the diminutive particle *-a*), they are unquestionably voiced, not voiceless. For example, the Church Romanization spelling *kut-a* 'small bone' is pronounced [kula], not [kuta].

from the neighboring NASAL syllabic (C. Tung 1968, 1988).[7]

That sounds fine, but the problem lies with CVC sequences, which involve the above-mentioned distributional hole related to Chart 2 as well as the complementary distribution of syllable-initial VOICED stops. Specifically, in a CVC sequence, the initial C is never NASAL, with the result that syllables like *mat* or *man* in English is impossible in Taiwanese. Thus it is necessary for treatment B to say, without indepentent justification, that progressive nasalization has priority over regressive nasalization in so-called "consonant nasalization", the latter applying only if the former has not applied. In other words, it is assumed that vowels are inherently either ORAL or NASAL even in the environment of Chart 2, and that a NASAL vowel becomes inactive after progressive nasalization and, for that reason, it is then phonetically perceived as more like an ORAL than a NASAL despite its inherent NASALITY.

Still another treatment (treatment C) is like treatment B but tries to overcome its problem by viewing the matter in a slightly different fashion (Laurent Sagart--personal communication). It says there is no such thing as progressive consonant nasalization in Taiwanese, and that the only consonant nasalization in Taiwanese is regressive. More specifically, the phonetic NASAL/ORAL stop contrast at the end of a syllable is only the phonetic manifestation at the segmental level of an independent contrast at another level, or "tier" (Goldsmith 1979), between CHECKED and UNCHECKED tones, just as the presence or absence of the glottal stop is a phonetic manifestation of that same phonological contrast for OPEN syllables.

So treatments C and B both deny the phonological significance of the NASAL/ORAL contrast for consonants, and recognize a phonological NASAL/ORAL contrast only for

---

7   Actually the mechanism posited, in C. Tung (1968) in particular, is not assimilation in the sense of an ORAL segment turning into a NASAL segment, but an operation that may be more appropriately referred to as "spreading" because it is the process of a segment unspecified for NASALITY becoming positively or negatively specified for NASALITY according to the value for that feature in a neighboring segment. The term "consonant nasalization" below, therefore, is also to be understood as "spreading" of the positive NASALITY value in this sense.

syllable nuclei, with the result of dividing syllables into ORAL syllables on the one hand and NASAL syllables on the other. But syllables are also either CHECKED or UNCHECKED in this language in the patterning for tones and, according to treatment C (but not treatment B), this difference phonetically manifests itself as presence or absence of the glottal stop at the end of an OPEN syllable, and as presence or absence of NASALITY at the end of a CLOSED one (where it ends in some closure in the oral cavity). For (with such closure) the only way to control air discharge as required by the CHECKED/UNCHECKED contrast is by manipulating the velum, with the resulting phonetic presence or absence of NASALITY (for the closure) at the end of the syllable.

Treatment C, in short, derives phonetic NASALITY for consonants from two different sources, from the NASAL/ORAL contrast for syllable nuclei (in case of syllable-initial nasal stops) or from the tonal CHECKED/UNCHECKED contrast (in case of syllable-final nasal stops) and the problem, of course, is whether that is really tenable.

Besides, while treatment B assumes that a phonological NASAL/ORAL contrast for CLOSED syllables in the syllabic "tier" is turned into a phonetic NASAL/ORAL contrast for syllable-final stops, treatment C has to say that such contrast for some reason is phonologically nonexistent for CLOSED syllables (that is, the distributional hole related to Chart 2 is inherent, not deceptive). Thus it leaves the hole unexplained.

Nevertheless, in relating the NASAL/ORAL contrast for syllable-final stops in the segmental "tier" to the CHECKED/UNCHECKED contrast in the tonal "tier", treatment C has a clear advantage, not only over treatment A, but also over treatment B, in both of which the restriction of syllable-final ORAL stops to CHECKED tones, and of syllable-final NASAL stops to UNCHECKED tones, is merely coincidental and unaccounted for. What is more, this must be considered an important advantage, in view of the generality of the CHECKED/UNCHECKED contrast for tones in this language. So maybe treatment C is the choice to make, after all, if one is not bothered by the problems it has. That is, if one can explain the distributional hole related to Chart 2, and if one doesn't mind deriving

Jeffrey C. Tung

NASALITY for consonants from two different sources.[8]

REFERENCES

Chomsky, Noam and Morris Halle.

  1968 *The sound pattern of English.* New York: Harper & Row.

Cheng, Robert L., and Susie S. Cheng.

  1977 *Phonological structure and romanization of Taiwanese Hokkien.* Taipei:

      Student Book Co. (In Chinese)

Ferguson, Charles A.

  1966 Assumptions about nasals: a sample study in phonological universals. In

      Greenberg, J. H., ed. *Universals of language,* 2nd edition (53–60). Cambridge,

      Mass: MIT Press.

Goldsmith, John.

  1979 The aims of autosegmental phonology. In Dinnsen, D.A., ed. *Current*

      approaches to phonological theory (202–222). Bloomington: Indiana Universi-

      ty Press.

Hockett, Charles F.

  1955 *A manual of phonology,* Memoir ll of IJAL.

Li, Paul Jen-kuei.

  1985 A secret language in Taiwanese. *Journal of Chinese Linguistics* 13.1:91–121.

  1989 On the nature of syllable-final glottal stop in South Min dialects. *BIHP*

      60.3:197–202.

---

8 One way to explain the distributional hole related to Chart 2 is to ascribe it to neutralization. Note that, as mentioned earlier, the environment of Chart 2 causes the six-way vowel opposition to become reduced to a three-way opposition. It is thus not surprising that the same environment should also cause the NASAL/ORAL vowel opposition to be neutralized, leaving only the ORAL specification to be picked as the default value. As for the problem of having two sources of NASALITY for consonants, it must be remembered that, as part of the major distributional hole related to Chart 2, VC and CVC sequences, where syllable-final NASAL stops occur if ever, are exactly the kind of syllables in which syllable-initial NASAL stops never occur. That is, the two sorts of NASAL consonants never co-occur in one and the same syllable.

Luo, Chang Pei.

    1931   *Phonetics and phonology of the Amoy dialect*. Institute of History and Philo-
           logy, Academia Sinica. (In Chinese)

Taipei Language Institute.

    1965a   Pronunciation drills for Taiwanese Hokkien. Taipei, Taiwan.

    1965b   *Speak Taiwanese*. Taipei, Taiwan.

Tung, Jeffrey Chao-hui.

    1968   *The phonological system of Gaoxiong, a Min dialect of Chinese*. POLA (2nd
           series), No.5. Berkeley: University of California.

    1988   Nasality and orthography. In Cheng, R. and S. Huang, eds. *The structure of
           Taiwanese: a modern synthesis* (67–94). Taipei: Crane Publishing Co.

Tung, Tung Ho.

    1957   Phonology of the Amoy dialect. *BIHP* 29:231–53. (In Chinese)

    1959   Four South Min dialects. *BIHP* 30:729–1042. (In Chinese)

古腔粵曲的音韻

雲惟利

澳門東亞大學

現在的粵曲是用粵音來唱曲和念白的。這大概是清末以後的事。在那以前，則全用官話。廣東省境內本無戲曲。無論南宋的南戲，元代的北曲，明代的南曲，都是從北方傳入廣東的。據粵曲伶人說，早期粵曲唱念都依據「中原音韻」、「中州方言」。粵曲的曲調是約在明末清初時形成的。其基本的曲調是梆子和二黃。梆子來自秦腔，二黃則來自徽劇。另外又從桂劇傳入桂林官話。當時叫戲棚官話。唱曲和道白都是用的桂林官話。現存的古腔粵曲正是用官話來唱念的。伶人稱之爲「中州桂林話」。但其語音系統和現在的桂林話並不相同。本文的重點便是在於記錄這古腔粵曲的語音系統。這項資料的重要性有三：其一，這種方言形成於四百多年前，但非日用語言，僅用於台上。形成之後的變化應不太大，可看成一種方言化石。其二，這種方言形成之後，雖難免受粵語的影響，但仍或多或少可見其初生時的面目。此類資料，不可多得。其三，此方言的聲調有五：陰平、陽平、上、去、入。其入聲帶喉塞韻尾。這對於了解《中原音韻》時代入聲的演變情況，甚有幫助。

一、引　子

現在的粵曲用粵音來唱曲和念白。這大約是從清末民初的時候開始的。在那以前，則全用官話。

廣東省境內，原本並沒有戲曲。無論是宋代的南戲，元代的北曲，明代的南曲，都是從北方傳入廣東的。這類戲曲既從北方傳來，唱念時也當然是用的北方話了。現存的古腔粵曲便正是用官話來唱念的。

古腔粵曲所用的官話音，究竟來自何方，現在無法確定。粵曲伶人間流傳的說法

有兩個。陳非儂《粵劇六十年》說：[1]

> 早期的粵劇，唱的是南曲、北曲、弋陽腔、崑山腔，這些都不是廣東的腔調，一般廣東人聽不懂，特別是當時粵劇的對白，說的是中原音韻、中州方言，一般廣東人也是聽不懂，這對粵劇的傳播，和深入民間，造成障礙。到了明朝末年，最容易和各地方言溶化和結合的弋陽腔，和廣東各地的地方方言，溶化和結合，形成了一種廣東化的弋陽腔 —— 廣腔。廣腔唱白，接近廣州方言，廣府觀衆看粵劇時，易於理解和接受，因而大大的促進粵劇的傳播和發展。

弋陽腔出自江西弋陽。明代中葉已傳入廣東。徐渭（一五二一至一五九三年）的《南詞敘錄》說：[2]

> 今唱家稱弋陽腔，則出於江西，兩京、湖南、閩、廣用之。

這弋陽腔在明代流行的地區甚廣。常雜用各地方言，或與土戲結合，形成新的腔調。[3]廣腔當即由此而來。這廣腔或即粵曲的古腔。然而，弋陽腔傳入廣東時是否用「中原音韻」、「中州方言」則無法確知。不過，同一時期的海鹽腔（出於浙江海鹽），卻是多用官語的。

陳非儂的《粵劇六十年》中又說：[4]

> 桂劇，唱曲和道白都用桂林話。清代的粵劇，特別是所有唱廣腔的粵劇，唱曲和道白也是用桂林話，桂林話又叫戲棚官話。戲棚官話是原自桂劇的。這時候的戲棚官話，就是廣腔（這點是冼玉清女史明確指出的）。

歐陽予倩的《談粵劇》一文中也有這樣的說法：[5]

> 廣東戲老的唱法是和桂戲祁陽戲相差不遠的（除語音的差別，唱腔可說十之

---

1 見《大成》雜誌第八十期第八十頁。一九八〇年九月香港出版。
2 見《中國古典戲曲論著集成》第三冊，二四二頁。北京中國戲劇出版社一九五九年版。
3 參看周貽白《中國戲曲史綱要》三一九頁。上海古籍出版社一九七九年版。
4 見《大成》雜誌第八十三期第七十九頁。一九八〇年十月香港出版。
5 見《歐陽予倩戲劇論文集》第六十三頁。上海文藝出版社一九八四年版。

八九是一樣）。廣東戲用的所謂「戲棚官話」可以說就是桂林話。

這個說法以廣腔來自桂劇，和前一個以廣腔來自弋陽腔的說法不一致。但也並不矛盾。只是時間有先後而已。粵劇和桂劇的根源實都在於弋陽腔。後來又受了徽劇和祁陽戲的影響。早期粵劇還受了秦腔的影響。粵劇的曲調主要是梆子和二黃。梆子即傳自秦腔，而二黃則來自徽劇。[6]明清兩代的粵劇都是用官話音來唱念的。清代粵劇所用官話，或即來自桂劇，而桂劇所用官話也還是來自中州的。

粵劇之改以粵音來唱念，是清朝末年的事。陳非儂《粵劇六十年》云：[7]

> 「廣嗓」即是廣州話。粵劇用廣嗓唱唸，始自清末。到了民初，粵劇中的唱唸，基本已用廣嗓。廣嗓已經基本取代桂林官話和中州音韻，而成為粵劇唱唸的基本語言。

> 河南省古稱中州，中州音韻即是河南音韻。河南音韻又以開封（地名）土音為準。

粵劇改用廣嗓後，實還經歷了一個半古半白時期，即官話與粵語雜用，時在民國初年。後來便漸漸全用粵音唱唸了。

現存的古腔粵曲還是用官話來唱念的。其語音和現在的桂林的官話並不一致。當是古語的遺存。不過，現在還會唱此古腔的伶人已經不多了。據說，香港和澳門兩地還不到十人。本文起草前，得澳門李銳祖先生協助發音，特此致謝。

因所錄資料不多，只能整理出古腔粵曲音韻的梗概。他日錄得較多資料時，當再補訂。

二、聲　母

古腔粵曲的官話音共有十六個聲母（見表一）。其中有幾個特點：

㈠ 只有ts組音三個，而沒有tʂ組音和tɕ組音。所以，聲母總數只有十六個，比一般官話方言聲母來得少。這一點可能是受了粵語的影響。

6　見同注四及注五。
7　見《大成》雜誌第八十五期第八十頁。一九八〇年十二月香港出版。

㈡ ŋ母雖然還未消失，但所屬的字已很少了。

㈢ 全濁聲母也都已清化了。

㈣《中原音韻》時代的聲母 v 也消失了。這一點是跟現在的一些官話方言一致的。

㈤ 舌根音在齊齒呼前尚未顎化。所以，尖團音還大致能分。[8]

㈥ 有些字有不同的讀音，而聲母不一樣，如：花hua55、fa55，胸soŋ55、hoŋ55、可kʼo35、ho35等。其第一音當來自官話，而第二音當來自粵語。此外，面字也有兩個讀音，min33和lin11。前一讀當是本音，後一讀當是「臉」字的訓讀音。

方法 部位	不送氣 塞 音	送 氣 塞 音	鼻 音	擦 音	通 音
唇 音	p	pʼ	m	f	
舌尖中	t	tʼ	n		1
舌尖前	ts	tsʼ		s	
舌 根	k	kʼ	ŋ		
喉 音				h	0

表一：聲母表

三、韻　母

古腔粵曲的官話音共有五十五個韻母。其中元音尾韻二十五個，鼻音尾韻二十個，喉塞尾韻十個。（見表二）。如果不把喉塞尾韻計算在內，則總數只有四十五個。

---

8 現在的桂林官話是不分尖團的。見楊煥典等的《廣西的漢語方言》。刊於《方言》一九八五年第三期，一八一至一九零頁。北京中國社會科學出版社出版。

韻尾＼韻頭	元　音　尾　韻	輔　音　尾　韻	
		鼻　尾　韻	塞　尾　韻
開齊合	a　　ai　　au ia　　iai　　iau ua　　uai	am　　an　　aŋ 　　　ian　　iaŋ 　　　uan　　uaŋ	aʔ
開齊	e　　ei ie	en　　eŋ 　　　ien	eʔ
開合撮	ə uə yə		əʔ yəʔ
開合撮	o　　oi　　ou uo　　uoi	on　　oŋ 　　　yon　　yoŋ	oʔ　　　　　ouʔ
齊齊合	ʅ i iu	im　　in　　iŋ	iʔ
合齊	u iu	un	uʔ iuʔ
撮	y	yn	yʔ
鼻韻		ŋ	

表二：韻母表

韻母有以下幾個特點：

㈠ 入聲韻一律帶喉塞韻尾。現在的粵語没有喉塞尾韻，而桂林官話則没有入聲韻。[9] 所以，古腔粵曲官話音的塞尾韻當是早期官話的遺存。

㈡ Ɪ韻所屬的字甚少，仍可見早期支思韻與齊微韻之別。現在則兩韻逐漸合併了。

㈢ uə韻所屬只有一個兒字，當是仿讀現在的北京音而來的。古腔粵曲也曾受京劇的影響。

㈣ oi韻當是受粵語ɔi、œy兩韻的影響而形成的。

㈤ 有些字有不同的讀音，而韻母不一樣，如：姻in55、ian55，間kian55、kan55，芳faŋ55、foŋ55，嬌kiau55、kiu55等。其第一音當來自官話，而第二音當來自粵語。

㈥ 陽聲韻字中，有些m尾字變n尾了，如沈tsan11，談tan11；有些則有兩讀，而韻尾不同，如：今kim55、kin55，林lim11、lin11韻尾由m變n，現代官話方言多已如此。古腔粵曲的官話音，韻尾m並未全失，尚有am、im兩韻。當是早期官話的遺存。至於韻尾n，也有些字變讀ŋ，如：明miŋ11。也有些字有兩讀而韻尾不同，如：兵piŋ55、pin55，青ts'iŋ55、ts'in55，令liŋ33、lin33等。

㈦ 入聲韻字中，有些字有p、t、k韻尾，如：蝶tip2，別pit2，獲uok2；又有些字不止一個讀音，而韻尾不同，如：覺koʔ2、tsyəʔ2、kok2，月yəʔ2、yt2，得teʔ2、tak5等。其有p、t、k尾的讀音，顯然是由現代廣州音來的。不過，這類讀音並不多。

四、聲　調

古腔粵曲的官話音有五個聲調，即：陰平、陽平、上、去、入。（見表三）。

這幾個聲調還大致穩定。不過，審調時有一些困難。因爲伶人學官話音時，是隨唱曲念白而學的。其目的也在於唱曲念白，而不在於日常交談。而唱曲念白時，曲調和語調都會改變聲調。久而久之，也就可能變成習慣的。例如上聲字中，有些因重讀而聽起來像是念成全降調了。比方：可k'o51，本pan51，孔k'oŋ51等。這情形當是受

9　見同注八。

念白時的語氣的影響所致。可以略而不記。

就調值看來，五個聲調分別與現在的廣州話的陰平(55)、陽平(11)、陰上(35)、陰去(33)、陽入(2) 調值相同。這恐怕不是偶同，而是受了廣州話的影響。

五個聲調中，最有啟發性的當推入聲。入聲韻的韻尾輔音已由p、t、k消變爲ʔ。這當是早期中州官話的遺存。

調　類		陰　平	陽　平	上	去	入
調　　值		55	11	35	33	2
例　字	i si fu fan iŋ	衣 思 夫 分 櫻	疑 時 扶 凡 形	以 喜 府 反 影	意 是 富 飯 應	日 實 伏

表三：聲調表

五、聲韻調配合表

爲便於翻檢，現把收集到的字音編成一聲韻調配合表。不過，由於收集到的資料并不足夠，下面的聲韻調配合表并不完整。

就各韻音節分佈的情形看來，有以下幾個特點：

㈠ 有介音u的韻，除uon、un 兩韻外，只和舌根音及喉音聲母拼合。

㈡ ia、iai、ien三韻只和舌根音拼合。ian 則於舌根音之外，也獨用。

㈢ ie、uə、yoŋ三韻只單獨出現。

㈣ ɿ韻只和舌尖音拼合。

㈤ əʔ、yəʔ、兩韻只有入聲字。

㈥ ia、ie、ue、en、ien、ŋ等都是極小的韻，只一兩個音節有字。這當然跟資料不全有關係。不過，這些韻原本也應該是很小的。

上文說過，有些入聲字雜用廣州音而有p、t、k韻尾。這一類音都不列入表中。

雲惟利

	a					ai					au					ia				
	55	11	35	33	2	55	11	35	33	2	55	11	35	33	2	55	11	35	33	2
p			把	罷					敗				保	報						
p'				怕					配		拋			抱						
m			馬	罵					妹			謀								
f	花				伐				快			浮								
t			打	大	達	低			待				斗	到						
t'	他						台	體	泰		叨	頭		透						
n									奈					怒						
l		拿					來					勞	老							
ts								載	在		周		早							
ts'						凄	才	彩				愁	草							
s			灑	下	殺	腮			誓		稍	愁	手	少						
k						該					高			教				假		
k'						開			蓋				口	叩						
ŋ															樂					
h						孩	海		害		侯	好		後						
0	啊		啊			唉														

— 648 —

	iai					iau					ua					uai				
	55	11	35	33	2	55	11	35	33	2	55	11	35	33	2	55	11	35	33	2
p								表												
p'						飄														
m								渺												
f																				
t						刁														
t'																				
n																				
l							聊	了	料											
ts						蛟														
ts'							樵													
s							迢	小												
k	佳		解	界		嬌		狡	叫											
k'											跨					虧	攜			
ŋ																				
h											花						懷			
0							由	有	要			華		話				危		外

雲惟利

	e					ei					ie					ə				
	55	11	35	33	2	55	11	35	33	2	55	11	35	33	2	55	11	35	33	2
p						悲			被											白
p'						坯		鄙	佩											
m							眉	美												
f						非														
t		遞	德						地											
t'																				
n																				
l								裡												
ts	遮		者	榭	賊															
ts'				拆																拆
s	些		蛇	寫	色															
k						機		幾	記											隔
k'								起	戲											客
ŋ																				
h																				
0													也	夜						

	uə					yə					o					oi				
	55	11	35	33	2	55	11	35	33	2	55	11	35	33	2	55	11	35	33	2
p p' m f											波				白 莫					
t t' n l										略	多	沱 娜 羅	躲		托 落		雷	女	對	內 淚
ts ts' s						初 疏		楚		覺 說			所		作 錯	災 吹 須	除 誰	取 水	最 睡	
k k' ŋ										卻	哥 婀	娥	個 可 我		各	驅	佢			
h 0	兒									月		何	可							

雲惟利

	ou					uo					uoi					ɿ				
	55	11	35	33	2	55	11	35	33	2	55	11	35	33	2	55	11	35	33	2
p p' m f	保 蒲	報 普 母		不 坏																
t t' n l	都 滔	徒 奴	土	到 吐 路																
ts ts' s	遭 蘇	素														之		子 死	字 侍	
k k' ŋ						果	過	國				貴								
h 0				又		和 和						圍	爲							

	i					ui					u					iu				
	55	11	35	33	2	55	11	35	33	2	55	11	35	33	2	55	11	35	33	2
p p' m f					碧 滅						夫	芙	斧	付	不 目 福					
t t' n l			你		敵 立										督 錄		流	柳		六
ts ts' s	知 妻 西	遲 時	只 此 喜	至 氣 是	寂 設 十									住	竹 出	秋 消	樵	酒	就	
k k' ŋ						歸	回	鬼	貴		姑 枯		鼓	故	號 哭	嬌		久	救	
h 0	衣	疑	以	義	一	回	遺		未			無			忽	有			又	辱

雲惟利

	y					am				an				aŋ			
	55	11	35	33	2	55	11	35	33	55	11	35	33	55	11	35	33
p p' m f										班頻文番	凡	本盼滿反	半飯		旁方	茫房	放
t t' n l							南			曇難欄		懶	旦嘆爛	當堂能廊		擋倘冷	蕩
ts ts' s	朱書	徐	主貯許	箸去						眞山	趂殘屑	陣襯散		爭	蒼生	長降	恨上
k k' ŋ						襟				肝恩		柬看俺		剛			更
h 0	於	兒	雨	瑜	玉	堪				慳	寒	俺	漢				

	en				eŋ				ien				on			
	55	11	35	33	55	11	35	33	55	11	35	33	55	11	35	33
p p' m f					兵		秉									瞞
t t' n					叮		訂						端		斷	
l					靈		令								論	
ts							正								轉	
ts'					稱	成							春	傳		
s					聲		幸									
k					荊		敬		間							
k' ŋ					卿	瓊										
h		很														
0					卿											

雲惟利

	ian				iaŋ				uan				uaŋ			
	55	11	35	33	55	11	35	33	55	11	35	33	55	11	35	33
p p' m f																
t t' n l					娘	良	兩	亮								
ts ts' s					將 窗 相	詳	將 想	像							霜	
k k' ŋ	艱				江							慣 困	光	狂	廣	
h 0	因	人	眼		鴦	陽	映		昏	還 聞		問	亡	枉	望	

— 656 —

	on				yon				yoŋ				im			
	55	11	35	33	55	11	35	33	55	11	35	33	55	11	35	33
p p′ m f	風	蒙 逢	夢 鳳													
t t′ n l	東 窿	同 龍	懂	動 痛 弄										臨	點	念
ts ts′ s	中 蔥 松	從 雄	種 塚	重 送		脣		勸					心	尋 禪		甚
k k′ ŋ	公 空		孔	共 甕									金		錦	
h 0		紅	框	昂	鴛	圓	遠	願	容		勇	用	陰	嚴		

雲惟利

	in 55	in 11	in 35	in 33	iŋ 55	iŋ 11	iŋ 35	iŋ 33	un 55	un 11	un 35	un 33	yn 55	yn 11	yn 35	yn 33
p	兵		稟	便				病				伴				
p'		貧														
m		明		面				命				滿				
f																
t	天	塡			丁											
t'			聽			聽	停									
n		年				寧										
l		連		令		凌										
ts				盡												
ts'	千	前			青	情							穿	全	犬	
s	鮮	賢		信	星											
k	今		瑾		巾				觀			貫	君			卷
k'										款						
ŋ																
h										喚						
0	姻	言	忍	現	櫻	形	影	應					鴛	原		

	ŋ															
	55	11	35	33	55	11	35	33	55	11	35	33	55	11	35	33
p p' m f																
t t' n l																
ts ts' s																
k k' ŋ																
h 0	吾															

六、標音舉例

西　廂　待　月
si55　siaŋ55　tai33　yə?2

（梆子首板）在　西　相，寂　無　聊，滿　胸　惆　悵。
tsai33　si55　siaŋ55　tsi?2　u11　liau11　mun35　soŋ55　ts'au11　tsaŋ33

（慢板）夜　沉　沉　人　寂　靜，望　穿　秋　水，　還
ie33　ts'an11　ts'an11lian11　tsi?2　tseŋ33　uaŋ33　ts'yn55　ts'iu55　soi35　huan11

不　見　嫦　娥　仙　女　下　落　廣　寒。倚　門，前
pou?2　kin33　ts'aŋ11　ŋo11　sin55　loi35　sa33　lo?2　kuaŋ35　han11　i35　man11　ts'in11

手　托　腮，令　我　心　猿　飄　蕩。步　蒼　台，
sau35　t'o?2　sai55　lin33　ŋo35　sim55　yon11　p'iau55　taŋ33　pou33　ts'aŋ55　t'ai11

俯　金　階，眼　兒　昏　花，我　手　扶　欄　杆。
fu35　kim55　kiai55　ian35　ue11　huan55　hua55　ŋo35　sau35　fu11　lan11　kan55

聽　樵　樓　打　罷　了　初　更　鼓　響。思　想　起，
t'iŋ55　ts'iau11　lau11　ta35　pa33　liau35　ts'o55　kaŋ55　ku35　siaŋ35　si55　siaŋ35　k'ei35

不　由　人　雲　雨　巫　山　枉　斷　肝　腸。（中板）房　櫳
pou?2　iau11　ian11　yn11　y35　u11　san55　uaŋ35　ton35　kan55　ts'aŋ11　faŋ11　loŋ11

寂　莫　秋　風　冷。刁　斗　森　嚴　白　露　寒。柳
tsi?2　mo?2　ts'iu55　foŋ55　laŋ35　tiau55　tau35　sim55　im11　po?2　lou33　han11　liu35

梢　頭，明　月　遲　遲，半　空　中　一　陣　陣　彩
sau55　t'au11　min11　yə?2　ts'i11　ts'i11　pan33　k'oŋ55　tsoŋ55　i?2　tsan33　tsan33　ts'ai35

雲　吹　散。樵　樓　鼓　打　叮　噹，不　覺　夜　靜
yn11　ts'oi55　san33　ts'iu11　lau11　ku35　ta35　teŋ55　taŋ55　pou?2　tsyə?2　ie33　tseŋ33

更　闌。看　松　林　之　外，台　榭　重　重，迴　廊
kaŋ55　lan11　k'an33　soŋ55　lin11　tsi55　uai33　t'ai11　tse33　ts'oŋ11　ts'oŋ11　hui11　laŋ11

疊　　疊，　猶　　見　　燈　　光　　掩　　映。　俺　　小　　生，　在　　於
ti?2　ti?2　iau11　kin33　taŋ55　kuaŋ55　in35　iaŋ33　ŋan35　siau35　saŋ55　tsai33　y55

西　　廂　　下，　盼　　望　　情　　人　　臨　　風　　懷　　想，　眞　　果
si55　siaŋ55　sa33　p'an33　uaŋ33　ts'iŋ11　ian11　lim11　foŋ55　huai11　siaŋ35　tsan55　kuo35

是　　去　　就　　兩　　難。　孱　　弱　　書　　生，　相　　思　　不　　慣
si33　ts'y33　tsiu33　liaŋ35　nan11　san11　yə?2　sy55　saŋ55　siaŋ55　si55　pou?2　kuan33

憶　　當　　年，　兵　　臨　　普　　救　　寺，　幾　　至　　月　　缺　　花
i?2　taŋ55　nin11　peŋ55　lim11　p'ou35　kiu33　ts`l33　kei35　tsi33　yə?2　ts'y?2　hua55

殘。　老　　夫　　人　　傳　　下　　命　　來，　說　　道　　誰　　人　　能
ts'an11　lau35　fu55　ian11　ts'on11　sa33　min33　lai11　syə?2　tau33　soi33　ian11　naŋ11

把　　賊　　兵　　驅　　散。　願　　把　　女　　兒　　來　　許　　配，　不
pa35　tse?2　pin55　k'oi55　san33　yon33　pa35　loi35　yl1　lai11　sy35　p'ai33　pou?2

論　　富　　貴　　貧　　寒。　俺　　微　　幸，　白　　馬　　解　　圍，　所
lon33　fu33　kuoi33　p'in11　han11　ŋan35　iau35　seŋ33　po?2　ma35　kiai35　uoi11　so35

以　　叩　　垂　　青　　盼。(介)赴　　瓊　　筵，　陳　　玉　　帛，　只　　道
i35　t'au55　soi11　ts'iŋ55　p'an33　fu35　k'eŋ11　in11　ts'an11　y?2　po?2　tsi35　tau33

乘　　龍　　跨　　鳳，　可　　以　　夢　　到　　巫　　山。　又　　誰　　知
ts'an11　loŋ11　k'ua55　foŋ33　k'o35　i33　moŋ33　tau33　u11　san55　iau33　soi11　tsi55

一　　到　　他　　府　　中，　兄　　妹　　相　　稱，　便　　使　　姻　　緣
i?2　tau33　t'a55　fu35　tsoŋ55　soŋ55　mai33　siaŋ55　ts'in55　pin33　si35　in55　yon11

拆　　散。　這　　都　　是　　人　　情　　反　　覆，　致　　有　　恨　　海
ts'e?2　san33　tse35　tou55　si33　ian11　ts'iŋ11　fan35　fu?2　tsi33　iau33　han33　hai35

波　　瀾。　蒙　　姑　　娘　　恩　　義　　多　　情，　就　　使　　紅　　娘
po55　lan11　moŋ11　ku55　niaŋ11　ŋan55　i33　to55　ts'iŋ11　tsiu33　si35　hoŋ11　niaŋ11

遞　東。相　約　我　在　西　廂　等　候，還　有　心
tei33　kan35　siaŋ55　yə?2　ŋo35　tsai33　si55　siaŋ55　taŋ35　hau33　huan11　iau35　sim55

事　敍　談。俺　小　生　得　聞　雷　霆　怒，抱　病
si33　tsoi33　t'an11　ŋan35　siau35　saŋ55　te?2　uan11　loi11　t'iŋ11　nou33　p'au33　pin33

憫　憫，恐　怕　垂　危　夕　旦。今　日　裡，爲　姑
in33　in33　k'oŋ35　p'a33　soi11　uai11　tsi?2　tan33　kim35　i?2　lei35　uoi33　ku55

娘　不　覺　步　履　艱　難。停　停　貯　立，情　愁
niaŋ11　pou?2　tsyə?2　pou33　lei35　kian55　nan11　t'iŋ11　t'iŋ11　ts'y35　li?2　ts'iŋ11　sau11

意　懶。(介)又　聽　得，竹　聲　風　弄，疑　是　環　珮
i33　lan35　iou33　t'in55　te?2　tsu?2　san55　foŋ55　loŋ33　i11　si33　huan11　p'ei33

珊　珊。夜　沉　沉，花　睡　著，難　道　前　言　見
san55　san55　ie33　ts'an11　ts'an11　hua55　soi33　tso?2　nan11　tau35　ts'in11　in11　kin33

誆。待　小　生　步　出　園　門，細　看　端　詳。忽
uaŋ33　tai33　siau35　saŋ55　pou33　ts'u?2　yon11　man11　si33　k'an33　tuon55　ts'iaŋ11　u?2

聽　得　碧　欄　杆　外，像　有　金　蓮　步　響。(滾花)眞
t'in55　te?2　pi?2　lan11　kan55　uai33　siaŋ33　iau35　kin55　lin11　pou33　siaŋ35　tsan55

果　是　嫦　娥　下　界，素　女　臨　凡。
kuo35　si33　ts'aŋ11　ŋo11　sa33　kiai33　sou33　loi35　lim11　fan11

七、餘　論

　　俗語說：「天不怕，地不怕，只怕廣東人說官話。」這古腔粵曲所用的官話，正是廣東人所說的官話。其來源則是中州方言。後來可能也受了桂林話的影響，所以，伶人又稱之爲「中州桂林話」。

　　中州方言隨北方戲曲而傳入廣東。廣東伶人既學其戲曲，也學其方言。古腔粵曲

便因此形成。然而，粵人說的中州話是難免帶廣東口音的。所以，這古腔粵曲所用的官話，實在是廣東人說的一種官話方言。不過，這種方言並非日用語，止用於台上。所以，形成以來的變化應該不會太大。幾乎可以看成是一種方言化石了。雖然數百年來，口耳相傳，也難免會走樣，或雜入粵音，但仍或多或少可見其初生時的面目。所以，這樣的方言資料是十分難得的。其中，入聲字音的變化，或有助於了解《中原音韻》時代入聲的演變情況。

《中原音韻》時代的中原音是否有入聲，是聲韻學界時有爭論的問題，至今未決。《中原音韻》雖是北曲韻，其所據的語音則是中州音而非大都音。[10]這一點也可以從古腔粵曲得到啟示。中州戲曲傳到廣東而形成粵曲，數百年來都用中州音來唱，直到清末才改用粵音，而古腔粵曲依然不絕如縷。這樣看來，中州的戲曲傳到北方而形成北曲，也未嘗不可用中州音來唱。未必馬上就改用大都音。中州音當爲元明兩代戲曲所通用。只有各地土戲可能用方音。古腔粵曲的官話音雖然不能說是直承《中原音韻》而來的，但其間不應全無關係。如果依據古腔粵曲入聲字的變化來推測，則《中原音韻》時代的中州音應該還有入聲。只是韻尾已消變爲喉塞音了。所以，唱曲時，可以和其他聲調字押韻。果眞如此，那麼，這古腔粵曲的資料就更重要了。

10　參看楊耐思《中原音韻音系》六十六至七十五頁。北京中國社會科學出版社一九八一年版。李新魁《中原音韻音系研究》十五至四十六頁。中州書畫社一九八三年版。

附　　錄

上 古 音 對 談 錄

對談者：梅祖麟先生、龔煌城先生
第一次對談（1989年12月9日）

梅：謝謝林英津女士，還有何大安先生。我到這裡來訪問，一直想有機會跟龔先生談，其實是請教。同時我在這裡最高興的就是看到龔先生的論文。一個是〈從漢藏語的比較看上古漢語若干聲母的擬測〉(1989)，其中最重要的是喻三——這是非常重要的。同時我又讀了龔先生的博士論文(1976)，也是我多年想讀的，讀到了。

　　大家都知道我最近研究注意力主要是在語法方面。不過我對上古構詞有興趣，好像是不得已要考慮到上古音。我最初開始對於上古音發生興趣，其實是讀雅洪托夫（楊托夫， C. E.ЯХОНТОВ）的論文。先讀〈上古漢語的複輔音聲母〉(Consonant Clusters in Old Chinese, 1960)，後來是〈上古漢語的唇化元音〉(The Rounded Vowels of Old Chinese, 1960)。有英文的翻譯，我最初是讀羅杰瑞 (Jerry Norman) 的英文翻譯稿，後來登在《麒麟》(《Chi-Lin》)。

　　我一直感覺：雅氏講聲母部分，影響整個我們這一代研究上古音。尤其是龔先生現在出了 *gwrj-。最初是二等字有 *-r- 介音；後來從圓唇元音跟不圓唇元音的考慮，結果就出來帶 *-r- 的唇化舌根音 (labialized velar)；再下一步就出了 *gwrj-，就跟藏文的 gro-，對的非常準。

　　所以我心目中一直在想這麼一個問題，也就說是：雅氏這幾篇文章都是1960年左右寫的，他的系統本身確實有很多的缺點。其實他很多東西是王力的，王力的東西有很多實在是說不通。以後李方桂先生發表了他的《上古音研究》(1971)，他的《上古音研究》當然是參考了雅氏的東西所寫的。《上古音研究》的上古音系統影響非常大。不過呢，李先生發表《上古音研究》以後（其實大家都知道那個演講是1968年），其他研究上古音的學者，如包擬古 (Nicholas Bodman)、蒲立本 (Pulleyblank)，以及張

琨先生，都沒有完全接受李方桂先生的上古音。尤其沒有接受李方桂先生給幽部跟宵部所擬的唇化舌根音韻尾(labial-velar finals)。

　　所以我現在先談李方桂先生與雅洪托夫上古音系統的比較。我想我們可以採取兩種態度，李方桂先生跟雅洪托夫先生這兩位，那個系統比較好。我覺得一般說來，李先生的系統是比較好。不過呢，裡面有一個問題，也就說是我們是不是有辦法把雅洪托夫的系統裡面的短處，按照李先生的辦法改了？以後可能有兩個結果，就是改了以後，完全像李先生的；等於把雅氏的給取消了。不過呢，另外還有一個可能，也就說是：我覺得他的上古音系統，有種種想法。其中有一種想法，我覺得最特殊，那就是他對於圓唇元音的處理。所以我寫摘要的時候，心目中並不是他寫出來的那個系統，而是他那個意思。那個意思是什麼東西呢？在某一方面可以說是比較滑頭。不過呢，我現在就說說我對這個系統的一些意見。

　　我想李先生的系統裡面有四個元音 i、u、ə、a ，他還有三個複合元音 iə、ia、ua 。 iə、ia 專門管一些不怎麼聽話的韻母，也就是說有些個韻母阻止聲母輕唇化。我們就在 ə 前頭加個 i 、或者 a 前頭加個 i 。我覺得裡面有問題，也許我們以後有更好的解決辦法；不過並不是一個大問題。但是 ua 這個音分布的情形有很多缺項，下頭表一、二是根據李方桂先生的元音系統排出來的音韻分布情形。表一是李先生的寫法，表二則是我的寫法。

表 一

陰	之 əg	幽 əgʷ	魚 ag	宵 agʷ	侯 ug	佳 ig
入	之 ək	幽 əkʷ	魚 ak	宵 akʷ	侯 uk	佳 ik
陽	蒸 əng	中 əngʷ	陽 ang	--	東 ung	耕 ing

陰	微 əd, ər	--	歌 ar 祭 ad	--	--	脂 id
入	微 ət	--	祭 at	--	--	脂 it
陽	文 ən	--	元 an	--	--	眞 in

入	緝 əp	--	葉 ap	--	--	--
陽	侵 əm	--	談 am	--	--	--

表 二

	i	akʷ	a	u	ə	əgʷ
-k	佳 ig	宵 agʷ	魚 ag	侯 ug	之 əg	幽 əgʷ
	ik	akʷ	ak	uk	ək	əkʷ
	耕 ing		陽 ang	東 ung	蒸 əng	中 əngʷ
-t	脂 id		祭 ad, uad	--	微 əd	--
	it		at, uat	--	ət	--
	眞 in		元 an, uan	--	文 ən	--
			歌 al*, ual*	--	(微) əl*	--
-p			葉 ap		緝 əp	
			談 am		侵 əm	

*-l原作-r，今改。

魚韻陰聲 *ag 、入聲 *ak ，下頭是歌祭元。 *ua 得要排在這一項底下，也就是歌祭元三部各有 *a 元音以及 *ua 元音。所以我們假如只是看表一，就感覺是相當整齊。假如眞正把 *ua 出現的範圍放進去，如表二，第一就是覺得怎麼就是在歌祭元三部裡面，有兩種元音，一個是 *a 、一個是 *ua 。至於雅氏的系統，龔先生排成如下表三。

表 三

陰	之 ə	幽 u	魚 â	宵 ü	侯 o	佳 e
入	之 ək	幽 uk	魚 âk	宵 ük	侯 ok	佳 ek
陽	蒸 əng	中 ung	陽 âng	--	東 ong	耕 eng
陰	微 ər	(微合) ur	歌 ä, är	--	(歌合) or	脂
入	微 ət	(微合) ut	祭 ät	--	(祭合) ot	脂 et
陽	文 ən	(文合) un	元 än	--	(元合) on	脂 en
入	--	緝 up	葉 äp	--	--	--
陽	--	侵 um	談 äm	--	--	--

龔先生並且比較兩位先生的擬音系統，提出四點說明：

    a. 雅氏擬音 â 與 ä 分布極不尋常，只在開音節有魚 â 與歌 ä 的對比。因爲有此一對比，故也無法把二者加以合併。李先生系統無此缺陷。

    b. 雅氏系統 ü 元音分布極受限制，只有 ü，ük；至於 ü 爲何不與舌尖音韻尾與唇音韻尾結合，無法解釋。若依李先生，宵部與幽部分別爲 ak^w 與 ϑk^w，其特徵是韻尾的圓唇舌根音，自然沒有相對的舌尖音與唇音韻尾。

    c. 依李先生系統須要解釋的是爲何上古漢語沒有 -ut, -ud, -un, -up, -um 的音節，也沒有 -ip, -im 的音節。漢藏語比較研究的結果顯示，在這些音節中元音都變成 -ə- 了。這是很自然的演變，如中古英語的 /u/ 變成現代英語的 /ə/。若依雅氏系統，要解釋上古漢語爲何沒有 -op, -om, -ep, -em 將十分困難。

    d. 圓唇舌根音在印歐語的擬測中也出現過。李先生對上古漢語給予圓唇舌根音的擬測並不特別奇怪。

    我想第一點是可以接受的。也就是雅氏有兩種 a，一種是在魚部跟陽部，一種是在祭元那些個韻部。他唯一出現的對比 (contrast) 就只是在開音節，其餘都是互補，根本就可以把它們併成一個。第二，ü 元音分佈確實是非常受限制。我也覺得：宵部到底是一個什麼東西？眞是一個很麻煩的問題。雖然龔先生另外提到宵元對轉的例子，就是“健 *gjan < *gjang^w ”：“蹻（勇健）、矯（勇武）*gjak^w ”…等。但是這些個例子——也是龔先生博士論文裡面所引用的例子——都是沒有牽涉到諧聲字的對轉。我覺得諧聲字是不能夠否認的；但是不牽涉到諧聲字的對轉，是可以見仁見智的。所以我自己也不知道雅氏對於宵部是怎麼個想法。假如我們能夠看到一些個漢藏對比的例子，也就是宵部字跟藏文裡面的對比，那麼我們就可以看的比較清楚。我查了一下龔先生1980的論文——很重要的，也許是經典之作——漢藏緬三種語言元音的對比（《A Comparative Study of the Chinese, Tibetan and Burmese Vowel Systems 》）。我還沒有看到一個宵部字跟藏緬語對比的，所以我不太知道是怎麼對比。

    第三就是上古爲什麼沒有 *ut、*un ？也就是 u 元音不能在舌尖音的韻尾前頭出現？這個其實也就是牽涉到上頭提到的問題。 *ut 這些個東西照李先生的說法，相當於微部跟文部；也就是變成 *ə 元音。但是侯部跟東部也是 *u 元音，我們倒看到很

多侯、元對轉的情形；但是我們没有看到侯微對轉的例子。所以這個問題以後還要討論。至於上古爲什麽没有 *-op、*-om 跟 *-ep、*-em？這個我覺得其實可以改良。雅氏的 *-ep、*-em，等於是 *-ip、*-im。所以這個是龔先生說的對，更早的 *-ip、*-im，到上古已經變成 *ə 元音了。這也就是把雅氏的 e，改成 i。以後我們就可以承繼龔先生的成果。同樣，*-op 跟 *-om 没有，其實是唇音異化 (labio-dissimilation) 的結果。也就是因爲 o 它本身是個圓唇音，後頭不會有 -m 或 -p；一般漢語是有唇音異化的。所以我倒要請教龔先生，大家常常說藏文"lob-ma"意思是"leaves"，對漢語的"葉"——至少有人這麽說——"葉"是喻四 *lap。所以是漢語 *op 變成 *ap。也就說是照雅氏的說法，o 跟 a 是圓唇跟不圓唇，u 跟 ə 也是圓唇跟不圓唇。所以看起來是相對應的。所以我覺得雅氏的系統裡面爲什麽没有 *-om 跟 *-op，並不是問題。

下面這是我請教龔先生的一個問題，也就是大家感到困惑的圓唇舌根音韻尾 (labio-velar final)。據我現在所知——不能說據我們現在所知，因爲我知道的很少——在藏緬語系，没有圓唇舌根音韻尾。廣東話雖然有圓唇舌根音的聲母 (labio-velar initial)，但是也没有圓唇舌根音韻尾。所以，我就想想在印歐語——大家都知道有圓唇舌根音聲母——它有没有圓唇舌根音韻尾呢？龔先生就舉了兩種例子，一種是圓唇舌根音聲母 *k^{w}e-、*k^{w}i-。第二個是圓唇舌根音韻尾的 *leik^w-。不過下頭有一橫，加了那一橫，我並不太知道它是不是在音節最末尾的部分，也就說是不是在韻尾？還是後頭得要加元音才能出現？假如是要加其他元音才能出現，那個並没有完全回答我的問題。因爲我的問題是：據我們現在所知道的，不管是活的語言或者是死的語言，有没有任何一個語言有 k^w 那種音，可以在音節尾 (absolute-final position) 出現？所以我看了龔先生的例子，並不完全懂倒底是怎麽樣。

古韻分部的問題，我覺得龔先生說的是對的。不過呢，其實是這樣——我只能說我没有做功課——從前脂微分部，我們知道很花了一大把力氣。先是有王力先生，後來有董同龢先生。因爲分部需要考慮到很多細節，是一個一個字、一個一個韻這麽去做的。雅氏所做的，確實是有很多例外。但是呢，我們再仔細看看，尤其假如是參照漢藏對比去看看，是不是能夠把它分得稍微更準確一點。我覺得第三這點，也就是說雅氏微文兩部的合口韻母，李先生認爲是後起的。重要的差異是：詩經時代雅氏認爲

是 *-un 、 *-ut 等音，李先生認爲是 *-ən 跟 *-ət。不過李先生同時也說： u 這個元音，以前的分布更廣；在詩經時代，它的分布只限於在舌根音聲母的後頭——這個不太容易了解。假如更早有 *un、又有 *ut，同時又有 *uan、*uat，我想會發生衝突。所以這個問題，我們還得要討論。

我也覺得確實雅氏的系統並不足以令其他人信服，雖然對我頗有引誘力。也就說是裡面也許還有工作需要做。脂微分部，大家都知道，是王力先生、董同龢先生偉大的發現。李先生在《上古音研究》裡說：「…這種分法大體可以接受，…。不過脂微兩部的分野仍不易分清，詩韻協韻的地方仍不少；諧聲也有例外…」。脂微分部其實從三十年代一直到七十年代，搞了四十年，還是有些個糾纏不清的問題。像歌祭元是不是能夠再分成兩種？我覺得至少我要持保留的態度；也就說是得要做點苦功。也許是各位在座的做點苦功，以後我們才能知道。同樣的牽涉到微部跟文部是不是再分？這個也要做些苦功。這個苦功——因爲現在越分越細了。以前脂微分部已經花了大力氣——是兩代的老師跟太老師所做的。

最後一個我覺得龔先生確實提出一些雅氏 E 型元音與 O 型元音之分的例外，如表四、表五。不過呢，看這個表五，他說是：原始漢藏語的 *u，是漢語的 *ə。那麼我覺得其實是照我的想法，也就說是 u 它因爲是唇音異化變成 ə，就解釋了。"銀" 跟 "貧" 大概是如此，不過我還有個不放心的東西：它並不是一般的 u 就變成 ə。在這裡面，"銀" 跟 "貧" 前頭還有個小小的 *i。這個小小的 *i，我並不太了解它是怎麼來的，另外是怎麼一個功用？而龔先生認爲若依李先生的擬測，只要假設「原始漢藏語 *u ＞藏語 u，原始漢藏語 *u ＞漢語上古音 ə／在舌尖音及唇音韻尾前；原始漢藏語 *ə ＞藏語 a，原始漢藏語 *ə ＞漢語上古音 ə」便一切都得到解釋了。但是「原始漢藏語 *u，變成漢語上古音 ə，是在舌尖音跟唇音韻尾前頭。」這是一個個別條件 (disjunctive condition)，或者是在舌尖音的前頭，或者是在唇音韻尾的前頭。普通碰到這種所謂分開列的情形，也就說並沒有說出它一個共同的性質；這只是一種排列性的描寫。至於表五之二，漢語上古音的 ə 對藏語的 a。這個，雅氏系統完全可以照抄。

表 四：從詩經押韻看雅氏Ｅ型元音與Ｏ型元音之分的例外

	Ｅ 型	Ｏ 型
0	衣・i̯ər 歸 ki̯wər（丰）	崔 dzwər 綏 歸 歸 懷（南山）
1	潰 肄 di̯əd 墍 xi̯əd（谷風）	嵬 隤 dwər 罍 lwər 懷（卷耳）
2	門 殷 ・i̯ən 貧 艱（北門）	順 問（女曰雞鳴）
3	變 li̯wän 卯 見 弁（甫田）	變 婉 選 si̯wän 貫 反 亂 lwân（猗嗟）
4	怨 岸 泮 宴 晏 旦 反（氓）	
5	活 濊 鱍 揭 孼 朅（碩人）	闊 活（擊鼓）
6	月 佸 桀 括 渴（君子于役）	闊 說（擊鼓）
7	館 粲（緇衣）	變 li̯wän 管 kwân（靜女）

蠆 li̯wər 弟 di̯ər（葛蠆）
門 雲 存 巾 ki̯ɛn 員（出其東門）
泉 歎（泉水）

表 五：從漢藏語的比較看雅氏 Ｅ型元音與 Ｏ型元音分類的困難

1) 雅氏 Ｅ型元音對應藏語的 u：

	漢	藏	
分	pjən	′phul	to give
	bjən	′bul	to give
貧	bji̯ən	dbul	poor, poverty
飛	pjəd 翁 pjən	′phur	to fly
顧	kən	′gul, mgul	neck, throat
銀	ngji̯ən	dngul	silver
塵	drjən	rdul	dust

2) 雅氏 Ｏ型元音對應藏語的 a：

孫	sən	mtshan ＜ *m-san	nephew
妥	hnər	rnal	rest, tranquillity of mind
焚	bjən	′bar	to burn

　　主要我覺得雅氏系統裡面可能有道理，也就是祭元歌三部爲什麼有 *ua 元音。而龔先生在1980年那篇文章裡面還說： ua 元音一直要推到共同漢藏語。在共同漢藏語裡面，它的分布是不是也是同樣的那麼有限制？這個我覺得是一個非常大的問題。跟

這個問題相關的，也就是爲什麼 u 這個元音它的分布在漢語上古音只是限於侯東兩部，而不能夠在舌尖韻尾前面出現？我們其實還可以問另外一個問題，也就說是詩經也許已經分不清，諧聲字是不是可以分？假如說是 ua 以前的分布比較廣，u 以前分布也比較廣。我猜想大概會發生衝突。

　　龔先生1980年的論文裡，我最喜歡的一個同源詞 (etymology)，就是“短 **tung > *tun > tuan（元合）”跟“豆 **dug（侯部）”諧聲。裡面我覺得講的非常清楚，它們原來都是 u 元音；u 在舌尖韻尾前分裂成 ua，也就是“短”。龔先生博士論文裡面，精彩的地方很多；我覺得很精彩的一個，也就是把“對轉”——楊樹達先生以及章太炎先生所說的“對轉”——用一種現代的眼光，把道理說出來。因爲有這種“對轉”，我們可以看同樣一個元音，在不同的韻尾——舌根韻尾或者舌尖韻尾——後頭，它相互的關係。

龔：這次討論會是何大安先生組織的，他向我提出這個構想。因爲大家都知道梅先生是一個很淵博的人，他經常有很好的主意。他這一次到所裡來，也是像以前一樣，對研究工作推動的很熱心。他每個禮拜在所裡有一次討論會，討論的問題牽涉可能很廣。當中牽涉到上古音的部分，因爲跟我以前的研究相關，何大安先生就打電話來，希望我來參加。就這樣我就參加了兩次的討論會。後來何大安先生說：他要安排一個我跟梅先生的對談，好使我們都有機會充分的交換彼此的研究心得。

　　我研究漢語上古音，是十幾年前我在寫博士論文的時候。因爲上古音有好幾家，擬音都不一樣。我就想有沒有什麼方法或有什麼好的一套東西來驗證，這幾個系統倒底哪一個比較正確？因爲要是你沒有一個判斷的標準，那就大家憑各自的信心了。比較崇拜董先生，就想董先生的系統正確。比較崇拜王力先生，就說王力的系統正確。覺得雅洪托夫算是一個很偉大的學者，他說的大概不會錯，就接受他的。這樣一來，就大家各說各的，學生無所適從。在大學《漢語聲韻學》這門課，是中文系學生的必修課。以前因爲董先生在台灣大學開課，他有《中國音韻史》——後來改爲《漢語音韻學》——這本書出版，所以大家都接受他的系統。後來跟大陸的交通慢慢開放，大家看到王力的系統，也有人覺得王力的系統比較正確。究竟哪一個系統比較正確？我

想應該有驗證的方法。所以我的目的就是希望找一些新的材料，有新的證據；用這個新的證據來檢討各家的擬音，倒底哪一個擬音比較可靠。我找到的證據就是同源詞。

首先我要說明的是：同源詞這個東西代表什麼？我們研究上古音的時候，根據詩經的押韻，歸納出韻部，所得的系統代表詩經時代。可是押韻的字有限，其他不在韻腳出現的字，倒底韻母是屬於那一類呢？後來發現大致同一諧聲偏旁都是屬於同一個韻部；因此在詩經押韻不足的部分，就用諧聲字來代替。就是說押韻出現的字，那個字所包括的聲符，也算是跟它屬於同一個韻部。所以現在我們就有兩個材料，一個是詩經押韻的材料，一個是諧聲字的材料。最初這兩個合起來用，好像沒有什麼大的出入。可是慢慢研究的結果，發現當中還是有一小部分的出入。一般的看法就是：詩經押韻跟諧聲字如果有不符的地方，諧聲字總是比較早。

我所找的同源詞的證據，我認爲比諧聲的時代還早。諧聲是文字產生的時候的系統，詩經的押韻是詩經產生的時候的系統，而同源詞的系統則代表語言產生的時代。這個應該比諧聲字、比詩經要更早。雖然剛才梅先生說：諧聲的證據比較可靠。我想比較可靠（或者比較具體──也許是比較具體），只是因爲諧聲聲符很清楚。同源詞如果是一個字一個字孤立，這個字跟哪個字同源，可能見仁見智。你認爲這兩個字同源，我不認爲這兩個字同源；憑什麼來斷定這兩個字一定同源呢？我認爲很要緊的就是要發現語言裡面有規律的對應。語言是一個系統，裡面一定有規律。研究同源詞就是要發現這個規律。研究同源詞時如果你光憑兩個字意義接近、語音有關；或者語音接近、意義有關，就斷定它是同源詞，是沒有說服力，不能讓人心服的。可是如果你發現，這些同源字都是有規則的。好比說一個是宵部、一個是元部，一個讀成 kjau（宵部）的字、和另一個讀成 kjan（元部）的字意思一樣。你可以說這只是巧合。可是你再看，這個叫作 pjau 的字，跟那個叫作 pjan 的字，意思也一樣。這個可能也是巧合──怎麼巧到兩個？然後你又看到一個叫作 sjau 的字、跟一個 sjan 的字，意思也一樣。你就不能再說都是巧合了、一再的巧合是不大可能發生的。我說同源詞的關係，就是建立在有規則的對應上面。聲母要一樣，或者同部位；韻母是 au 和 an 對立。這樣如果整套的發現，我就說這樣的同源詞是相當可靠的。因爲這不會是巧合，一定是這兩個字有關係。我們可以假設說在古代兩個字不是離的那麼遠，一定是相

當接近──語音應該相當接近，是一種轉換 (alternation) 現象。所以我的《從同源詞的研究看上古漢語音韻的構擬 》(1976)，在本質上可以說是一種內部的擬測 (internal reconstruction)。因爲發現語言裡面有對應關係，認爲它不是巧合，一定是從前有規則的語音的轉換。把它們的不同，解釋成是語音變化的結果。這是一個最基本的假設。這種語音對應，有它的規則性，從前一定不是離的這麼樣遠。一定有一個模式，倒底是什麼模式？我找到的模式，最明顯的，就是像"亡"跟"無"、"往"跟"于"的關係。古書上說"亡"跟"無"意思一樣，"往"跟"于"意思一樣。"亡"按照董同龢先生的擬測，是 *mi̯wang 的音；"無"是 *mi̯wag 的音。"往""于"也是一樣，一個是 *-ang、一個是 *-ag。按照高本漢的擬音，"亡"是 *mi̯wang、"無"是 *mi̯wo、"往"是 *gi̯wang、"于"是 *gi̯wo。如果按照高本漢的擬音，一個叫做 mi̯wang 的字、跟一個叫做 mi̯wo 的字，有同源關係；一個叫做 gi̯wang 的字、跟一個叫 gi̯wo 的字有同源關係，顯然是不能滿意的。根據這個，我們就可以初步判斷，高本漢對這個部分的擬音，不可靠。而董同龢的擬音比較正確。從這個例子就發現上古漢語有一個 *-g 跟 *-ng 的轉換：一邊是塞音韻尾 *-g、一邊是鼻音韻尾 *-ng，兩個同部位。至於這種消息倒底有什麼意義？現在還不知道。

　　現在再回到宵部和元部。按照董先生的擬音是：

宵　　　　元

*i̯ɔg　　*i̯an ／ 合口 *i̯wan

元部跟宵部對轉的是開口字。如果宵部上古音是 *i̯ɔg 、元部是 *i̯an，爲什麼這兩部會有字源上的關係？這個也是不可解。現在我就用這個，再來檢討各家的擬音，看哪一個能夠滿足這個條件。王力認爲宵部陰聲是 *au、入聲是 *auk，元部是 *an。李先生認爲宵部是什麼呢？他把合口的成份解釋成圓唇舌根韻尾，所以宵部擬成 *-agʷ、*-akʷ。假如把宵部按照李先生擬成 *agʷ、把元部擬成 an 的話，就找到一些線索了。按照我的模式，跟 -agʷ 轉換的，應該是 -angʷ。由此可以推測原來在詩經時代以前曾經發生 -angʷ ＞-an 的音韻變化， angʷ 音變入 -an（元）韻。我們就可以解釋整套的一邊是 -angʷ、一邊是 -agʷ 的對應關係。這個變化的模式，跟"亡"和"無"的模式一樣。這樣的假設能不能成立，你要看看上古漢語有沒有 *-angʷ 的音，剛剛

好宵部沒有相對的鼻音韻尾（參看表一），可見是發生 ang^w > an 的變化變入元部了。前面說"亡"對"無"，也就是魚部跟陽部的關係（魚陽對轉）──漢語音韻學上叫做陰陽對轉。現在宵部有陰聲、有入聲，而沒有陽聲──沒有鼻音韻尾。爲什麼沒有呢？它原來是有，可是在詩經時代以前，甚至於在諧聲時代以前，就變了。諧聲時代以前，在這些語詞產生的時候，應該是有 $*-ang^w$ 的音。後來發生語音變化，就變成 $*-an$ 了。這樣可以得到一個合理的解釋。

證據是漢藏語同部位陰陽入對轉的現象。現在我來檢討這個證據。(1)"矯健"──"健"($*-an$)屬於元部，"矯"──也是勇健的意思──屬於入聲、是宵部的入聲。爲什麼"矯"跟"健"意思一樣？假定說：原來它也是同部位的轉換，一個是 $-k^w$、一個是 $-ng^w$，這一對的情形就跟"亡"跟"無"的關係一樣。(2)"稈"和"槀"，"稈 $*kan < *kang^w$"是"稻麥的莖"、"槀 $*kag^w$"是"稻的乾稈"，兩個字意思也一樣。一個"槀"、一個"稈"，怎麼意思會一樣呢？我的假設就是說：這兩個字原來就是同源詞。雖然現在的音差的很遠，可是古代一個是 $*kag^w$、一個是 $*kang^w$，音很近；是由轉換的方式產生、衍生出來的兩個同源詞。(3)"偃蹇 $*jan\ kjan < *jang^w\ kjang^w$"和"夭撟 $*jag^w\ kjag^w$"。《廣雅釋訓》"偃蹇，夭撟也。""偃蹇"兩個都是元部字，"夭撟"兩個都是宵部字。還有(4)"斑 $*pran < *prang^w$"跟"斕 $*lan < *ran < *rang^w$"、"駁 $*prak^w$"跟"犖 $*rak^w$"。"斑斕"就是"駁犖"；"斑"就是"駁"、"斕"就是"犖"。這兩個字連起來可以用，單獨也可以用。"斑斕"都是元部字、"駁犖"都是宵部字，而且"斑駁"都是二等字。這些都是章太炎先生在《國故論衡》裡舉的例子，大家都不相信他。可是我覺得這裡面有些你不能說是巧合，也不能說是附會，是有原因的。我就從研究他的原因著手。

現在有一個有趣的現象，就是說雅洪托夫研究諧聲現象，他有一個很重要的貢獻，發現一個很重要的現象。來母字跟二等字──各種聲母的二等字──可以諧聲。而來母字通常只有一等韻、沒有二等韻，跟它諧聲的字都是二等韻。擬測上古音，是從中古音推上去的。中古音一等韻韻圖排在第一等、二等韻排在第二等；排的位置不一樣，表示它韻母不一樣。可是上古可以諧聲，顯示韻母應該一樣。根據歷史語言學的基本假設，語音變化有規則，所以如果說上古音這兩個元音一樣，到了中古元音變

成不一樣，一定要指出條件。以前找不到條件，只能說這兩個音上古可以押韻，韻母一定很近。兩個字在上古詩經時代可以押韻，表示它們的韻母一樣。中古音韻母不一樣，那表示上古也應該不一樣——這兩個互相衝突的命題，怎麼樣調合呢？在高本漢的時代，這兩個音在上古一定要擬成不一樣的音，只是很接近而已。然後到了中古，因爲上古稍微有點不同，所以到中古不同的就更厲害了——要這麼解釋。但是這樣一來，高本漢的韻母系統就變成非常的複雜。現在雅氏這個發現，就找到條件了。原來一個有 *l、一個沒有（雅氏擬了一個有介音、一個没有）。好比說一個是 *lak 的音、一個是 *plak 的音：上古音一個是 *-lak、一個是 *-ak，韻母一樣，可以押韻。到了中古，因爲 *l 的關係，影響了 *a，結果就分道揚鑣。到了中古，*lak 的 ak 跟 *plak 的 ak 就變成不一樣的音。這樣一來，我們在擬測上古音的時候，韻母系統就變的非常簡單，這是雅氏一個非常偉大的、了不起的貢獻。雅氏的 *-l-，後來李先生修改認爲是 *-r-。而且，最近很多人的研究也認爲實際上是 *-r-。

　　現在我們來回想看看：雅氏的假設有一個條件。他發現：l 開始的音（來母字），都是一等韻；而 plak 的音，是二等韻。可是他說應該屬於一等韻的來母字，卻有三個例外。"斑斕"的"斕"和"駁犖"的"犖"，都是二等韻。應該是一等韻的元音才對，怎麼會是二等韻呢？我們說這兩個字是例外，例外就不能解釋。現在我拿這個例子，可以做一個解釋。它的解釋是什麼呢？因爲"斑斕"、"駁犖"經常連起來用。這是古代的構詞法。一個是 plan lan，一個是 plak^w lak^w。因爲部分重疊的關係，講話的時候，習慣上知道 plan 的 -lan 跟 lan 的 lan，只是重疊而已，應該一樣。所以 plan 的元音變了，lan 的元音也受到影響跟著它變。這就是表示"斕"跟"犖"這兩個來母字——l 開始的音——到了中古發生變化是有來由的。這個例子也提醒我們，以前研究聲韻學，都是一個字一個字，把字當作孤立的東西來研究。然後說這個字不規則、那個字不規則。其實我們要想想，語言——講話的時候，不是一個字、一個字孤立的來講，是一個連貫發音 (connected speech) ——連起來講。所以語音的變化，可能就是在那個上下文當中發生。而變化發生，講話的人仍然不知不覺。編字典的人光想這個字怎麼唸，就給它注什麼音。我們雖然覺得這個很不規則，一個字、一個字看，也看不出所以然。可是要了解它的語音變化的情形，就要知道這個字經

常是在什麼時候用，在什麼環境之下用。就要把這一點考慮在內。

從這個地方，我就主張宵部跟元部兩個都有 *a 元音，不同的是元部的 *-n 是 *-ng^w 的音變來的。這樣可以解釋爲什麼宵部没有陽聲韻。如果接受雅氏的擬音，把宵部陰聲擬測成 *ü 、入聲擬測成 *ük，我們就不能解釋爲什麼宵部没有相對的陽聲韻尾。其次，按照雅氏的擬音，也不能解釋爲什麼這個 ü 只能有 ük ，而不能有 üt 、ün 。我們當然可以說， ü 是圓唇元音，跟圓唇的 -p 、 -m 互相排斥，所以没有 üp、 üm。可是 üt 跟 ün 爲什麼没有，仍然不能解釋。但是如果接受李先生的擬測，我們可以解釋說宵部是 *-ak^w，而這個 *-k^w 是一種單獨的輔音，漢語裡面只有圓唇舌根音 -k^w，而没有圓唇的舌尖音 –t^w、也没有圓唇的唇音-p^w。而且 *k^w 在字音的開頭也會出現。某個音在音節的開頭出現，如果同樣的也在韻的後面出現，一點也不奇怪。至於一個語言裡面，某一個音在音節的開頭可以出現，在韻尾卻一定不可以出現，你不能這樣說。所以實際上我不需要證明圓唇舌根音是不是可以出現在韻尾。因爲你剛好提到印歐語有没有出現在音節後面的，所以我就查印歐語的比較語言學，抄了這兩個例子。這兩個例子是詞素結構 (morphemic construction)。我覺得根據別的語言，來說某一個音可以或不可以在哪裡出現，並不能證明另外一個語言也可以，或者也不可以。我只是附帶的提一提而已。我想：假如我們努力要證明某一個音在某一個語言裡面不可能出現，這是背負了太大的證明的擔子。你要把世界所有的語言都調查清楚，然後才能說某一個音都不在某個位置出現，這個工程是太浩大了。

現在我們再回到最前面。李先生擬測古音，是以他以前的許多學者的研究爲基礎做擬音。所以上古音有多少音類，他就擬幾個。可是雅氏不一樣，雅氏還要進一步，給詩經的押韻分類。可見雅氏是很有野心的一位學者。他這樣做，如果成功的話，已經超過剛才梅先生推崇的王力脂微分部。如果雅氏在清朝三百年以後，在那麼多中外學者研究以後，又能夠在歌祭元、微文這幾部裡面，再一分爲二。這是相當大的一個嘗試。我認爲我們對他的分部，應該仔細看看是不是能夠成立？我仔細看他的文章，雅氏是一個非常誠實的學者，對他不利的例子，他也通通列出來。初步的印象是：例外太多了。我把它列出來，不是說雅氏不知道這些例外的情形。我只是要讓大家知道，向大家說明，他這些例外的情形是怎麼樣，一分爲二是可行還是不可行？這是我給

梅祖麟　龔煌城

他的評語 (comment)：首先，好比說一個是元部、一個是文部，以 an 跟 ən 來做一個例子。雅氏認爲：我們現在擬測爲 *ən（文部）而上古可以押韻的一群字當中，實際上是有兩類，一類是 *-un、另一類是 *-ən 。 *-un 是合口， *-ən 是開口——他說一個是O型，一個是E型，兩類彼此不押韻。 *-an （元部）他也認爲有兩個類型，一個是 *-an，另外一個是 *-on。 *-on 跟 *-an 照道理也不互相押韻——他的 *-on 我們普通寫成 *-uan。根據李先生的解釋，在詩經時代 -uan（像“短”那種音）——可以跟 -an 押韻，這是李先生跟所有其他的研究漢語聲韻學的人共同的出發點——他們都不認爲元部有兩類，而認爲只有一類都是 *-an。現在，雅氏說這兩類從來不押韻；押韻是例外。我們就要來考察看看，他是怎麼分哪些音是 on 、哪些音是 an。他認爲：中古音 -uan ——有兩類，一類是 kuan，由 *-on 分裂變成 -uan。詩經時代是 *-on， *-on 變成 -uan。好比說：“官”這個字， kuan 是從 *kon 變來的。另外一部分是圓唇舌根音 *kʷ- 變來的。換句話說，他認爲：我們現在讀成 kuan 的字，詩經時代實際上有兩類，一類是 *kon、一類是 *kʷan 。只有像 tuan 這樣的字，因爲沒有 *tʷ- 這樣的圓唇舌尖音，不能說 tuan 的 -u- 也是 tʷ- 變來的。所以只有一個解釋：tuan 的音一定是從 *ton 的音變來的。也就是說雅氏認爲：像 tuan、duan 或者 tsuan 這樣的音， -uan 一定是 *-on 變來的。不會是 tʷ-、 dʷ- 或者 tsʷ-，這樣的圓唇舌尖音變來的。可是 kuan 這樣的音就有兩個情形，一個是 *-on、一個是 *kʷ-（圓唇舌根音）變來的；而這兩類不能押韻。我們再看看他的分類（表四）。“歸”按照一種押韻的情形是跟“衣”押韻，而“衣”是開口、是屬於E型的元音。“歸”跟它押韻，所以一定要說“歸”是E型、開口型。第二首〈南山〉裡面，“崔”跟“綏”是舌尖音、合口，所以一定要斷定跟這些音押韻的“歸”是合口。因此在這裡就發生一個矛盾，“歸”這個字倒底是E型還是O型呢？如果從它跟“衣”字押韻的情形來判斷，它是開口、屬於E型。可是從它跟 *dzwər 押韻的情形來看，一定要說它是合口、O型才可以。再舉一個例子，“反”字在右邊，是屬於O型。可是這個字也出現在左邊跟“旦”押韻，“旦”非常明白，是屬於E型的元音。“反”跟“旦”押韻，就應該判斷“反”是屬於 *-an 的E型元音。可是反過來看“反”又跟“亂”押韻，而“亂”只有一個解釋，它是合口的 *-on。根據這些情形，我們到底要說“反”

是 *-on 的音還是 *-an 的音呢？可以兩歧嗎？還有 "館" 跟 "粲" 押韻，應該是 *-an 的音。可是 "管" 又出現在右邊跟 "變" 押韻。在這樣的情形下是不是還能主張元部可以分爲兩類呢？還有，"蠆" 跟 "弟" 押韻（葛蠆）；"弟 *djər" 是脂部、"蠆 *lįwər" 是微部。根據王力，這兩個是不同部，所以是例外押韻。例外押韻如果一個是 u 、一個是 i；我覺得這種押韻非常不合適。如果一個是 i 、另一個是 ə，還可以接受；如果一個是 i ，一個是 iə，也勉強可以接受。"存" 跟 "巾" 押韻（出其東門）。"巾" 是開口。可是 "存" *-uən 是合口。因此被迫不得不宣佈 "存" 也是例外。── "存" 又從 "才" 聲，"才" 是開口；所以 "存" 字有開口、合口諧聲的現象。同樣的，"泉" 跟 "歎" 押韻（泉水）也是例外。雅氏是很認眞的學者。解釋例外，一個一個作交代。我覺得他這種研究的態度，是值得我們學習的。不要光把自己有利的證據提出來，不利的就藏起來。

梅：龔先生，我插一句，他承認不能分的，是在唇音後頭跟舌根音後頭，也就是他所列的範圍。

龔：對這點我還要繼續補充。爲什麼以雅氏這樣有學養的學者，面臨這些不利的證據，他還相信能分？一定是他覺得例外不多。因爲每一種古韻分部都難免有例外押韻的現象、都會有牽扯不清的地方。他大概覺得從比例看，這樣的例外可以容忍。而且詩經可能有各地不同的方言、另外也許還有其他什麼因素，是我們所不知道的，他也許覺得這些都不足以動搖他的信心。可是我有兩點理由不贊成他的說法。第一點是，他的分類歸字會發生矛盾。譬如說 "官" 這個字，如果跟 tan 押韻，他就說 "官" 字屬於E型；"官" 如果跟 tuan 押韻，他就說 "官" 屬於O型。他的基本假設與他的方法允許他可以把喉牙音的合口字任意分成O型與E型，而只有當同一個字分類發生不一致的情形，我們才能看出其矛盾，而認爲其基本假設有問題。還有唇音，唇音在中古漢語根本就不分開合，只有一類。如果按照我的想法，就只有一個選擇：認爲是開口，就全部是開口；認爲是合口，就全部是合口。可是他也把唇音字分成兩類，它跟開口字押韻、就是開口；跟合口字押韻、就是合口。因此只有出現矛盾，我們才能看出

他的假設有問題。第二點，我不贊成他上古音這樣分，是從漢藏比較語言學的角度來看。爲什麼呢？因爲漢語的 ə 元音，如果可以照他的方法分成一部分是 ə、一部分是 u 的話，我們應該會發現他認爲是 -un 的音，就跟藏文的 -un 對應；他認爲是 -ən 的音，就跟藏文的 -an 對應——藏文沒有 -ən 的音，-ən 都變成 -an 了。可是漢藏語的比較研究並不支持他的說法，他認爲 un 的音，一部分跟 an 對應、一部分跟 un 對應，他認爲 ən 的音，也有一部分跟 an 對應、一部分跟 un 對應。這就是我在表五舉出來的，對他不利的證據。舉例來說，"分" 這個字，根據他的說法是 E 型元音，所以元音不是 u、而是 ə。可是這個字跟藏文的 u 對應，我認爲這個字，原來漢藏語就是 *u。*u 在詩經時代，已經變成 ə 了。再看 "貧" "飛" "銀" 等字，這些字依據雅氏的標準也是屬於 E 型元音，可是相對的藏文卻是 u。而在另一方面他認爲是 u 的，像 "孫 *sən" 這個字，按照他的說法是 un、合口，可是藏文卻是 mtshan，古藏文是 m-san——以後 s 變成 tsh，這是李方桂先生發現的古藏文的詞頭影響聲母的情形。所以從這一點看起來，他的 un 跟 ən，跟藏語比較起來都不合。他有沒有辦法解決呢？我認爲他沒有辦法解決。根據這些對應關係，我推測原始漢藏語的 *u，在藏語保存，在漢語變成 *ə。至於漢語的 *ə，原始漢藏語也是 *ə；藏文沒有 ə 的音，因爲它變成 a 的音了。

　　假如我們反過來說，認爲這兩個音原來都是 u，又有什麼缺陷呢？第一、漢語 u、藏語 u，因此原始漢藏語 (Proto-Sino-Tibetan) 也應該是 *u。按照雅氏漢語是 u，藏文是 a，原始漢藏語倒底是 *u、還是 *a呢？第二、漢藏語如果是 *u 的話，爲什麼在藏語一部分的 *u，得以保存，一部分的 *u 卻變成 a 呢？講不通的。如果漢藏語是 a，就要說原始漢藏語的 *a，變成上古漢語的 *u。這樣的變化比較不自然。同時，一部分的 *a，變成漢語的 a，一部分變成 u，也沒有條件。所以，一定要像我的解釋，條件很清楚——原始漢藏語的 *u，在漢語變成 *ə，跟原來的 *ə 混在 (merge) 一起，變成一類了。現在只有根據比較的證據，可以在漢語的 *ə 裡面，分出一個 *u 變來的 ə，一個原來的 *ə。u 跟 ə 已經合併在一起了，由 u 變成 ə 這個方向比較合理。所以說在詩經時代已經是 ə 了，上古漢語音節結構有個限制，圓唇韻尾——像 -p、-m 的音、圓唇舌根音韻尾 -k^w 跟 -ng^w，不能跟 u 圓唇元音結合，這是互相

排斥，是一種異化作用 (dissimilation)的結果。我也認爲漢語發生過異化作用。根據這個現象，宵部一定是圓唇舌根音韻尾，因爲宵部沒有合口字，即沒有圓唇舌根音聲母。幽部也沒有，因爲它後面是 -k^w、-g^w，圓唇舌根音的韻尾跟圓唇舌根音的聲母，互相排斥。這個現象可以認爲足以支持李先生圓唇舌根音韻尾的擬測。

梅：我剛才聽龔先生講元宵二部，實在非常精采。我昨天還跟洪惟仁先生說，我覺得章太炎那個"對轉"，根本就是得要重建。看龔先生博士論文裡面侯部以及幽部對轉的情形，原來章太炎那些個"對轉"的東西還有道理。其實元宵那個部分，也是在龔先生博士論文，而且是最前面一節。我當時看的時候，我是懷疑；不過今天聽了以後，覺得是非常精彩。我說說爲什麼。一個呢，雅氏沒有 r 介音的三個例外裡面，解釋了兩個。我覺得因爲精密 (detail)，更能夠令人信服。龔先生的這個理論，並不是爲這個設的；而是附帶的把一個長久的問題給解決掉了。另外呢，像"短"不但跟"豆"諧聲，而且找出藏文的同源詞，所以完全可以看出它的發展脈絡，是侯、元合對轉。同時還有"取 *tshugx"（侯部）"最 **tsugs > *tsuts > tsuats"（祭合）"叢 **dzung > *dzun > dzuan"（元合），它們的聲符都是"取"。還有"篤 *tək^w"（幽部）"敦 **təng^w > *tən"（文合），藏文是 thug < *tug "thick"。是幽部跟文部合口的對轉。侯跟元以及幽跟文的對轉，都同時有諧聲字，又有同源詞；而且"取""最"是右文。我覺得這是非常強的證據。但是，我最初看龔先生的元宵對轉，雖然說的很有意思，而且它這個變化，*-ang^{w}一掉，就掉了圓唇舌根韻尾。中部跟幽部相對應的陽聲韻，也是掉了 -əng^w。那倒是非常好的一種平行。不過呢？我信不信這個東西呢？當時就覺得，只是靠同源詞，這個東西總是有點玄。不過，這回聽龔先生元宵這個解釋非常非常好。也就說是在某一方面說起來是很冒險，但是冒險而是很成功。因爲諧聲字是古人認爲相同，並不是我們認爲相同。同源詞——尤其是龔先生講的，兩個語詞同時出現。這種是非常強的證據。因爲不只是一個字、一個字配，而是兩兩相對的配，而兩個都能解釋。我眞是很高興，我們談了以後，對於元跟宵對轉我現在是相信的。

龔：如果你能夠接受宵部是 $*\text{-ag}^w$ 的話，就不會反對幽部的 $*\text{-əg}^w$ 了。

梅：對。

龔：我不正面攻你，我就從旁邊攻。

梅：對，旁邊攻。我猜想大概龔先生根本已經知道有這個東西：$*\text{-ak}^w : *\text{-ang}^w$。也就是說，這個東西假如把它放回到漢藏語，藏文它出來的音應該是 og 或者 o ，是不是？這個在您1980裡面沒有……。

龔：沒有例子。我最近看到俞敏的文章，宵部也沒有例字。宵部的字不常用。一個語詞經過幾千年，要保留下來，一定要很常用才行。

梅：您找到漢藏對照的例子?! 我覺得如果有這麼樣的例子，幾乎問題就已經解決了。

龔：我現在還沒找到。

梅：還沒找到。我也是想到有宵，我就看看宵有點什麼字？一查：根本都偏僻的很。

龔：你找到的話，就寫信告訴我。現在漢藏語言學比較麻煩的一件事，就是說你看很多人提出來的同源詞，十之七八不可靠。大家看了就眼花撩亂，就懷疑漢藏語這種東西是不是能成爲科學。研究漢藏比較語言學的人幾乎每一個人都花很大的力量找同源詞，我自己也帶著沙裡淘金的心情，希望找到一、兩個宵部的好例子。結果我自己沒找到，也沒看到別人找到。

梅：所以我們都做過類似的工作，都沒找到。

龔：應該先知道要到哪裡去找。研究漢藏語先要有一點正確的觀念，才知道到哪裡去找黃金。要不然，只能撿到破爛。

梅：龔先生能不能稍微講一點？您也說了，"豆""短"只是方言的現象。龔先生"短"的擬音是 **tung ＞*tun ＞tuan 。雅氏應該是 **tong ＞*tuan ……。

龔：雅氏没有這個意思，這恐怕是你的意見。

梅：對。我是說接受你的意見，在雅氏的系統裡面，怎麼表示法。不過我還是覺得這一類的例子，也就說是李先生的 *ua，是不是可以推到漢藏語？它的分布是怎麼樣？

龔：我現在是這樣想： *ua 可能是從更早的 *u 分裂的，我想很可能。

梅：對。

龔：可是，漢藏語的階段已經是 *ua 了。爲什麼呢？因爲藏文跟緬甸文一比較，緬甸文已經是 ua 了。

梅：不過緬甸文它也可能是分裂的。

龔：問題是我們現在如果以多數決的話，一個藏文、一個緬甸文、一個漢語：藏文 o 、緬甸文 ua 、漢語 ua ……。

梅：它可以是共同的變化 (common innovation)。

龔：對。可是這個說法有嚴重的缺陷。我是認爲： *ua 代表原來的，漢語跟緬甸文的 ua 存古；藏語的 o 才是後起的。當然擬測古音不能靠多數決。另外一個考慮是這樣

：從藏語內部的情形看起來，這個 o 是後起的。

梅：能不能說藏語有一部分 o 是原來的，有一部分是後起的？

龔：假如說藏語有一部分 o 是原來的，而漢語你把侯部擬成 o，然後又推到漢藏語，那麼有一個問題，後元音有 o 有 u，前元音有 i 應該也有 e。但是有沒有 e 呢？顯然沒有。前元音只有一個，後元音爲什麼有兩個呢？藏文現在是 a、i、u、e、o ，前元音有 i、e，後元音有 u、o，但按照你的說法，藏語的 o 也不是原來的，因爲 o 變成 u 了。

梅：有一部分變成 u，有一部分不變。

龔：在 ng 的前面。按照你的說法，像 ong 要變成 ung。

梅：對。

龔：可是，現在藏文的 ong 是從那裡來的？你要解釋藏文的 ong 是從那裡來的？還有，o 變成 u 的話，我們通常也會預期 e 也會變成 i。像英文的元音大遷移 (great vowel shift)，ē 變成 ī、ō 也變成 ū。類似的演變，在緬甸文也發生過。緬甸文原來有 -ik、-uk，後來 -ik 變成 -aik、-uk 變成 -auk，這也是一種平行的演變。

梅：我一直感覺到，比方說現在漢語，它的元音是根據後頭韻尾有所變化。所以王士元，是 Wang；王安，中文也是王；但是變成英文呢？就是 Wan。所以我覺得這樣的元音受後頭的韻尾的影響，可能不只是現代漢語，而且很可能是一種漢藏語裡面的共同性質。所以您剛才舉的例子，英文的元音大搬家，不管在那一種語境 (environment)，它都移位 (shift)。很可能在漢語或者跟漢語同親屬的語言不一樣。當然，結果是把問題變成複雜了。不過，變成複雜，至少可以試試看。因爲倒底現在藏文字典裡面這

些個語詞，我們不太知道它有多少是現代的、有多少是古代的？相隔那麼遠。雖然藏文本身有 aung 跟 ong 的對比 (contrast)，我們在沒有理清藏文的詞彙 (lexicon) 以前，這個確實是一個問題。目前至少不應該阻止我們向這方面探索。我的意思就是，我們不能說是七、八世紀所寫的字，都是從早都有的，就代表典型的藏語。你講的是原始藏語 (Proto-Tibetan)，它的元音系統就可以被藏文全部代表。這個至少從我們漢語的經驗，不是這麼回事。藏文相當於我們的中古音，中古音的元音可複雜了。

龔：從漢藏語的比較研究來看，依我的看法，藏文也不代表原始漢藏語的元音系統，因爲 e 跟 o 是後起的。跟緬甸文比較，古緬甸文沒有 e 跟 o；而 *ə 也消失了。所以我也不是把藏文就當作原始漢藏語。

梅：所以我覺得 *ua，確實是一個我現在還是覺得非常麻煩的問題。也就說是，*ua 我們怎麼把它推上去？*ua 在漢語裡面所出現的範圍是限於 *-n、*-t 這些個音之前，我們只有在這些個音之前可以把它推上去。所以在共同漢藏語，它的分布也是這麼有限制 (limited)。我認爲是非常奇怪的一種事情。同時，*uk、*ung、*ug，也是同樣往上推。我覺得乾脆放兩個星星 (star) 就完了。結果呢？

$$**uk、**ung、**ug > *uk、*ung、*ug$$

$$**uat、**uan > *uat、*uan$$

好了，碰到這種情形，幾乎正好是互補。我覺得這是一個非常滑稽的語言。也就是說到後來是：越像上古漢語的，越像共同漢藏語，這個我覺得是非常滑稽的一個結論。

龔：我沒有完全了解你的意思。

梅：我們從上古漢語李方桂先生的東西來說，他是互補。也就：有 *u 的侯、東，它的出現範圍只限於在舌根音前頭：*-t 這裡是缺項——*-p 不管，反正是異化 (labio-dissimilation) ——同時元、祭、歌的合口，李先生擬成 *ua（參看表二），這個跟藏文的 o 是對比。好了，我們現在假如往上推，共同漢藏語也會有這麼一個分配

很不平均的現象。也就說是：*ua 只能在舌尖音前面出現，而 *u 只能在舌根音前面出現。我覺得這真是一個非常滑稽的一件事。

龔：因為語言這種東西，都是歷史演變的產物。我們現在擬測原始漢藏語，只是表示那個時代的情形——漢藏語還沒分家的那個時代的情況。那個時代的情況，我們是根據漢語、藏語、緬甸文來做推測。推測推到那個階段，發現那個階段的分布不均勻，也沒有辦法，因為事實就是這樣。你如果再進一步考慮：為什麼那個時候的分布會這樣不均勻呢？你可以說：這個可能是某種變化的結果。那就變成比原始漢藏語又更早的階段，沒有材料來做考察。那就變成純粹的推理 (speculation)，把語言弄成一個數學公式了。現在我們瞭解的語言，語言某種變化會破壞它的均衡的系統，然後又有一種力量在修補。所以一邊變成規則，一邊變成不規則，這樣一直變。如果依這樣的觀點來看，我們發現現在的音，就想這個應該是以前的什麼情況變來的，追溯到以前會變成比較規則。如果以前還有不規則的話，我們也可以推想那種不規則更早是規則的。如果說語言有一個傾向，把它變成很均衡、很對稱、很整齊的語言；如果已經達到一個完美的境界，語言就不應該再變了。可是語言還是在變。所以我們就想：破壞的力量是什麼，而修補的力量又是什麼？這個也變成一種純推理了。大概語言破壞的力量就是發音的方便（語音變化的原因有各種各樣的說法）。變了以後，這均衡就消失了。以後可能就有一個新的力量，又給它補起來。這是我現在的看法。好比說現在的國語，古代的濁聲通通變成清聲了，可是也留下一個濁聲母的 z（日母）。像"日本"的"日"字，是國語裡面唯一的濁聲母。濁聲母應該變清啊，所有的 *b- 的音都變成 p- 或者 p'-，*d- 的音都變成 t-、t'-，*ʒ- 的音都變成 ʃ- 了。從系統來看，現在也是不均衡，怎麼語言裡面都沒有濁聲，只有一個 z 的音了？可是你不能因為濁聲母分布不均衡，就說它不對。事實就是這樣。你要追究它為什麼會這樣，找出它的原因。我們現在是知道，原來它不是普通的濁擦聲，原來是鼻音，或者是 *ń-。按照高本漢的擬音，日母前面有一個 *ń- 的話，那個 *ń 可能阻止 *ź 變成 ʃ 的音。或者它就是鼻音變來的，那我們就接受。漢藏語也是一樣，你推到原始漢藏語不規則，你也不能因此就懷疑它不是這樣。根據現在的證據，我們只能這麼推測。而那個時候的不

規則，可能有什麼特別的原因。我們可以去猜想，但可能没有什麼證據可以作科學的推論。

梅：我覺得光想是不行。但是看到這種"互補"的情形，按照一般的說法，出現的範圍互補，而音韻可以有變化。所以就是在詩經裡面不能分的狀況，我們還是想法給它補出來。結果也就是——我覺得雅氏它系統裡面最引人入勝的地方——東、侯下頭，假如我們把祭、元的合口放在下頭，而把它定在諧聲時代。結果上古漢語的元音分配就比較均匀，我們不需要把漢語元音分布不均匀的情形，推到共同漢藏語。這是一個工作。另外，我覺得具體的一個工作，是柯蔚南 (South Coblin) 想做的。也就是整理藏文詞彙，把它分分時間，說不定有些是梵文借來的。我們知道藏文從梵文裡、從漢語裡借了很多字。借詞可以攪亂它原來的音韻系統。這麼一來，就把問題弄成複雜了。確實如此。不過您有一個前提，藏文字典裡所能看到的音韻分布，我們最早只能推到七、八世紀。七、八世紀所留下的藏文，我覺得多少還有辦法可以理一理。也許有些個根本就是後起的，當然我們有材料的限制。也許就是您所研究的西夏文裡面——西夏文或者緬文，可以給我們一些線索。有些個詞彙，是在西夏文、或者緬文裡面共同出現的，我們認爲這些是共同藏緬語 (Common-Tibeto-Burmese)。用那些個詞彙，看看它的音韻分布，是不是跟藏文字典裡面所看到的音韻分布一樣？

您說的對：比原始漢藏語更早的東西我們簡直没法弄，那根本就是一個純推理。那就是回到章太炎先生，不但有「初文」，現在是「初音」(Proto-human)，這個東西我們真是不應該做的。

我今天學了很多東西，尤其是元、宵對轉。我回去真是仔細想想，元宵對轉假如可以接受，實在没有道理不接受幽或者 Kʷ。這是一個問題，牽涉 Kʷ 的問題。同時我還是覺得，李先生的制度裡面，在某一方面是非常圓滿的。但是他的 *ua。您列的時候，總是只列祭元歌的開口（表一），假如把合口一起列出來（表二）。就會覺得爲什麼就是祭元歌三部有兩種元音？而整個，我覺得雅氏跟李方桂先生最偉大貢獻，也就是說其他二十一個韻部，都只有一個元音，這是最重要的一個擬構上古音的原則。這個原則也就是李方桂先生跟高本漢不同、跟王力不同、跟所有人不同的地方——一個

韻部只有一個元音。李先生也說——您也說，*uat 跟 *at 可以押韻。不過，雖然詩
誼是可以這麼押韻；我們從分布來看，這個還是一個非常美中不足的特點。當然，我
們面對事實，沒什麼辦法。不過，我們就把它列了出來，列了出來以後，可真得要想
想辦法。我就覺得這個東西不能夠因爲漢語分布那麼不平均，結果就讓我們兄弟的語
言藏緬語，也蒙受同樣的不平均。這個好像並不是一個很好的辦法。像"短"這個字
在《論語》裡出現過，並不是很晚。我們知道在楚方言，魚侯通押，還有東陽也通押
。我覺得這個例子特別好，是龔先生找到的。它什麼時候有？共同漢藏語就有。它的
演變經過，諧聲、押韻的情形，我們知道的清清楚楚。這種例子特別值得深思。

龔：我看到"短"那個字，又想到另外一個字，就是"鐵"字。"鐵"字在中古音是
　　*thiet，可是這個字聲符是"壬" *thing，是 *-ng 收尾。因爲是諧聲字，所以原來韻
　　尾的發音部位可能是一樣的，一個收 -k，一個收 -ng，是陽入對轉。"鐵"字古音如
　　果是 *thik，假定發生 *thik > *thit > thiet 的變化，只有一個證據，就是它跟"壬"這
　　個字的諧聲。可是泰語"鐵"叫作 hlek。如果漢語的"鐵"跟泰語的"鐵"有關係，
　　而且如果 *thik 這個擬音正確的話，我們現在可以看看發生了什麼變化：首先， *-k
　　在高元音後面向前移，變成 *-t。以後 *-i- 發生分裂，就變成 *-ie-，變成四等韻。這
　　個現象就跟"短"的現象平行。"短"原來是 *tung，在高元音 u 後面，*-ng 向前移
　　，就變成 *-n。以後 *-u- 也發生分裂，變成 *-ua-。-i- 分裂，不是變成 -ia-，而是變
　　成 -ie-，就是現在的四等韻。耕部、支（佳）部，沒有一等，只有四等韻。一等韻應
　　該是 -i-，可是沒有 -i- 的音。爲什麼？因爲發生分裂變成 -ie-。像這樣，個別的、獨
　　立的證據互相交叉、互相支持構成一個系統。像這個"鐵"要有諧聲字，來暗示它來
　　源於 *-k；還要有泰語的 -k 來對應。"鐵"的變化，跟"短"互相配合，這些整合起
　　來構成一個上古音系統。光是一個孤立的證據，我覺得太薄弱，太不可靠。

梅：跟這個平行的，是"節" *-ik > *-it ，它的諧聲是 *-k 尾。假如龔先生說"鐵"
　　這個字是平行的話，是戰國以後的事。上古音還是 *-ik，不是 *-it。"鐵"是很晚起
　　的東西，戰國才有鐵。因爲東西晚進來，所以可以證明 *-ik > *-it 的時間很晚。因爲

上古音是很長很長的一段，一直從周初或甲骨文末年，也就是從公元前一千年，到公元前三百年。我們從這個例子可以看出來，泰語借字其實是漢朝借的比較多。鐵這個東西，在中國也是戰國時才有的。

龔："短"字在《詩經》裡面有沒有出現過？

梅：大概沒有，我所看到的。我只查高本漢的《中日漢字形聲論》(《Grammata Serica》)，它的例證 (citation) 是《論語》。

龔：如果"短"字在《詩經》韻腳沒有出現過，我們就沒有把握說當時"短"字已變成 *-uan 的音了。

梅：不過您說假如是平行的話……。

龔：如果是平行的話，"短"變成 *-uan 的音，應該是很晚，不應該是在詩經時代。根據這一點來推論，"短"字如果出現在先秦文獻的韻腳，它不應該與 *-an、*-uan 的音押韻。如果出現在韻腳，而竟與 *-an、*-uan 的音押韻，您的音韻變化時代的假設，就要修改。假如我們發現"短"字在韻腳出現，而它跟我們明確知道是 *-an、*-uan 的音押韻。那些文獻就可以讓我們知道"短"變成 *-uan 的確實的年代。

梅：我覺得您博士論文裡面有很多平行變化，我們多少猜想這種平行的變化所發生的時間。正好"鐵"是一個晚出的東西，所以是晚起的字，它正好有泰語的借詞的證據。當然這個論證並不是那麼準確。

龔：鐵器時代差不多是幾年？

何：是戰國。中國的工藝發展，"鐵"是青銅時代以後的產物。整個兩周都是青銅時代。

梅祖麟　龔煌城

龔：這麼說來，"鐵"這個字應該是在戰國以後才出現，而它出現的時候，應該是
＊-k 的音，如果諧聲字與泰語借詞的證據可靠的話。

梅：對。按照這個可以說是：從戰國，一直到中古以前"鐵"已經借入泰國。假如說
是按平行變化——因為我們沒有其他的證據，來定"短"的年代——就會出現這麼一
個結果。

龔：如果按照同源詞與諧聲字的證據看起來，從漢藏語時代，一直到文字產生的諧聲
時代，還是唸一樣的音（城按：指"短"讀成 ＊tung 的音）。

梅：＊thiet 這個音？

龔：這個音我就不知道了。諧聲時代絕對是 ＊thik ，泰語是這樣，對不對？因為你說
是戰國時代。如果平行演變的話，諧聲時代是這樣，詩經時代還不可能是 ＊thiet 這個
音，對不對？

何：我提供一個字，這個字見於《詩經‧秦風》裡面，"小戎駟驖"。但"驖"不是
鐵器的字。換句話說，這個字的意義是在於"鐵"這個音已經出現。

龔：是不是韻腳？

何：不是韻腳。

龔：在韻腳才能知道它是屬於那個韻部。所以現在我們還是面對同一個問題：如果"
鐵"是戰國時代才有；而且如果"驖"的意思就是"鐵色"，由"鐵"字衍生 (derive)
出來的話，將會是互相衝突的假設，一定要想辦法解釋。因為《詩經》比戰國早，而
居然知道有鐵，才能有鐵色的馬。唯一的解釋，如果兩個都沒有錯，我們必須要說"

鐵 ” 原來不是指 “ 鐵 ” ，而是指……。

梅：黑色的東西。

龔：黑色的東西，拿來給鐵命名。是後起的。如果是這樣的話，“ 鐵 ” 就不應該是從泰語借到我們這裡來，是由我們這邊借到泰語去的。

梅：對，是我們借到泰語。借到泰語的時候是 *-k，我們現在就要推測，什麼時候可以借進泰語？我們一般覺得借入泰語不會太早。因爲您很好的那個同源詞：“ 易 *rik > jiak（交易、交換）” 跟泰語的 lεεk 是同樣的。泰人跟漢人做買賣，他就得學這個字。而且我跟您也提過的 “ 鬲 ” ，它對龍州泰語的 heek。我覺得都是同一時期，而且是比較晚，頂多是戰國時期。還是回到原來的問題。戰國已經是上古音的晚期。這些個變化您多少得排上一個絕對時間。絕對時間是什麼時候？

龔：你看呢？

梅：上古。所以我還是說，得回到雅氏元部合口，它有 *-on。我這個說法不只是爲解決這個問題，而是解決互補分配的問題。

龔：雅氏現在還在嗎？

貝：還在啊！(PEYRAUBE A.)

梅：聽說他明年會到法國去。

貝：六月會到法國去。

龔：我們大概得在這裡結束了，謝謝各位。

第二次對談（1989年12月23日）

梅：今天這裡其實可以談的問題很多。不過我看見龔先生帶來了泰語的書，所以我們先談泰語。有一回，也就是二組的討論會，我們談到了一個有關漢語的鼻音問題。也就是傳統所謂次濁聲母，借到泰語，聲調相當於泰語的1調；1調按李方桂先生的擬構，是清鼻音。泰語和漢語的平去上入的對應關係是：

漢	泰
平	A（1, 2）
去	B（1, 2）
上	C（1, 2）
入	D（1S, 1L, 2S, 2L）

"巫"暹羅話 (Siamese) 是 A1 mɔɔ ，相當於漢語的清音平聲。那麼它的 1 差不多相當於漢語的陰聲調，它的 2 差不多相當於漢語的陽聲調。霧 D1L mɔɔk 、帽 D1L muak 、墨 D1S mïk 、膿 A1 nɔɔng 、顎 D1L ngïak 等字，在暹羅話都變成清鼻音。龔先生所講授的「漢藏語言學導論」也討論過類似的問題；而且龔先生對剝隘方言裡的漢語借詞做的很深入。所以問題的起源，也就是為什麼漢語的鼻音聲母（次濁聲母）借到泰語變成清鼻音？或者說是一般的泰語，至少是原始泰語 (Proto-Tai)，出來的是清鼻音。如"墨"泰語的意思是 ink，我們知道上古音是 *mək，而在泰語是 D1S mïk。暹羅話轉寫制度中，把聲母分成高、中、低三種。'ink' 這個字在各泰語方言可真是奇怪，在暹羅話是 D1S，在龍州、剝隘是 D2S。D2S 很好，可以擬構 *m-，而 D1S 則是 *hm-（清鼻音）。我們上回討論時，我就想到何大安先生的一篇很好的文章〈濁上歸去〉(1988)，探討次濁是歸濁還是歸清？在漢語方言中，上聲有一種是跟濁，有一種是跟清的跑。我自己也寫過一篇文章〈說上聲〉(1982)，提到邵雍的汴洛方言鼻音的上聲是跟清的跑，也是次濁音跟陰聲調走的現象。所以我也碰到類似的情形。

我猜想古漢語也許就有兩種方言，次濁音中一種跟清的跑、一種跟濁的跑。不過這種說法還是很混淆，你得要說清楚平聲裡面次濁音是跟清的跑、還是跟濁的跑，上聲裡面次濁音是跟清的跑、還是跟濁的跑等等。我們上回討論何大安先生跟林英津小姐有關客家方言的文章，平上入的鼻音都跟清的跑。不過客家方言一般說法是代表宋代方言：更早有點什麼證據？更早有賴惟勤的文章。我們都沒找到他用日文清楚寫出來的文章 (Tsutomu Rai: The *Shoomyoo*（聲明）Hymns of Japanese Buddhism and the History of Chinese Tones., 1976)，我想最重要的就是第二章。結論也就是在入聲中，濁歸濁，而次濁則跟全清、次清一致。在日本聲明的讀音中，入聲裏面的鼻音聲母（次濁）是跟清的跑。在這一方面是跟客家方言相同的。另外是遠藤光曉的文章〈「悉曇藏」の中國語聲調〉（載在尾崎雄二郎、平田昌司編《漢語史の諸問題》（京都，1988），39-54頁）——我在北大認識他，現在在東京大學。這篇文章裡是用安然的《悉曇藏》及唐代傳到日本的四種聲調體系作成對照表（表一）。他這個表非常有意思，表、金、正、聰是四個會說中國話的和尚，表是中國人、金可能是朝鮮人、正跟聰是日本人；他們的時間差不多是從八到九世紀。先看金跟正非常有意思，金下頭入聲和上聲的次濁都跟清的跑，正和尚的入聲次濁歸清、上聲歸清；平聲次濁他說的不太清楚，只說「輕之重」。

表一

		表	金	正	聰
平聲	清	"直低" *33	表に同じ	?	正に同じ
	次濁	"直低" *11	表に同じ	"輕之重"	正に同じ
	全濁			?	正に同じ
上聲	清	"直昂" *55	表に同じ	金の平輕＋上輕 *35	正の上重に類似
	次濁				
	全濁		平重＋平輕 *13	金上重，不突	正の平輕之重
去聲	清	"稍引" （長い）	表に同じ	"短"	角引終直止 *33
	次濁			"長"	自らの上重に似る，角引，終稍昂 *34
	全濁				
入聲	清	"徑止" （短い）	表に同じ	"昂" *5	正に同じ
	次濁				
	全濁	"徑止"	表に同じ	"低" *1	正に同じ

說來說去，漢語方言中有客家方言入聲次濁是跟清的跑。我們也有若干文獻的證據，可以一直遠溯到唐代。所以我以前就有個想法，聲調一般是清音、送氣 (voiceless、aspirate) 所產生的聲調最高，其次是清音、不送氣(voiceless、unaspirate)，然後是我們所謂的次濁 (continuance)，也就是鼻音、邊音 (nasals、laterals) —— 這裡有鄭秋豫小姐，也許可以爲我們說一說聲學上的根據 —— 再其次就是濁音 (voice)。當然在泰語

還有帶喉塞音聲母 (pre-glottalized) 如 ʔd-、ʔb-、…，暫時先不管。漢語借入泰語的那個時候是哪個方言，我們不太知道。不過我們知道漢語方言並沒有鼻音變讀的情形。不過呢，假如是像這個樣子：

	泰			漢
全清	p-	陰		p-
	hm-			m-
	———			———
全濁	m-	陽		b-
	b-			

上面等於我們的陰，是泰語的1；下面等於我們的陽，是泰語的 2 。原始泰語的鼻音跟濁的在一起——我相信原始泰語的鼻音有兩種，一個是清、一個是濁。 hm 是 1 ，而 m 是 2 。假如是漢語某個方言某個聲調裡鼻音歸清的話，借入泰語就讀清鼻音 hm-。這是我簡單的想法。

龔：關於漢語和泰語之間的關係，我在唸書的時候傾向於相信漢語與泰語同源的說法。如果漢語跟泰語同源的話，怎樣利用泰語來擬測我們的上古音，是個很重要的問題。其中像梅先生剛才提到的墨和黑的關係就很有意思。這兩個字有兩重關係：第一點，墨的聲符是黑，墨與黑有諧聲關係，所以如果上古"墨"是 *mək ，"黑"是 *hək ，兩者相差得那麼遠，*hək 怎麼可以做 *mək 的聲符呢？第二點，墨跟黑有詞源關係。因爲墨是黑的，兩者可能同源。換句話說，他們是由同一個詞根衍生出來的兩個不同的詞。如果一個讀 *mək ，一個讀 *hək ，差得太遠，不可能同源。而高本漢根據諧聲和同源關係，把"黑"擬成 *hmək 。可以解釋兩個字的諧聲關係，一個是 m- ，一個是 hm- ，聲音很近。這樣的擬音也可以說明同源關係："黑"是由"墨"加上詞頭造成的；換句話說，先有"墨"後有"黑"。董同龢先生研究諧聲字，認爲——"黑"的 hm- 表示清鼻音，不是複聲母。按照他的說法，"墨"和"黑"諧聲，是一個濁的 m- 以清的 m̥- 來做聲符，也講得通。那麼怎麼解釋同源的關係呢？也許可以說清的"黑"和濁的"墨"有音韻轉換 (phonological alternation) 關係。

開始的時候，我提到研究上古漢語，要進一步研究同源的語言；同源的語言所透

露的關係，可以用來擬測更早的階段。假如說漢語跟泰語同源的話，漢語跟泰語做比較，應該可以透露上古音以前那個階段的語音消息。泰語有個"墨"字與漢語同源。可是泰語的"墨"很奇怪它是這樣子寫（ หมึก ），轉寫是 hmïk (hmɯk)，現在讀成 mïk。字母前面有個 h-，倒底是什麼東西？在泰語內部有爭論，簡單說有三種說法：第一種說法，認爲 h- 只不過是表示聲調的符號而已——加一個 h- 來表示不同的聲調。第二種說法，認爲 m- 加上 h- 表示清鼻音——認爲古泰語有濁的 m、n、ng 和清的 m̥、n̥、ŋ̊。最後一種說法，根據泰語和藏語緬甸語的比較，馬伯樂 (Maspero) 發現泰語 m 前面的 h-，相當於藏文的詞頭 r-——就是梅先生舉的例子，有的時候也相當於 s-（即：泰語的 hn 和藏文的 sn- 對應）。泰語的 hna "臉孔"，對藏文的 sna "鼻子"，緬甸文 na 也是鼻子。當然臉孔與鼻子意思不一樣，但都是指身體的部位而且還相當接近，有同源的可能。現在我們拿第三種說法，以泰語的hmïk 跟漢語的"墨"和"黑"作比較，卻遇到一個困難：

泰 語		漢 語	
hmïk	"墨"	*hmək (m̥ək)	"黑"
		*mək	"墨"

不管是董先生的清 *m̥- 或高本漢的 *hm-，跟泰語 hmïk 相對應的應該是漢語的"黑" *hmək(m̥ək) 才對。結果卻是漢語的 *mək ，因爲泰語 hmïk 是"墨"不是"黑"。

　　我最初相信漢泰同源。但是如果同源，不管那一種說法，漢語和泰語的對應關係應該都是一致的。怎麼說呢？泰語的 hmïk，它一定是先有個前綴 h-，我們可以設想原來是 *sm，*sm 變成 hm 。 hm 影響聲調，h 脫掉變成 m-，這是一個說法。另外一種解釋是：因爲 s- 是清的，使濁的鼻音發生同化作用而變成清音，s- 脫落，剩下清鼻音。如果這樣解釋，則是以泰語的 h- 和藏緬語的 s- 相對。

　　不論採用哪一種解釋，如果漢語和泰語同源的話，以漢語的 hm- 或 m- 來對應泰語的 hm- 都不妨礙。可是麻煩來了，泰語有 hmïk "墨"，卻沒有"黑"。如果泰語的 hmïk 和漢語的"墨"同源，漢語的"墨"應該是 *hmək；那麼黑就不可能是 *hmək，否則不能解釋兩個字後來爲什麼有不同的演變。如果漢語的"墨"是 *hmək ，"墨"和"黑"有關係，"黑"只好是 *hək。這麼一來，豈不是說 *hmək 有個中綴 -m- 嗎？所以如果把漢語和泰語這種對應關係看成同源，認眞看待這個問題，我們

會得出一個結論，漢語不是有前綴而是有中綴，而且這個中綴是 -m-。這是怎麼一回事呢？對於這個問題我的想法後來慢慢改變了。

漢泰同源這種認定，歷史很悠久。我曾經提到一百多年前的學者康拉弟(Conrady, A.)──但不是從他開始，而是在他之前早就有人已經認出泰國話跟中國話的關係──在他的書裡很明白的把漢藏語系分成幾支。到了 Schmidt (1926) 他說西半部藏文和緬甸文是一個系統，而東半部漢語和泰語是一個系統。⋯這些學者一向都是認爲漢藏語裡面漢語跟泰語比較接近。這樣的一個想法一直繼承下來。所以在擬測上古漢語時，像高本漢也接受這個觀念。馬伯樂雖然沒有很明白的說，不過他在研究唐朝的長安方言時，也是大量利用泰語來跟漢語做比較。而泰語跟漢語同源的認定，一般都可以馬上直覺的得到一個印象──泰語和漢語都是單音節的語言，音節結構都一樣，都有 -p、-t、-k 入聲韻尾，以及相對的鼻音韻尾 -m、-n、-ng，泰語也一樣；都是四個聲調平上去入，而按照陰陽分裂；字的次序，漢語跟泰語都是「動詞──賓語」。在類型上一致。而藏文緬甸文都是「賓語──動詞」──賓語在前，有重大的不同。所以漢語跟泰語一向都被認爲是最接近的。

可是到了1942年班乃迪克 (Benedict) 提出了不同的看法，他認爲泰語和漢語是借用關係，因爲基本詞彙都不一樣。他從基本詞彙去看，泰語跟漢語不一樣，反而跟南島語系（如：印尼話）接近。自此以後就有分歧的看法。一般說來，大陸學者到現在都比較傾向於相信漢語跟泰語是同源的。我在台大開「漢藏語言學導論」，就面臨到這個問題──要不要把泰語放進去？如果不放進課程中，別人可能會說漢語跟泰語的關係最接近，你連這個都不談。可是談的話，西方（尤其是美國）的學者已經接受班乃迪克的看法了，會覺得很奇怪，到現在還在談漢語跟泰語同源的關係；中國大陸的學者卻會認爲這樣最基本的東西，難道還有疑問嗎？所以這是一個很重大的困惑。我自己原來相信漢泰同源。可是等到我開始做漢藏語的比較研究時，把漢語跟藏文、緬甸文拿來做比較，找了很多同源詞，卻發現漢語跟藏語、緬甸語同源的字，跟泰語都不同源；而漢語跟泰語同源的字，跟藏、緬都不同源。這裡的例子，請大家看表二，列舉了一些漢語、藏語、緬甸語、西夏語、泰語的詞彙。第一欄大都是身體的部位，從"耳"到"死"，一看就知道漢、藏、緬、夏都一樣，可是泰語卻不一樣。第二欄"二、三、四、五"大致都一樣。其中「四」藏、緬、夏的來源可能都是 *l-，而漢語是 s-，跟泰語一樣。通常的說法是：因爲漢語的三、四相連，而產生一種交互感染

(contamination)，"四"受到牽引，也變成 s-。如果是這樣的話，那麼泰語從漢語借過去的跡象是很明顯的。還有"五"，漢、藏、緬、夏都一樣是"ng"，只有泰語是"h"，到底是怎麼回事？第三欄，泰語跟漢語接近的，跟藏、緬、夏都不一樣。所以從詞彙的比較上，我就感覺到泰語跟其它的漢藏語不一樣，逼得我對漢泰同源發生疑問。

表二　同源詞的比較（台語以暹羅話為例）

	漢	藏	緬	夏	泰	
耳	njəg	rna	nâ	niu¹	huu	A1
目	mjəkʷ	mig	myak	mei¹	taa	A1
乳	njug	nu	nui′	ni̯u¹	nom	A2
吾	ngag	nga	nga	nga²	kuu	A1
汝	njag	--	nang	na²	mïng	A2
爾	njid	nyid	--	ni²		
魚	ngjag	nya	ngâ	--	plaa	A1
日	njit	nyi	ne	ni̯ə¹	wan	A2
死	sjid	ɛ̀i	se	sɪ¹	taai	A1
二	njid	gnyis	hnac	ni̯ə¹	jii	B2
三	səm	gsum	sûm	so̜¹	saam	A1
四	sjid	bzhi	lê	li̯e̜¹	sii	B1
五	ngag	lnga	ngâ	ngwə¹	haa	C1
臆	· jək	brang	rang -pat	· a̜²	ʔok	
肺	phjad	glo	--	tsə¹	pɔɔt	D1L
牙	ngrag > nga	ba-so	cwai	ku̜o²	ngaa	A2
象	rjang	glang	chang	bu²	čhaang	C2
馬	mrag > ma	rmang	mrâng	ri̯e¹	maa	C2
雞	kig > kiei	bya-de	krak	wu̜o¹-i̯auɯ²	kai	B1
燕	ʔian	khug-ta	pyam-hlwa	ta¹ · ôn²	ʔɛɛn	B1
鞍	ʔan	sga	ka′	· i̯ei²	ʔann	A1
軛	ʔrik	dor	tâm-pûi		ʔɛɛk	

　　第二點讓我產生疑問的是從元音比較，漢、藏、緬語元音系統都很簡單。漢語據李方桂先生的上古音研究有 i，u，ə，a 四個元音，藏語有 i，u，e，o，a 五個元音，其中 e，o 可能是後起的。緬甸語有 i，u，a 三個元音。可是暹羅話的元音系統有九個，而且又分長元音、短元音；複元音又那麼多（表三）。李方桂先生根據各種泰語方言的比較研究，所得到的原始台語 (Proto-Tai)，如果不分長短元音，有九個元音；如果保持長短元音，可以減少成七個 (Li 1977：297)。可是不管九個或七個，跟漢語上古音相比還是太多了。不單是單元音，泰語還有非常多的複元音。我們如果要解釋音韻系統，應該是要所有的音都能獲得交代。如果只看到大半是某幾個音跟漢語有關，其它的音都無關。我們就要問，這種元音系統是怎麼樣從一個簡單的元音系統演變出來的？這明顯地暗示它原來就是個借詞系統。台語（包括泰國話）元音系統本來就很複雜，跟漢語不同源。漢語的借詞只出現在特定的某些韻，其他的韻母找不到與漢語有關係的字。我看到這種現象不得不放棄漢泰同源的觀點，重新解釋前面所提到的問題。從同源的觀點看漢語跟泰語的關係，是同源的語言之間的「比較研究」。如果認爲兩者不同源，是借詞的關係，再加以研究對比，結果會大不相同。

表 三　暹羅話的元音系統

i	ï	u	ii	ïï	uu
e	ə	o	ee	əə	oo
ε	a	ɔ	εε	aa	ɔɔ
ia	ïa	ua（可接韻尾輔音）			

ai, aai, əi, iεε, ooi, ɔɔi, ui, ïi, ïai, uai
au, aau, iu, eu, uεε, əu, əəu, εεu, iau

　　漢語跟泰語有很多聲調的對應關係──這是以前的學者曾經研究過的，尤其是 Wulff 在1934年所寫的《漢語和台語》(Chinesisch und Tai)。漢語的平、上、去、入，相當於泰語的A、C、B、D──以ACBD命名是李方桂先生開始的。有人問爲何不直接用ABCD來對平上去入？有一次我聽李先生提起，他只說泰語爲什麼要遷就漢語？我後來才想明白，因爲泰國文字A調不標符號，B調寫得像1的字，C調寫得像2的字。這是泰國人排列聲調的習慣，從泰語的觀點看，應該是ABC的順序對應漢語的

平去上。如果遷就漢語聲韻學的傳統，以平上去入對ABCD，反而不合泰國人的習慣。對漢泰聲調的對應關係，我們要怎麼樣來解釋？剛才梅先生提到清濁的對應關係。我覺得應放在更大的範圍來看。漢藏語比較研究正常的規則是：清的對清的、濁的對濁的，鼻音對鼻音。這是整個大勢。我們濁的 m 變成它的清的 m 是例外。所以現在我們要把例外的情形拿出來做解釋，如果光是拿 hm 可能看不出來。要看整個漢語濁的 m 要怎麼變成清的 m。

我去年 (1988) 在瑞典參加國際漢藏語言學會，提出一份論文〈剝隘話中的漢語借詞〉，我所研究的結果是這樣：漢語和剝隘土話中的漢語借詞的對應關係相當複雜。若以漢語做標準，借入剝隘土話平聲有好些個調，上聲也是，好像一點條理都沒有。我以漢語的平上去入為基準，漢語陰平聲剝隘話是 24 聲調的，我把它集中在一起，44、21 聲調的也都各自集中在一起。經過這樣的整理，聲調的對應關係就清楚了。可以看出凡是漢語的平聲，在剝隘變成 31 調的，都是喉塞音。這是有條件的。凡是漢語陰平聲對應剝隘的 21 調的，都是原始台語裡的詞彙。這種發現讓我感到最興奮的是，根據這種平上去入各有好幾種不同對應的關係，把原始台語對應的聲調抽出來之後，就剩下剝隘土話的聲調系統，這個聲調對應系統是後來的。剝隘在雲南，楊時逢先生作雲南方言調查報告，所記剝隘的漢語方言的調跟剝隘土話的聲調完全一樣——這是我去年那篇論文的主要內容。這個問題跟我們現在談的問題有什麼關係呢？它給我們一個啟示：借詞的調值很重要。借用時不會管這個調在歷史上是清的還是濁的。他聽起來如果高高的，就模仿高高的；聽到的是降調，就模仿成降調。普通老百姓不是語言專家，借入的調怎麼唸，他就怎麼唸。這個觀念我相信跟這個問題的解決是有關係的。附帶談到不規則的對應，還有一個重大的意義。李方桂先生研究龍州土語的時候，他說其中有漢語借詞，聲調有對應；可是有很多例外。這些例外可能就是同源詞。大家知道李先生的學術背景，他對泰語有很深入的研究，他的目的當然是要研究漢語跟泰語之間同源的關係。他研究龍州話，說其中有很多漢語借詞。把借詞抽出後，剩下的字跟漢語的音義都很接近；但不是聲母不大合，就是韻母不大合，或是聲調不合 (Li 1940：20-36)。他當時認為漢泰同源，當然那些剩下的不規則對應就是同源字了。等到整個學界大勢傾向於認定漢泰不同源時，李先生還是提出質疑。其中之

一就是這個現象不能用借詞來解釋——像"墨"在漢語是濁的 m-。泰語爲什麼變成清的 m-？泰語有清有濁，理當借進濁的，怎麼會變成清的？所以李先生認爲在漢台語 (Sino-Tai) 中不能用借詞來解釋。

去年開會時，我的論文是站在漢泰不同源的觀點立論。因爲在剝隘土語的兩個系統裏面，有一個系統跟原始台語的對應完全一樣。一般所謂的漢語跟泰語的同源詞像 Wulff 所指出的那些規則的聲調對應關係也是借詞。現在只剩下一個問題，那些不規則的要如何解釋。班乃迪克問我，我說不知道。現在被梅先生逼問了，非得再好好研究不可。我應該利用這個機會好好的想一想。我現在只是試著提供證據給各位參考。我的信條是：研究問題有沒有成果，大部分要看你如何提出問題而定。如果你問爲什麼漢語的濁聲母借進泰語要變成清聲母，難道泰語沒有濁聲母嗎？這個問題是問錯了，我們無法答覆。因爲事情完全不是這麼回事。如果我們假定像漢語"提條"等平聲濁聲母的字，爲什麼借到泰語不和"塗塡"讀同調？這樣問也沒有答案。爲什麼人家借進去的時候，一定要知道那些字是平聲、是濁的？你一定要先假定漢語這些字本來就讀成 24。泰語借過去的時候，一定要找一個跟 24 很近的調來唸。如果這樣子問就有答案了——在泰語語音史中，清濁聲母有不同的演變，現在的某些調是古代的清聲母變來，濁聲母字以這種調借入，會被誤認爲清聲母來源。這種想法跟梅先生所提的可以配合，一點都沒衝突。梅先生是從漢語內部把問題廓清，這是前半部，我的部分是就漢語借進剝隘土話所發生的變化，提出一個解釋。

梅：我跟龔先生的看法不完全一致，龔先生從調值的觀點著手，我們可以知道現代暹羅話的調值，例如"霧"是 D1L，它也借入龍州、剝隘。按李先生的標音，三個調都是 D1L，所以一定是原始泰語時借入的調是 D1L。D1L 是個調類，這個調類在原始泰語時的調值，是幾乎無法確知的。所以我的想法並不是從調值來看。我做過若干漢語調值史的研究，我們最早有信心的，只能推到唐代，也就是安然所讀的音，李先生所談的"干支"，大概是漢代已經借進去了。我們現在所談的這些個字，並沒有很清楚的理由可以說明它不是在唐代以前借進去的。假如是在唐代以前借進去的，我們第一個要碰到的問題，就是漢語當時的調值是什麼？另外的一個問題是，借入的是原始

泰語，我們知道原始泰語有若干調類。但這些調類如何構擬調值，我覺得是幾乎沒法解釋的問題。所以我的著手點還是類跟類的關係。剛才我所提的問題，特別提到在平上去入次濁是一個"類"，它跟清的"類"一起跑，所以我完全是從"類"的觀點去看的。至於古調值，稍微早一點的，我們就幾乎沒有辦法。我的辦法是從某一種漢語方言——我讀賴惟勤的文章，跟何大安先生、林英津小姐討論，——客家話一般說是宋代，代表宋代的北方官話。從賴惟勤和遠藤的文章，我們多少知道唐代有這麼一種方言，它的上聲的次濁是歸清的，入聲次濁也是歸清的。它的調值是什麼？唐代多少我們還有一點辦法；不過我們讀同樣的文獻有這麼一個調值，是什麼樣的調值也不能得到一致的看法。假如說是更早漢語借入的方言，它的調值是什麼，原始泰語方言的調值是什麼？我們就沒有辦法。剛才龔先生所說的24，24是暹羅話現在的調值。但是更早……。

龔：可能我沒有解釋的很清楚，才引起你的誤會。因為要幫助大家了解，用具體的例子是比較容易了解的。我說漢語讀成這樣、泰語也讀成這樣，所以借進去。因為是現在的漢語、泰語，大家比較容易體會。實際上我想說的是在原始泰語時，泰語還沒有分家前的調值。調值會改變，我們只能知道古代的調類。古代的調值泰語方面不知道，漢語方面也不知道。為什麼借用的時候不可能是依據調類來借呢？因為這種對應關係——借用的時候，都是聽到什麼，自己也有什麼一樣的調值，就借進去；才不管它是平上去入哪一個。像漢語平聲的"功"借入剝隘話讀 kung 44，如果從調類的觀點來看——剝隘話是陰上，豈不是漢語的平聲變成剝隘話的陰上？所以我說借用的時候，實際上不是借調類；而是借調值，"調值"類似的就借進去。借進去的時候是原始泰語的時代。現在的暹羅話、龍州話、剝隘話，同一個平聲，調值都和漢語方言不一樣；可以推想原始泰語的時候，也不一樣。所以我的意思是說，當時——在原始泰語的時代，某一個調類的調值跟漢語某一個調類的調值剛好一樣，就借進去了。我的意思是這樣。我們可以看到龍州、剝隘或其他泰語方言的調類是一致的，雖然調值各不一樣。如果我們發現借進去的調類和漢語的調類有一致的對應關係，那麼一定是發生在原始泰語的階段。原始泰語的調值怎麼樣，我們不知道；借進去的是漢語哪個方言

，實際上的調值怎麼樣，我們也不知道。不過我們可以斷定那個時候某一個調值，一定和漢語古代的某一個方言的調值一樣。這是第一點。第二點，我的說明必須站在一個假設之上，就是借進去的原始泰語，一定陰陽調已經分裂；或是尚未分裂，但是已經造成音值上的差異。我們知道，聲調的不同有時候是語音上的不同，有時候是音位上的不同。語音上的不同——好比說"通"跟"同"現在是聲調不同，但在古時候他們是同一調類。他們的不同是"同"的聲母是 *d- ，也許因為聲母是濁的，使開頭降低一點；也就是說開始的時候他們聲母不一樣，聲調也不一樣。但是這個時候"同"的調值，沒有音位上的意義。等到清濁的區別（區別"通"跟"同"的濁聲母），慢慢變的沒有那麼重要，*d- 也變成 th- 了；聲調的不同就具有音位的意義了。從這個觀點看，原始泰語的陰跟陽一定已經產生調值的差異。所以漢語借進去的時候是濁的聲母，但聲調跟泰語某一個清的調值類近。一定要這樣解釋，才能說明漢語濁的和泰語清的為什麼這樣對應。

對於我的說法很不利的地方是：如果我的說法成立，原始泰語借進漢語的時代應該不會太早。可是"帽、霧"中古音已經沒有輔音韻尾，而泰語卻收 -k 音。這似乎是上古漢語的特徵，要怎麼解釋呢？我們要查查看在漢語的歷史上，去聲的 *-ks 保存到什麼時候？如果泰語的"霧"跟"帽"也是從漢語借進去的話，一定在還有 *-ks 的時候就借進去的，不應該太晚。但這樣就跟我的假設矛盾。我的假設是：平上去入分陰陽調是什麼時候，雖然不知道，但總應該是比較晚的。所以我覺得這個例子還得要考慮。剛好泰語的"帽、霧"跟藏文是一樣——這個例子梅先生也提到了：

	藏	泰
帽	rmu-ba, rmugs-ba	mɔɔk
霧	rmog	muak

我覺得這可能不是偶然。如果藏語剛好也有同源的字，泰語就不一定是從漢語借的，也有可能是從藏語借的。從藏語借還有個好處，藏文的 o 是後起的，由 *ua 變來的。而泰語正是 ua，兩者可能有關係。可以看出泰語從藏語借進去的時候，藏文的 o 還讀 ua，霧是 *rmuag。至於"帽"藏語是 u，對這一點我目前還提不出什麼好的解釋

。不過我傾向於相信，藏語的" 霧 "跟" 帽 "和漢語同源；而泰語的" 霧 "跟" 帽 "是從藏語借進去的。

梅：這些個字都很麻煩。因爲泰語的" 帽子 "，它在暹羅話中，如龔先生所說，是 muak，因爲是 1 調，所以前頭有個 h 。但是在龍州，它不是 D1L，是 B2；在剝隘也是 B2，而且後頭無 k 尾。

龔：那也有可能是個別借進去的。

梅：對。" 墨 "的聲調也有參差，在暹羅話是 D1S，但是在龍州、剝隘都是 D2S，只有" 霧 "在暹羅、龍州、剝隘都是 D1L，都有 -k 尾所以這些個例字眞是非常非常麻煩。我的基本想法，比方像" 膿 "這個字，它是 A1 調。我覺得要解釋泰語的演變，倒還是借進去的時候，泰語是 hnɔɔng，漢語是 *nəng^w。假如當時鼻音平聲是跟清音跑，在原始泰語 (Proto-Tai) 它就已經是清聲，這麼樣進入三個語言，它出來都應該是 A1 調。如此比調值容易解釋，假設借的時間不是在聲調已經分裂的階段，即泰語只有 ABCD ，尚無 1234 的音位時。不過漢語也是麻煩，我們用種種文獻學的 (philological) 或是方言的資料，也只能推到唐代的某個方言。也許是客家話的祖先，也就是聲明或《悉曇藏》所記載的那些個方言。我們比較知道清楚的是，它的上聲跟入聲，次濁是跟清的跑。平聲則因文獻不足，只有客家話有此現象。可惜莎加爾 (Laurent SAGART) 不在這兒。

　　Haudricourt 的聲調發生說，他所要解釋的是，爲什麼古漢越語，在古漢語借入越語時，它有一套對應關係，到唐代是另一套對應關係。古漢越裡去聲和問 (hoi) 跌 (nga) 兩聲對應，按馬伯樂 (Maspero) 的說法，問跌兩聲來自 -h < *-s；上聲和銳 (sac) 重 (nang) 兩聲對應，銳重兩聲來自 -ʔ。

	漢		越
	上	：	-ʔ
	去	：	-h < *-s

它正好一個是喉塞音 (glottal stop)，一個是 -h，更早是由 *-s 變來的。漢語的調類跟非漢語的調類，對應關係不一定完全是由調值決定——古漢越語跟漢越語的對應關係不同。唐代是調值跟調值的對應，但在比唐代更早的階段，是字尾塞音 (final consonant) 的對應關係。

確實是有調值的對應關係。可是我一直不敢踠調值的問題，因為別人立刻會問：漢語那時的調值是什麼？非漢語借入漢語時的調值是什麼？您所說的剝隘，晚近泰語的漢語借詞調值確實是如此，和雲南的剝隘相像…。

龔：我們現在剛好有剝隘方言的紀錄，又有剝隘借詞的紀錄。大家想想看，假如經過三百年以後，剝隘地方的漢語方言的調值變了，剝隘當地土話的調值也變了，會給以後的人造成什麼困擾？他們會想怎麼這麼複雜，原來是上升的調值，借到另一個方言卻成了下降的調值。以後的研究者對於調值的差異，如果沒有文獻的記錄，就更不明緣故了。因為不知道當時的調值，所以研究者才用調類的觀念來解釋。可是用調類的觀念並不能解釋，因為調類是人為的命名。按理說應該是有調值的對應，只是這裡的調值無法配合調類上的對應。我們雖然不知道當時的調值，我們可以肯定的是：當時借入的調值讀法一定相近。就好像閩南語借入國語的「讚」字，跟著國語的第四聲唸高降調。如果要說是調類的對應，那麼國語的「讚」字，在閩南語應讀成半低平調。

梅：符合漢語「平上去入」和泰語「ACBD」對應關係的，我認為都是漢語借詞。我們能不能猜一猜……像干支的借入，據李方桂先生的研究，應該是很早，最晚在漢代，因為它保存若干上古音的現象……

龔：這一群符合的，可能是在泰語聲調ACBD還沒分化以前，就借進去了，然後跟著泰語的潮流一塊變。而我所說的，是泰語聲調分裂以後才借進去的。

梅：麻煩也就是這裡。

梅祖麟　龔煌城

龔：對，是在這兩個地方。

梅：我們是不是能說個絕對時間 (absolute Time)？是在漢代？魏晉？還是唐代？

龔：我很佩服梅先生重視這樣的問題。他是研究歷史語法學的專家，對每個變化都希望確定年代。這是很好的習慣。我是一點概念也沒有，我一直只想建立個相對的年代。所謂相對的年代，就是說，倒底是漢語的平上去入分裂在先，還是泰語的平上去入分裂在先。漢語還沒有分裂的時候借進去是如何？漢語已經分裂的時候借進去又如何？所以有四種可能的組合。…我們不知道他們的ACBD分裂是在何時，我們也不知道漢語平上去入的分裂在何時…

梅：我們知道！我這裡所列的安然《悉曇藏》的資料，所記錄的是七、八世紀。寬一點看加一個世紀應該沒有問題。

龔：還有一個問題，那就是借進去的漢語方言，是不是已經發生分裂了？跟《悉曇藏》的方言分裂，是不是大概同樣的時間？

梅：是有這個問題。我們可以知道《悉曇藏》所代表的是北方方言。

龔：我們考慮借進去的時候，彼此是否已經分裂，要考慮四種可能。如果能建立相對年代就很不錯了。

梅：我猜想合乎這些是在唐代以前，而且我們已經知道在九世紀已經有「濁上歸去」，是一種普遍的現象，有文獻的資料可以證明。所有的北方官話中，除了山西話以外，都有相同的情形。假如漢語的濁上相當於泰語的 B2 而不是 C2，時代應該在公元八百多年，我自已想總是在漢唐之間。

漢語和泰語在什麼時候才有直接的接觸，跟其它問題大有關係。漢語的詞序，一有文獻開始就是 SVO，藏緬語是 SOV。漢語可能是和某種非漢語的 SVO 語言接觸，從 SOV 變成 SVO。這個假設也許是錯的。不過假如漢語原來詞序是 SOV，後來是跟泰語或是其他南亞語接觸，造成巨大的改變。而南亞語根據我的看法，一直在中國的南部有很多人，在長江的南岸。

龔：關於漢語詞序的問題，我的看法正好跟你相反。你認爲原始漢藏語是 SOV，漢語原來也是 SOV。那麼是漢語後來發生變化。而我認爲漢語的 SVO 是原來的。藏語的 SOV 是受阿爾泰語系的影響發生的變化。這已經變成另一個問題了。我覺得我還有一個更重要的，跟本題有關的問題……

梅：是……

龔：我舉幾個漢語疑母對應泰語 h- 的例字，對這一個問題我原先想不通。但我現在有一些想法。"五"和"雁"的漢語的 ng- 爲什麼變成泰語的 h-？還有"六"…。這些要連起來看。漢語濁的聲母怎麼變到泰語是清的聲母？

	漢　語		泰　語	
五	*ngag	> nguo	haa	41
雁	*ngran	> ngan	haan	22
六	*rjəkw	> ljuk	hok	22

ng- 與 h- 的對應關係，也可以在中古音與閩南語中看到：

*ŋ-	>	岸	hua:
*ŋ-	>	魚	hi
*ŋ-	>	蟻	hia

都是 ng- 變成 h- 的例子。倒底兩者有什麼關係？

　　如果從借詞的觀點去看，對於聲調不一致的問題就可以解決了。我認爲當時泰語鼻音已分陰陽，漢語讀 ng- 的那些字的聲調，相當於泰語清鼻音的調值。在音節的限制下，泰國人只有兩種選擇，不是聲母讀不準，就是聲調讀不準。結果泰國人犧牲了聲母，而保持聲調。所以不借入濁鼻音的現象就可以理解了。並且李方桂先生提到 *hŋ 變成 ŋ，只出現在 A 調。而這裡漢語的 ŋ 對應泰語 h 的是 B、C 調，並不衝突。在《泰語手冊》206頁，列了九個字，其中 A 調有六個字，其中四個字是 ŋ、兩個字是 h。至於像「五、雁」兩字，分屬 B、C 調。用借詞的說法就可以把 *h 改成 ŋ 了。

　　所以我在這裡等於是以借詞的說法替李方桂先生做了一個修正。（參看 Li, 1977. A Handbook of Comparative Tai）。從這裡我又對「六」字有了修正的新說法。現在泰語的“六”是“hok 22”。但由漢語借進去的時候，漢語是個 r-。所以泰語是 *hrok > hok，加一個 h-，也是由於聲調的關係。

梅：在閩西（建甌、建陽）有此現象。

龔：但這裡有一個問題，不管這種借詞是語音性或音位性，漢語的借詞是在泰語聲調發生分裂以後借進去的，這個時候應該不會太早。可是“六”在原始台語 (Proto-Thai) 仍然讀 r-。是不是表示泰語這個“六”讀成 hr- 的歷史也是很早？

梅：漢語來母的 *r > l 是在漢代以後。柯蔚南 (Coblin) 根據東漢的聲訓，認爲喻四和來母，一定是 *l- 先變掉，然後 *r- 才能變成 l-。李方桂先生用干支的對音，說明漢泰發生關係的時間很早。我想借入干支的時候，也同時漢人和泰人做買賣，借入一些商業共同語，如數詞「一、二、三」以及「易、買、賣」等。

龔：如果我今天所說的是對的話，那麼就可以下個結論：泰語的聲調分裂的時代相當早，不管是語音性的，或是音位性的。

梅：王士元從語音(phonetic)的觀點，認爲漢語很早的時候實際概本就有八個調。

龔：那我的說法便是支持王士元了。

梅：泰語裡面李方桂先生不是有一個重要的看法嗎？也就是說泰語在濁音清化以後，聲調的分裂才是音位性的。至少音位化(phonemicization)又可以斷某一種絕對時間。所以我一直覺得這些個東西，有一個相關聯的音韻(relevant phonology)現象。不過你一碰到借詞或對音的時候，兩個東西都得做出類似的，獨立的音韻(absolute phonology)變化。這種獨立的音韻變化，我們說是加或減兩百年(±200)，也就是說在三、四百年之間…。

龔：音位層次是屬於語言學家的理論。一般人民不一定具有這種知識。語音的借法，不管有沒有音位的區別。

梅：次濁歸清也可能要有一個語音性的層次。

龔：我很感謝梅先生從漢語的角度提供他自己的想法，而我純粹從泰語入手，希望梅先生繼續從漢語的角度去研究，給我們更多的啟發。謝謝。

第三次對談（1990年1月13日）

梅：本來我實在是不怎麼想講這個題目。前幾回，我覺得我們討論，我學了很多東西——跟龔先生、跟各位都學了很多東西。今天講的題目，其實是我1984年夏天寫的一篇很長的文章（〈上古漢語 *s- 前綴和 *-r- 中綴的構詞功用〉）。後來有一部分在1985年第二屆國際漢學會議上發表過。一個很大、全盤的問題，就是上古有多少詞綴(affix)？我們現在知道的比較清楚的，是有 *s- 前綴。它主要有兩個功用，一個是使

動化 (causative)，另外一個是名謂化 (denominative)。而這兩個功用，正好跟藏緬語裡面，可以配起來。我們知道上古漢語有 *-s 後綴 (suffix)，後來變成去聲。這個跟藏文裡面表示名詞化 (nominalizing) 的 -s，可以相配。我在師大演講，在清華教課，都提到這兩個功用。

另外呢，我們知道的比較清楚的，就用一個簡單的辦法說：也就是清濁別義 (voiced and voiceless stop alternation)。它基本是分辨 " 他動 " 和 " 自動 " (transitive and intransitive) 的構詞法，這個是我們比較知道的清楚的。至於 " 他動 " 跟 " 自動 " ，這種變化，是不是根本就只是清濁交替 (voiced / voiceless alternation)？還是由於更早有一個鼻音後綴 (nasal suffix)？——也就是蒲立本 (Pulleyblank) 認爲：一個鼻音後綴，可以把一個清音 (voiceless) 變成濁音 (voiced)。是不是這麼回事？我們不知道。

龔先生，我後來想想：這是蒲立本的說法，這個說法不一定對。我們還不太知道的相當清楚，也就說是上古漢語有沒有個鼻音後綴？這問題的出發點就是因爲在藏文有 a-chung（ Q' ），比方像張琨先生認爲它是一個鼻音前綴 (nasal prefix)，它的功用，是把及物變成非及物 (detransitivize)。至於漢語裡面有沒有什麼東西可以跟它相配，我們也不知道。

另外，這個問題就說是：除了這些個東西以外，漢語還有點什麼其他的詞綴？我覺得其中可能有一個，也就是有 *-r-。在漢語本身來看，好像是一個中綴 (infix)；至於它是不是中綴？我不知道。它在共同漢藏語的地位，我也不知道，說不清楚。

所以，這是我一個出發點，就是：我們應該要重建上古漢語的整個構詞系統 (morphological system)。構詞系統據我們現在所知道的，主要都是派生 (derivative)，很少有屈折變化 (inflection)，不太知道爲什麼是這麼回事。藏緬語裡面好像有屈折變化，也許也是由詞綴來的——尤其是藏文裡面的動詞。這也就是我跟龔先生最近學的一部分東西。就是這麼一個主要的想法，這是我做的工作的一部分。已經過了五年還沒有發表，原因就是我自己實在想不清楚到底是怎麼回事。

爲什麼要談 *-r- 中綴，還有另外一個原因。我說從章太炎的《 文始 》、從王力的《 同源字典 》，其實更早就是王念孫《 廣雅疏證 》，也就是我們對於同源詞研究。當然，我們對於上古音有新的了解。我們對同源詞之所以成爲同源詞，應該有一種更新

的了解。我讀了王力先生的《同源字典》，覺得非常失望。王力先生那個東西是1980年的東西；1980年的東西應該有我們近三、四十年上古音的知識，但是它完全沒有。在這裡，我覺得我是王力先生再傳弟子，做再傳弟子的一個責任，就是改我們老師的錯誤。

對於 *-r- 介音，我們知道的相當多。我們知道的最清楚的，是雅洪托夫（楊托夫，C.E.ЯХОНТОВ）1960 年所提出的二等字有 *-r- 介音，而最初是 *-l- 介音，大家現在都知道最初應該是 *-r- 介音（參看龔煌城 1989）。所以假如中古有一等跟二等的區別，上古是有 *-r- 跟沒有 *-r-。比方最清楚的例子是(1)"行（行列）*gang"跟"行（行走）*grang"；"*gang"是一等字，"*grang"是二等字。另外我們也知道知系有 *-r- 介音，照三系沒有 *-r- 介音。另外還有照二系和精系，照二是 *tsr-；中古的精系是 *ts-；所以也是 *ts- 與 *tsr- 的區別。照三系 *krj > tśj- 與見系 *kj- > kj- 是李方桂先生的說法 (1980：91-93)，我想大概對，但是我們並不完全清楚。我以前也寫過文章，想從漢藏同源詞裡來證明。不過，雖然有這種嘗試，雖然李方桂先生說過，我們還並不太知道。也就說是，我們從諧聲字裡看到有照三和見系諧聲的字，這些個字我們怎麼個解釋法？李方桂先生認爲照三系是 *krj-，即上古的 *krj- 變成照三。跟它相區別的，也就是沒有 *-r- 的，那出來應該是見三系。還有喻三合口 *gwrj- > jw- 與群三合口 *gwj- > gjw-。這是龔先生，我覺得非常重要的一個發現，喻三（云母）是 *gwrj-。以前我們說是喻三歸匣，我們現在是喻三歸 *gwrj-。假如上古喻三是 *gwrj-，去掉 *-r-，那麼上古是 *gwj-。*gwj- 中古我猜想，它出來應該是群三合口。是不是在構詞方面有這麼樣的例？不太知道。我們現在只是從音韻 (phonology) 方面來看。這是我最近學到的東西，所以我還沒有從構詞方面去想有沒有。這是我覺得值得想、值得看的。也就說假如在喻三跟群三這種同源詞裡面，也看到它所表示的現象是跟其他相同的，又是一種支持龔先生那個說法的間接證據。其實龔先生的說法，不需要支持，我覺得是不可懷疑的。不過我們可以從另外一個方面說，也就是由於龔先生這個發現，我們做構詞，又有一種新的區別。基本還是有 *-r- 沒有 *-r-，不過前頭有不同的聲母類型。

（A）我想第一步先就是說明 *-r- 中綴確實有這麼一回事，大概有這麼一回事。

先選擬音比較沒有問題的來說明有這麼一回事，那麼以後我們還可以繼續研究擬音比較不肯定的。也就是這些個例子它們是同源詞，我覺得是不可懷疑的。不過，它們做爲同源詞，在音韻上是怎麼一個差別，是我們不知道的。所以我們現在先反過來看。

*-r- 介音，是從音韻來看；假如從構詞來看，那它是中綴。如(2)"拔"有兩個讀音，一個是二等 *briat > bwǎt，一個是一等 *bat > bât。"出類拔萃"的"拔"是一等字，是"鑽出來、突出"的意思，是一個自動詞。但是我們平常"拔蘿蔔"的"拔"，是一個他動詞，也就是"使一個東西突出來、鑽出來"。但是我只知道有這麼一對例子。

（B）有一些沒有 *-r- 中綴的，是一個動詞；有 *-r- 中綴，跟它相對應的，是一個名詞。比方(3)"買（酤）*kagx > kuo"跟"價 *krags > ka"。"買"是買東西，"價"是價錢。(4)"親 *tshin > tshien"跟"櫬 *tshrjin > tsh jin"。"櫬"有兩個意思，一個是棺材，"棺材"段注"…親身棺也。"也就是大概棺材有兩層，最親於身體的那一層，就是木字偏旁的那個"櫬"。因爲"親"是"親近"的意思。同時襯衫、襯衣的"襯"，也有"親近"的意思。因爲都有"親近"的意思，以前的訓詁學家，認爲是同源詞。它的差別也就是"親"是一個動詞，"櫬""襯"是名詞。還有(5)"齊 *dzid > dziei"跟"儕 *dzrid > dzai"。(6)"聰（囱 *tshung > tshung"跟"窗 *tshrung > tsang"。後面這個例子我覺得非常有意思。因爲"窗"這類東西出現的比較晚。假如這個例子能夠成立的話，也許可以幫我們斷定 *-r- 中綴在什麼時候還在活躍中。(7)"託 *thak > thak"；"宅 *drak > ḍɐk"、(8)"空 *khung > khung"；"腔 *khrung > khäng"、(9)"割 *kat > kat"；"犗 *krads > kai"、(10)"含 *gəm > ɤâm；"銜（馬勒口中）*grəm > ɤâm"、(11)"質（信也）*tjit > tśjĕt"；"質（人質）*trjids > ṭi"，大概都是這一類的。

（C）有些個關係正相反。沒有 *-r- 介音，它是個名詞；有 *-r- 介音，它是動詞。也就是（C）跟（B），關係正相反。在（B），沒有 *-r- 介音的，是個動詞，有 *-r- 介音的是一個名詞，所以 *-r- 好像是一個名詞化的中綴。但是在（C），*-r- 好像是一個名謂化的中綴。比方說(12)"性 *sjings > sjang"跟"生 *sring > sɐng"。我在史語所講，實在應該要提到傅斯年先生，《性命古訓辨證》(1940)。"生者，性也

。"(《孟子》)。傅孟眞先生說"生"跟"性",在金文還是同一個字;"命"跟"令",也是同一個字。但是分別表示不同的語詞。表示什麼不同的語詞呢?表現兩個同源詞,它在音韻上的差別,是一個有 *-r-,一個沒有 *-r-。有 *-r- 的是"生",沒有 *-r- 的是"性"。我以前談到有 *s- 詞頭的時候,也說起在金文、在甲骨文,常常是同一個方塊字,代表兩個同源詞。而兩個同源詞,它的差別常常是有 *s- 、或者沒有 *s-。從文字學的觀點來看,也就是傅孟眞先生說的,最早只是一個方塊字。想來當時人看到這同一個方塊字,他有的時候就讀成我們現在的"性",有的時候就讀成我們現在的"生"。兩個同源的不同的語詞,用同一個方塊字來表示,這是古文字非常常見的現象。例(1)更可以說明這個,我們現在"行"這個方塊字還是代表兩個字。"一行淚""八行書"是"行 *gang ","行走"也是"行 *grang ","行"跟"行"是同源詞。"行"是"走路","行"是"行列、道路"。《毛詩》裡好像就有"行,道也,路也。"(13)"專 *tjuan > tśjwan"跟"轉 *trjuans > ṭjwän";這個是"弄瓦,弄專",生了女兒就是"弄專"。爲什麼"弄專"呢?因爲女人是紡織的。紡織的時候用一個旋轉的東西,古代就叫做"專"。所以前面的那個"專",是一個名詞"紡錘(spindle)"。後面的那個"轉",就是能旋轉的東西;紡錘是一個可以旋轉的東西。(14)"絝(袴)*khwags > khuo"跟"跨(胯)*khwrags > khwa",也是同樣的。

(C′)好像情形又不同。因爲它這個關係,並不是名詞跟非名詞,好像是另一種關係。我想不出很好的辦法,就說"體"跟"用"。文章裡我有另外一種說法,不過還是等於說不怎麼太清楚。例如:(15)"折 *tjat > tśjät"跟哲學的"哲 *trjat > ṭjät"。古代的君主聽訟、折獄,"聽訟"就是兩造在君主的面前打官司,聽的好,他就是一個"聖人"。所以"聖"跟"聽"有關係,"聽"沒有 *s- 詞頭,"聖"有 *s-。而"聽"是一個動詞,跟它相配的是"折"。這個"聽"有點像美國所謂的聽證會(senate hearing)那個"聽";不只是耳朵聽,是一種司法制度(judiciary)或者法治的關係。所以往往有人說"大廳"的"廳",就是官坐在裡頭聽打官司。"折"跟"聽"配對,"折獄"就是兩造對質,"折"你得要判斷;"折"的好,也就變成哲學、明哲的"哲"。我對這兩對東西"聽"跟"聖"以及"折"跟"哲",覺得有意思。這兩個

現在 " 哲 " 是哲學 (philosophical) ， " 聖 " 好像是宗教 (religious) 的觀念。但是從它們的來源看，更早並不是一個哲學的，也並不是一個宗教的觀念。也就是在中國政教合一的思想體系裡面，君主有這個權利。我們現在說 " 行政不干涉司法 " ，從我們老的傳統看，是說不通的。一個君主當然有權利不但干涉，根本他就是審判官。所以聽的好，他就是 " 聖 " 。 " 聖 " 最早的意思是像 " 聰明 " 的 " 聰 " ；而 " 哲 " 是看的清楚。(16) " 孤 *kwag > kuo " 跟 " 寡 *kwragx > kwa " ， (17) " 作 *tsak > tsak " 跟 " 乍 *dzrags > dẓa " 。

這些個例子裡面，有些個唯一的差別是有 *-r- 或沒有 *-r- 。有一些個像第 (17)，就不只是最小對比 (mininal contrast) ， " 乍 " 有 *-r- 介音，同時它是一個濁音聲母； " 作 " 是一個清音聲母。所以除了零介音對 *-r- 介音之外，還有聲母清濁的對比。另外又有入聲跟非入聲，比方如 (9)。

前面，我講到有些個照三，是跟見系諧聲的。也許 (18) " 均 " 跟 " 勻 " 是一對相配的詞。 " 均 " 照李方桂先生的擬音是 *kwjin ， " 勻 " 是以母 *gwrjin 。這個也是有 *-r- 和沒有 *-r- 。不過這個不完全合乎李先生的假設，他所擬的 *Krj- 一般是變成照三的。另外還有一些個同源詞，像 (19) " 基 *kjǝg > kji " 跟 " 阯 *krjǝgx > tśi " ，兩個都是 " 地基 " 的意思； (20) " 期 *gjǝg > gji " 跟 " 時 *grjǝg > źi " ，兩個都可以泛指時間，《三國志》《西遊記》已經有雙音詞 " 時期 " 。還有 (21) " 記 *kjǝgs > kji " 和 " 志 *krjǝgs > tśi " 。它們中古的差別，簡單的說，後者是照三、前者是見系。所以上古的差別，我們說一個並不很準確的，是 *kj- 和 *krj- ； *krj- 變成照三 tśj- 。這些個語詞，雖然也是有 *-r- 介音和沒有 *-r- 介音；但是我並不認爲它們是由於構詞所產生的 *-r- 。我認爲這是方言不同。我們說不出什麼道理來，加了 *-r- ，以後爲什麼 " 記 " 會變成 " 志 " 。 " 記 " 跟 " 志 " ，我覺得意義跟用法，是完全一樣的。

我下頭簡單的再說一、兩句話，來說明爲什麼我現在還不太敢發表這篇文章。我們研究上古構詞法，最早是想法能夠跟更古的現象連起來。據我所知道，藏緬語裡面沒有 *-r- 中綴。我以前以及在這個文章裡都提到，在藏文裡面，有換位 (metathesis) ，也就說是一個 Cr- 變成 rC- 。有一種可能是原始漢藏語 (Proto-Sino-Tibetan) 的 *r 它是一個前綴，藏文它保存這種情形；在漢語裡面 *r 跑到字首輔音 (consonant) 後面

，所以我們看起來覺得它是一個中綴。不過我們也可以相反的來看，也就是更早的現象，也許確實是有 *Cr- 這麼一個東西。那麼漢語保持原來的形式，還是中綴；而在藏文裡面， *r 跑到前頭來。我不能決定是那一個。我想這是一個很難而且相當重要的問題，也就是怎麼樣能夠把上古漢語的 *-r- 中綴，跟藏文裡面的 -r- 前綴給連起來。至少我們得要想方法做做。

另外，何大安先生跟易家樂（S. Egerod）先生都跟我說過：南亞語（Austro-asiatic）有 -r- 中綴。易家樂有一個簡單的想法，他說：這個很好，這個可以說明漢語的 *-r- 中綴是從南亞語借來的。我以前也寫過文章說明南亞語確實曾分布在中國的南部，而且一直到長江的南岸（1976）。我也相信南亞民族跟漢民族很早就有接觸，所以確實有可能借自南亞語。但是我總覺得詞綴構詞法（affix morphology）是很不容易借來借去的。前面我們提到 *s- 前綴、 *-s 後綴以及清濁別義，其實是最能證明漢語跟藏語同源的一個證據。因為這些是詞音位的現象（morphological phenomenon），是相同而不容易借的，所以我們可以說它是同源。我們假如用這個觀點來看，就不能在談到 *s- 前綴、 *-s 後綴的時候，因為藏文跟漢語相同，我們說它是不容易借來借去，所以漢語跟藏緬語是同源。但是談到 *-r- 中綴，就說：因為藏文沒有，而南亞語有，我們就非常歡迎這種 -r- 中綴，所以漢語就把它借來。雖然現在看漢語的 *-r- 中綴，好像只是從音韻的觀點來看，構詞功用並不很清楚。但是既然 *-r- 能夠把名詞變成動詞，又能把動詞變成名詞；又能把別的東西變來變去。南亞語想來總會有這一類的東西，所以它是相類似的；要從相類似的說它是同源、或說漢語是從南亞語借來的。要我提出這麼樣一個假設，我膽子要比現在還要大一點；我現在膽子還太小。

我想我可以結束了。我所做的工作，也就是利用最近上古音的進展，來說明漢語是有 *-r- 中綴這麼一回事。至於這個現象怎麼樣解釋？我目前覺得最可行的道路是跟藏文的 r- 前綴連起來。至於怎麼連法？我不太知道。謝謝各位。

龔：謝謝梅先生的演講。梅先生是目前研究上古漢語構詞法最深入的一位學者。我知道他在這方面有特別的研究，所以請他來。而且我也知道台大中文研究所有幾位同學，對上古漢語的構詞法、對漢語裡面的同源詞有興趣，所以我也鼓勵他（她）們來聽

。我事前請梅先生要說的簡單一點；因爲他要詳細講，可能也講不完，時間也不夠。所以他講的很簡短。我就覺得我有一點責任稍微替他解說一下。

　　梅先生這個研究，簡單從結論先說，是結合最新的聲韻學的研究，跟傳統的訓詁學的研究；是討論漢語 *-r- 的問題，最深入的一個。他不僅進一步討論它的功用，而且又把它拿來跟藏文比較。像這樣的研究，到現在爲止還没有人這樣深入做過。他做到這樣的深入，難免會有很多地方還不能確定。不過我覺得他研究到這個程度，應該把他的研究結果讓我們知道，讓有興趣的人可以繼續往這個方向來研究。

　　我現在簡單說明這個問題的歷史背景。研究漢語裡面的詞綴，是從什麼時候開始的呢？是從高本漢進行上古音的擬測開始，那是一個動機。爲什麼這是引起研究漢語構詞法的動機呢？因爲高本漢擬測了中古音，然後再從中古音出發，開始研究上古音的時候，他就遇到了漢語裡面諧聲的現象。這是很有名的例子，大家都知道；就是像"各"字跟"洛"字的諧聲關係。"各"字中古音是 *kak，"洛"字中古音是 *lak。現在"各"是 k- 的音；"洛"是 l- 的音。"各"跟"洛"的諧聲關係，假如像現在的發音，或者像中古的發音，一個是 k 開始，一個是 l 開始，語音就差的很遠。可是"洛"字，是以"各"字來作聲符的。如果說上古"各"跟"洛"，一個是 *kak、一個是 *lak，就離的太遠，不可能諧聲。因此高本漢在他的《分析字典》(《Analytic Dictionary》1923)，開始研究上古音的時候，就覺得這個地方可能是上古音有複聲母的痕跡。那麼這兩個字倒底是什麼樣一個關係呢？他提出三個可能的解釋，後來他在《漢語詞族》(《Word Families in Chinese》1934)裡面就用 a, b, c 來代表這三個可能的解釋：

	各	洛
a.	*klak	*lak
b.	*kak	*klak
c.	*klak	*glak

在高本漢研究這一個問題的階段，這只是對"各"跟"洛"的諧聲關係所作的解釋，没有牽涉到詞源問題。 a. 一個是 *klak，一個是 *lak，有共同的部分 lak ，所以可

以諧聲。 b. 一個是 *kak、一個是 *klak，有共同的部分 kak，可以諧聲。c. 一個 *klak、一個 *glak，是最密合的。

這個問題爲什麼後來發展成倒底漢語有沒有詞頭、有沒有插詞這樣的問題呢？"各"和"洛"這兩個字當然是沒有詞源關係，但是假如換上兩個有詞源關係的字，情形就不一樣了。比方說"鑒""覽"，中古音是 *kam、*lâm，一個是 k-、一個是 l-。"鑒"跟"覽"不但有諧聲關係，兩個字意義很接近，可能還有同源關係。如果把上面所提高本漢的解釋套上去，根據 a. 的解釋，可以說：*k 是詞頭，而 *lam 是字根；一個字根，加上一個詞頭 —— 豈不就可以說上古漢語有前綴，這是馬伯樂 (Maspero) 的主張。馬伯樂在1930年發表了一篇論文，叫做〈上古漢語的詞頭跟語詞的衍生〉(〈Prefixes et derivation en Chinois archaique〉)，他根據高本漢1923年的《分析字典》，認爲上古漢語有 *k- 詞頭加在詞根的前面。

可是假如採用第二種解釋（b. 的擬音），就變成有一個中綴或插詞 (-l)。提出這個看法的是一個丹麥的語言學家，叫做 Wulff，他寫了一本《漢語跟泰語》(《Chinesisch und Tai》1934)。他認爲泰語裡面有中綴，漢語裡面也有中綴。這個說法提出來以後，馬伯樂在書評裡面就批評 Wulff。因爲他們兩個剛好是針鋒相對，根據同一個現象，一個主張有詞頭、一個主張有插詞。主張有插詞的 Wulff 是拿泰語跟漢語來做比較，而泰語裡面有很多例子。他舉的例子是怎麼樣呢？好比說泰語裡面一個叫做 kak、一個叫做 klak 這樣的字，而意思一樣。他的解釋就是說：後者是由前者加一個 -l- 造出來的。馬伯樂給他的書評，只針對泰語的部分。說他舉的泰語有些是借字，是從南亞語族的高棉語 (Cambodian) 借進來的。有些例子是擬聲字，不能做證據。有些則一邊是 -r-、一邊是 -l-，並沒有什麼可作證據的效力。有些字把漢語弄進來做比較，但漢語離的太遠了，不能證明純粹是泰語內部的借字。最後一個，可能最有說服力的，就是說泰語內部一個有 -r- 或者 -l-，一個沒有 -r-、也沒有 -l-。馬伯樂卻說要想想人家泰國的情形；泰國的年輕小孩子都要進廟裡面唸經，廟裡面唸經都是傳統的、最舊的方法，保存古音，-r-、 -l- 就照樣唸，有歷史的傳承。可是一般語言裡面這個 -r-、 -l- 已經丟掉了。所以實際上不是插詞的現象，而是一個古語跟現代語言重疊的現象。馬伯樂就把它也否認掉了。Wulff 所舉的另外一些例子，馬伯樂認爲

與插詞根本不相干，只是因爲 Wulff 不了解當地的文化，牽強附會的結果。好比說有一個字是筷子、有一個字是切，Wulff 用西方的腦筋來想，吃飯的時候要切東西，因此認爲要用來吃飯的那個工具跟切有關係。馬伯樂認爲Wulff 大概沒有看過亞洲人吃飯，或者自己沒有在亞洲吃過飯，所以才會想像這兩個字有關係，其實是風馬牛不相及。換句話說馬伯樂就是全盤否定泰語裡面有插詞，至於漢語裡面有沒有插詞他就沒有提到。可是 Wulff 確是舉了八十六個漢語的例子證明這個 -l- 的存在。

以現在的眼光來看，第一點：當時的上古音研究，沒有今天這樣進步。在很多地方，我們現在已經不覺得是諧聲；或者不覺得那個地方有一個 -r- 。 Wulff 畢竟是一個外國人，他覺得某兩個字有關係，而我們覺得並沒有關係。有一些他所舉的例子不是像梅先生舉的，每一個字都很有說服力。 Wulff 舉的是從字典摘下來的例子，沒有經過一番嚴格的汰選。我們回來看梅先生的研究。它的意義在那裡呢？它的意義就是說：從1930年代到現代，我們對上古音的看法有很多地方經過修正、都改了。梅先生的研究是根據最新的上古音的研究；好比說認爲二等韻有一個介音 *-r-，認爲來母字原先是 *r-。還有像照系字跟見系字的關係，這是採用李方桂先生的看法。連我最近才提出來的，喻三是 *gwrj- 的說法，他也已經加以採用，查看有沒有這樣的配對：一個是喻三，一個是群母三等合口字，檢討他們有沒有同源關係。馬上把最新的聲韻學的研究弄進來，加以研究。我覺得這是他的研究最新的地方。第二點就是說：過去的學者往往只憑高本漢的《分析字典》裡面的字，或者從字書裡面找出一些很偏僻的字作爲立論的根據，很缺乏說服力。梅先生根據訓詁學的書找出來的例子，我覺得比較可靠。

還有以前的研究，只是說這個字跟那個字很像，這個字跟那個字意義有關，沒有再進一步說到底像到什麼程度，有 r 跟沒有 r 到底區別在那裡？梅先生加以分別：說一個是造名詞用，一個是造動詞用；或者一個表示體、一個表示用。這樣都是進一步深入的研究構詞成分的功能問題。最近他又進一步要跟藏文的 rC 連起來考慮，就是說藏文是不是發生換位，一個音在現在的語言裏它是在前頭，但是在古代的語言裏它是不是原來在後面？像這樣的問題，又是更進一步了。所以難怪會遇到很多問題，到現在還不能解決。我鼓勵在座幾位研究生接下去研究，以梅先生的最新的研究爲基礎，看看將來是不是能夠有所突破？

梅：" 折 " 起先就是 " 斷 "，" 斷 " 是個動詞。" 哲學 " 的 " 哲 " 最早是一個形容詞 (stative verb)，不是名詞。" 聖 " 也是，" 聖 " 最早是聰明的意思，後來才變成名詞。所以歸類起來就比較不容易。另外這裡有一個換位的問題。是藏文的 rC-，尤其是 rm-，有的時候它有對應的 sm- 。所以有人說 r 是從 s 來的，這是很可能的。所以你看到書寫藏文裡面有個代表 r 的東西，它更早是不是 r，還是 s，也不知道。所以其實有兩個題。你這個想法，我覺得是蠻好的，所以也許不是 r 。

龔：梅先生認為 r 跟 s 是同一個來源，是因為有些字有 r- 與 s- 的轉換，例如在藏文裏 " 短 " 是 thung ，" 縮短 " 是 " 短 " 加 s- (stung)，可是另外還有一個字是加 r- (rtung) 。加 r 跟加 s 意思一樣，所以就認為 r 跟 s 可能有同一個來源。但是這個地方是不是牽涉到不同的方言，或古今字，也值得研究。馬伯樂在批評 Wulff 的時候，就提到：研究這一類問題，有一個陷阱。因為我們只是靠字典來做研究，對語言本身沒有深入的了解；而一般的字典可能是把各地方的方言，古今不同的詞形，通通收在一起。從字典裡面看不出不同的詞形到底是反映同一個時代的一種構詞法，或者是代表不同時代、不同的方言。

梅：我覺得可以試試，我覺得這個問題實在是問龔先生最好。我覺得從藏文，尤其古藏文的觀點去看《詩經》、《書經》，是非常值得試的一條路。最早走這條路的，我所知道的是俞敏先生，也許有別的人。這是老生常談了，也就是漢語既然跟藏語同源，那麼更早的時候兩個應該更相像。我們有很多《書經》、《詩經》的內容，照我們現代的眼光讀不通。因為古漢語的構詞程序已經式微了 (morpho-logical process is in decay)。所以換成從古藏文的觀點來看，這個想法是很可行的。我覺得俞敏先生和我們都是開始嚐試一個東西；雖然俞先生的有些個東西，我覺得有點是玄想。不過在我們這個階段，只能夠玄想；玄想過一陣子，不對的自然會有人指出來。所以我也跟龔先生同樣的意思，請大家多試試。

龔：我想時間到了，我們今天只好在這裡結束。