Nominalization in Mantauran (Rukai)[*]

Elizabeth Zeitoun
Academia Sinica

The present paper aims primarily at providing a descriptive analysis of the various nominalization processes found in Mantauran (Rukai), based on a large corpus of texts. While morpho-syntactic tests are proposed that permit the identification of derived nominals (as opposed to verbs) and the distinguishing of lexical nominalization from syntactic nominalization, the array of constructions that trigger syntactic nominalization shows that there is *a priori* no distinction between nominalization and relativization in this dialect.

Key words: Rukai, Mantauran, lexical nominalization, syntactic nominalization, relativization

1. Introduction

The present paper focuses on nominalization in Mantauran, a highly endangered Rukai dialect spoken in the Maolin district of Kaohsiung County.

Preliminary reports regarding the phonological and morpho-syntactic divergences that the Rukai dialects[1] exhibit are found in Li (1977a, 1996) and Zeitoun (1995 and 1997b) and suggest that Mantauran is the most "aberrant" (Starosta, p.c.) among the six. It has undergone a series of sound changes that renders any comparative analysis very difficult, and has developed a "verb-object" agreement not reported in any other Formosan language (see Zeitoun 1997a).

The data for this paper has been largely extracted from texts comprising over 600 pages in two volumes of transcribed narratives collected over a seven-year period (Zeitoun and Lin, to appear). The first volume is a record of our late informant's memories; the second is a compilation of traditional folktales.

The term "nominalization" is broadly understood as a process whereby an

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[1] These include: Mantauran, Maga, Tona, Budai, Labuan and Tanan.

adjective, a verb, or a verb phrase is converted into a noun. Comrie and Thompson (1985) divide nominalization into two main types: action/state nominalization and argument nominalization. The first type refers to a noun derived from a verb/adjective designating an action or a state. The second type indicates a semantic role (e.g., agent, instrument, manner, location, etc.) of the derived verb. Besides these two main types, they mention that nouns can also be derived from other nouns and that full clauses (relative, complement, or adverbial, for example) can be turned into noun phrases. They further show that while a distinction must be established between "derived nominals" and "action nominals" in terms of their retaining (or not) verbal properties, relativization might not be structurally distinct from nominalization.

The goal of the present paper is two-fold:

(i)   to provide a descriptive analysis of the various nominalization processes found in Mantauran (sec. 3);

(ii) to compare the morphological marking of verbs vs. that of derived nominals; and to try to establish a distinction between lexical vs. syntactic nominalization, and nominalization vs. relativization (sec. 4).

In the following section, I first provide a bird's eye view of Mantauran phrase structure and constituency, and show how derived nominals can be identified in terms of their sharing the same morpho-syntactic characteristics and distribution as other (underived) nouns.

2. A bird's eye view of Mantauran phrase structure and constituency

Mantauran is a verb-initial language with a relatively free word order:

(1) a.   o-kanə   vələvələ   tamatama.[2]
          Dyn.Fin-eat   banana   middle-aged man
          'Father is eating a banana.'

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[2] Abbreviations are as follows: ActNmz: Action nominalization, Ca-: Ca- Reduplication, Caus: Causative, ClsNmz: Clausal nominalization, CncNmz: Concessive nominalization, Dyn: Dynamic, E: Exclusive, Fin: Finite, Gen: Genitive, I: Inclusive, Imprs: Impersonal (pronoun), LocNmz: Locative nominalization, Neg: Negation, NFin: Non-Finite, Nom: Nominative, Obl: Oblique, ObjNmz: Objective nominalization, P: Plural, Rec: Reciprocal, Red: Reduplication, S: Singular, Stat: Stative, StatNmz: State nominalization, Subj: Subjunctive, SubjNmz: Subject nominalization, Sup: Superlative, TempNmz: Temporal nominalization, Top: Topic.

    b.   o-kanə   tamatama   vələvələ.
         Dyn.Fin-eat   middle-aged man   banana
         'Father is eating a banana.'

While the topicalization of agents is unconstrained, that of patients is more problematic: to appear in initial position as topics, they must be definite.

(2)   <u>tamatama</u>   ?a   o-kanə   vələvələ.
      middle-aged man   Top   Dyn.Fin-eat   banana
      'As for father, he is eating/ate a banana.'
(3)   <u>*(ðona?i)   vələvələ</u>   ?a   o-kanə   tamatama.
      that   banana   Top   Dyn.Fin-eat   middle-aged man
      'As for the banana, father is eating/ate (it).'

With the exception of oblique arguments referring to human participants, as in (5), nominal arguments are usually unmarked for case:

(4)   a.   o-laŋai   taotao   ða?anə.
           Dyn.Fin-buy   Taotao   house
         'Taotao bought a house.'
      b.   o-ka?acə   ta?oɭo   ?oɭa?a.
           Dyn.Fin-bite   dog   snake
         i. 'The dog bit the snake.'
         ii. 'The snake bit the dog.'

Among oblique arguments marked as [+human], a further distinction must be made between [±kinship] and [±personal] nouns: [+kinship] or [+personal] oblique arguments induce obligatory agreement (5); [−kinship] or [−personal] nouns may not (6).

(5)   a.   ma-ðalam*(-ilinə)   ðipolo   [<u>taotao   la   ?anao</u>].
           Stat.Fin-love-3P.Obl   Zipolo   Taotao   and   Anao
         'Zipolo loves Taotao and Anao.'
      b.   maðalam*(-inə)   <u>lalakə-li</u>   *taotao.*
           Stat.Fin-love-3S.Obl   child-1S.Gen   taotao
         'Taotao likes my child.' ~ 'My child likes Taotao.'
(6)   a.   ðona?i   ?aolai   ?a   o?ilap(-inə)   <u>apoto-ni</u>.
           that   boy   Top   look for(-3S.Gen)   stone-3S.Gen
         'As for that boy, he was looking for his stone(s).'

b. <u>ðonaʔi</u>   <u>ʔavai</u>   kapa-ki-kaavaʔ*(-*iðə*)
   that   woman   continously-Neg-Dyn.NFin:come-3S.Obl
   lamənaə-ða.
   husband-3S.Gen
   'As for that woman, her husband didn't come to her.'

In this paper, derived nominals are identified as such based on their identical distribution with other nominal arguments, and their sharing the same morpho-syntactic properties:

(i) They occur in an NP position:

(7) a.   o-kaoð-inamə   ka   <u>paiso</u>.
          Dyn.Fin-not exist-1PE.Obl   money
          'We did not have any money.'
    b.   akaoðo   ka   <u>ki-ḻihoaʔ-ə-li</u>.
          not exist   Neg-Dyn.NFin:know-ObjNmz-1S.Gen
          'There is nothing that I do not know.'

(ii) They can be modified by another noun:

(8) a.   <u>vələvələ-ni</u>   *taotao*.
          banana-3S.Gen   Taotao
          'Taotao's banana'
    b.   <u>kanə-ni</u>   *taotao*.
          ActNmz:Dyn.NFin:eat-3S.Gen   Taotao
          'Taotao's eating'

(iii) They may co-occur with a genitive pronoun:[3]

(9) a.   <u>ina</u>-*li*
          mother-1S.Gen
          'my mother'
    b.   <u>a-pa-solatə</u>-*nai*
          ActNmz-Caus-Dyn.NFin:study-1PE.Gen
          'our education'

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[3] Sole subject nominals—formed by the prefixation of *ta-* to the verb stem—cannot be followed by a genitive pronoun (see sec. 4).

(iv) They can undergo topicalization:

(10) a. <u>ðonaʔi</u>   <u>ʔaoðo̜lo̜ʔo</u>   mani vaaʔ-iðə   ʔaði.
    that   lunch box then Dyn.NFin:give-3S.Gen younger sibling
    'That lunch box, (she) gave it to the younger brother.'

   b. <u>ðona</u> <u>ta-ka-əaəa</u>   mani vaaʔ-iðə
    that   SubjNmz-Stat.NFin-one then Dyn.NFin:give-3S.Gen
    ʔaði.
    younger sibling
    'That one, (she) gave it to the younger brother.'

(v) If it refers to a human participant, a derived nominal can take a plural prefix (11a); if it refers to a non-human participant, it can be circumfixed by the quantifier *kapa-…-ŋa* 'all' (11b'):

(11) a. onaʔi *a*-o̜lolai la onaʔi <u>ta-*a*-ʔacakəlaə-ŋa</u>
    that plur-child and that SubjNmz-plur-married-already
    <u>ta-ka-*a*-roðaŋə</u>   o̜ðo̜lo-nai
    SubjNmz-Stat.NFin-plur-old Dyn.Fin-can-1PE.Nom
    ʔi-kariði.
    wear-sleeveless garment
    'Children, already married (women) and old people could wear sleeveless (fur) jackets.'

   b. mani poa-ŋ-inamə   toloðo ðonaʔi
    then Dyn.NFin:make-already-1PE.Obl bridge that
    <u>kapa-l̜ana-ŋa</u>.
    all-stream-Sup
    'Then, they built bridges for us on all the streams.'

   b'. ʔiraki-nai mənə-ŋa loŋai   saŋəparə, toʔonai ʔinaʔi
    for-1PE.Nom now-Sup Dyn.Subj:buy car   any(thing) this
    <u>kapa-a-laŋal̜-aə-ŋa</u>-nai...
    all-ObjNmz-Dyn.NFin:buy-ObjNmz-Sup-1PE.Gen
    'That's because nowadays we (want to) buy cars (as well as other) commodities.'

(vi) If it refers to a [+human] participant, a derived nominal can trigger verbal agreement:

(12) a. <u>ðonaʔi   ʔavai   kapa-ki-kaavaʔ*(-iðə)</u>
that   woman   continously-Neg-Dyn.NFin:come-3S.Obl
laməŋaə-ða.
husband-3S.Gen
'As for that woman, her husband didn't come to her.'

b. <u>ðona   ta-ka-ḻihili,   ðona   ta-ḻihoʔo   ʔa</u>
that   SubjNmz-Stat.NFin-clever   that   SubjNmz-Dyn.NFin:know   Top
mani   pa-ðaac-iliðə […]
then   Caus-Dyn.NFin:leave-3P.Obl
'Those (who were) clever, those (who) understood (would be) allowed to
leave.'

The distinction between verbs and nouns is further illustrated in the following pairs
of examples, which contrast the syntactic distribution of the verb *ʔaðiðapaə* 'work' with
the noun *ðiðapə* 'work'.

(13) a.   ʔaðiðapaə-ḻao.
work-1S.Nom
'I am working.' ~ 'I worked.'

a'.   *ðiðapə-ḻao.
work-1S.Nom

b.   ʔaðiðapa-a!
work-Imp
Work!

b'.   *ðiðapə-a!
work-Imp

(14) a.   ikaoðo   ka   ðiðapə-li.
not exist   work-1S.Gen
'I do/did not have any work (to do).'

a'.   *ikaoðo   ka   ʔaðiðapaə-li.
not exist   work-1S.Gen

b.   paʔəhəmaə   ðiðapə-li.
laborious   work-1S.Gen
'My work is laborious.'

b'.   *paʔəhəmaə   ʔaðiðapaə-li.
laborious   work-1S.Gen

In the following section, these syntactic tests will not be repeated, but the contrast
between a verb and its nominal counterpart will be, whenever possible, explicitly
exemplified.

3. Types of nominalization processes

Following Comrie and Thompson (1985), different nominalization processes are examined below: action/state nominals (sec. 3.1), argument nominals (sec. 3.2), (abstract) nouns (sec. 3.3), and nominalized clauses (sec. 3.4). A short summary is provided in section 3.5. Section 3.6 shows that although nominalization in Mantauran is a very productive process, it sometimes produces irregular morphophonological changes.

3.1 Action/state nominals

Four nominalization processes are involved in deriving action/state nominals. They are summarized in Table 1 and further illustrated in examples (15)-(18).

Table 1: Action/state nominals

Morphological process	Verbal (dyn.) stem	Action nominal	Verbal (stat.) stem	State nominal	
Prefixation of *a-*	**o**-ʔiaʔipi 'count'	**a**-ʔiaʔipi 'arithmetic'	**ma**-aʔa 'flirt'	**a**-*ka*-ʔaaʔaa 'flirt'	
	m-aramao 'resemble'	**a**-parama-ramao 'resemblance'	**ma**-ɭoolai 'young'	**a**-*ka*-ɭoolai 'childhood'	
	m-aʔavi 'share'	**a**-paʔavi 'share'	-- --		
	pa-ðəʔəŋə 'make...meet'	**a**-*pa*-ðəʔə-ðəʔəŋə 'meeting'			
	pa-solatə 'make...study'	**a**-*pa*-solatə 'education'			
	pa-vaɭisi 'make...change'	**a**-*pa*-vaɭi-vaɭisi 'antonym'			
	to-vaɭəvaɭəʔaə 'build roads'	**a**-*to*-vaɭəvaɭəʔaə 'traffic'			
Suffixation of *-aə*	-- --		**ma**-caʔəmə 'ill'	caʔəm-**aə** 'illness'	
			ma-rikoco 'busy'	rikoc-**aə** 'business'	
			ma-taaðiʔi 'good'	taaðiaʔ-**ə** 'goodness'[4]	

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[4] Compare with: *ta-ka-taaðiaʔ-ə* 'advantage' (lit., 'good place').

Occurrence of root	**o**-halacəlacə 'comb'	halacəlacə 'comb'	-- --
	o-təmə 'obstruct'	təmə(təmə) 'tollbooth'	
	o-vəɭətə 'pile up'	vəɭətə 'piling up, wall'	
	o-cəŋələ 'see'	cəŋələ 'seeing, look'	
Occurrence of a verb stem marked with a finite or a subjunctive form	**o**-kanə 'eat'	kanə 'eating'	-- --
	o-ðaacə 'leave'	**o**-ðaacə 'leaving' (+Real) ðoacə 'leaving' (+Irr)	

(15) Action/state nominals—prefixation of *a-*

    a. mani   ðoɭo   a-itina   a-tamatama

       then   Dyn.NFin:can plur-middle-aged woman   plur-middle-aged man

       kaamai   poa   pa-ðəʔəŋə...

       self   Dyn.Subj:make   Caus-Dyn.NFin:meet

       'The parents could have them meet...'

    a'. ...ðonaʔi   ʔaomo   aɭa-ŋ-inamə   o

       that   Japanese   Dyn.NFin:take-already-1PE.Obl   that

       ta-ɭihoʔo   po-inamə

       SubjNmz-Dyn.NFin:know   Dyn.Subj:make-1PE.Obl

       a-pa-ðəʔə-ðəʔəŋə,   poa

       ActNmz-Caus-Red-Dyn.NFin:meet   Dyn.Subj:make

       tolaðəkaə,   toŋoðaə,   a-pa-ʔikaɭomaɭomalə,   pa-ʔaovaovaha.

       place name   place name   ActNmz-Caus-get:prize   Caus-speak

       'The Japanese gathered the cleverest students from Maolin, Tona (and Wanshan) and let us compete.'

    b. onaʔi   lo   to-ðaʔanə-nai   toʔa-toloraə-nai

       that   when   build-house-1PE.Gen   use for-reason-1PE.Nom

       to-ðələpə,   ta-iki-ki-aə

       build-stone living room   LocNmz-Red-Dyn.NFin:b eat-LocNmz

       a-vaɭovaɭo   a-sava-savarə   ma-aʔa.

       plur-young woman   plur-Red-young man   Stat.Subj-flirt

'At that time, when we built a house, we (would) have a living-room so that young women and young men (could) flirt.'

b'. ðona   lo   ma-a-vaɭovaɭo-mao   mani
    that   when   Stat.Subj-plur-young woman-Imprs.Gen   then
    ka-ðao   ðonaʔi   _a-ka-ʔaaʔaa-mao_   lo
    Stat.NFin:many   that   StatNmz-Stat.NFin-flirt-Imprs.Gen   when
    ma-taaðiʔi-ða   ðona   vaɭovaɭo   takaocaə-ni.
    Stat.Subj-good-3S.Gen   that   young woman   character-3S.Gen
    'At that time, when we were young, a girl (would) have many admirers if she was kind.'

(16) State nominals—suffixation of -*aə*

a. olo   ðoma-naə   _ma-caʔəmə-nai,_   o-ðoɭo-nai
    when   other-TempNmz   Stat.Subj-sick-1PE.Gen   Dyn.Fin-can-1PE.Nom
    ʔiasə   saŋəparə...
    Dyn.Subj:call   car
    'If, at times, we are ill, we can call a taxi...'

a'. ðona   ta-ka-kociŋai   _caʔəm-aə_...
     that   SubjNmz-Stat.NFin-serious   sick-StatNmz
     'Those who had a serious disease...'

b. ʔinaʔi   ta-o-aə-ŋa-nai   tavaləʔəvəʔə
    this   LocNmz-Dyn.NFin:go-LocNmz-already-1PE.Gen   place name
    ʔaəla,   toramoro-ŋa-nai   ka   _ma-rikoco_.
    Dyn.Subj:move   very-already-1PE.Nom   Stat.Fin-busy
    'Since we've moved to the new village, we have been very busy.'

b'. onaʔi   a-iki-na-nai   ʔoponoho
     that   ClsNmz-Dyn.NFin:be at-still-1PE.Gen   place name
     akaoðo   ka   _rikoc-aə_-nai.
     not exist   busy-StatNmz-1PE.Gen
     'When we still were in the old village, we were not busy.'

(17) Action nominals—occurrence of the root

a. ...mani   patol-iðə   vəkənəɭə   _vəɭətə_   pa-okəla
    then   from-3S.Obl   soil   Dyn.Subj:pile up   Caus-Dyn.NFin:reach
    ðona   ta-iki-ki-aə-liða
    that   LocNmz-Red-Dyn.NFin:be at-LocNmz-3P.Gen
    ʔapəcə   a-ʔolalai...
    Dyn.Subj:sleep   plur-male
    '...stones were piled up from the ground to the place where men slept...'

a'. mani   cəŋələ-nai   ðonaʔi   ðaʔanə   ʔi
    then   Dyn.NFin:see-1PE.Nom   that   house
    <u>vələtə</u>   mani   ḷihoʔo-nai
    ActNmz:Dyn.NFin:pile up   then   Dyn.NFin:know-1PE.Nom
    ka-iki-liða   ʔina   vaḷio.
    in fact-Dyn.NFin:exist-3P.Gen   this   village
    'Then we saw the ruins of (earlier) houses and we realized that originally there had been a village there.'

b. <u>o-cəŋələ-ka-ʔ-inə?</u>
    Dyn.Fin-see-Neg-2S.Gen-3S.Obl
    'Did you see her?'

b'. kani   <u>cəŋələ-ʔ-inə?</u>
    why   ActNmz:Dyn.NFin:see-2S.Gen-3S.Obl
    'Why did you look at her?'

(18) Action nominal—verb stem marked as finite or subjunctive

a. onaʔi   a-kaavaʔi-ni   ana,
    that   ClsNmz-Dyn.NFin:come-3S.Gen   that
    <i>o</i>-ðaacə-ŋa-ḷao.
    Dyn.Fin-leave-already-1S.Nom
    'When he came, I had already left.'

b. <i>o</i>ðaacə-ʔo   ʔiðaə.
    Dyn.Fin:leave-2S.Gen   when
    'When did you leave?'

c. mənənaə   lo   <u>ð<i>o</i>acə-ʔo</u> ?
    which day   when   Dyn.Subj:leave-2S.Gen
    'When will you leave?'

3.2 Argument nominals

Argument nominals may be divided into: subject(ive), objective, locative, instrumental/manner/result and temporal nouns.

3.2.1 Subject(ive) nominals

Subject(ive) nominalization is rendered by the prefixation of *ta-* to the verb base (see Table 2) and yields the meaning 'one which "verbs"' though "the noun need not be in an 'agent' relationship with the verb" (Comrie and Thompson 1985:350). Thus the adoption of the term "subjective", suggested by M.-C. Paris, in place of "agentive" that narrows down the usage of *ta-*.

Table 2: Agentive nominals

Types of verbs	Verbal stem	Subject(ive) nominal
Dynamic verbs	**o**-alopo 'hunt'	**ta**-alopo '(who) hunts, hunter'
	o-kanə 'eat'	**ta**-kanə '(who) eats'
	o-l̩ihoʔo 'know'	**ta**-l̩ihoʔo '(who) knows'
	o-haraŋə 'snore'	**ta**-haraharaŋə '(who) snores'
	o-piʔapiʔa al̩acə 'write names'	**ta**-piʔapiʔa al̩acə '(who) writes names, officer, civil servant'
	o-solatə 'study, write'	**ta**-solatə '(who) studies/writes'
	o-ʔosario 'play'	**ta**-ʔosario '(who) plays, player'
	m-aavaʔi 'come'	**ta**-kaavaʔi '(who) comes'
	om-oa 'go'	**ta**-oa '(who) goes'
	to-alakə 'give birth'	**ta**-*to*-alakə '(who) gives birth'
	topoðaolaə 'true, right'	**ta**-topoðaolaə '(who) is right'
Stative verbs	**ma**-caʔəmə 'ill'	**ta**-*ka*-caʔəmə '(who) is ill, patient'
	ma-l̩ihili 'clever'	**ta**-*ka*-l̩ihili '(who is) clever'
	ma-roðaŋə 'old'	**ta**-*ka*-roðaŋə '(who is) old, old person (sg.)'
	ma-siʔi 'few, small'	**ta**-*ka*-siʔi '(who is/has) few, small...'

(19) a. araʔəvə   la   <u>o-kanə-ka-i</u>   ka   iki   ʔi
           but   and   Dyn.Fin-eat-Neg-3S.Gen   Dyn.Subj:be at
           sakovo
           men's house
           'But they did not eat in the men's house.'

 a'. olo   to-saisakipi-mao   kasa-ni
        when   make-small glutinous cake-Imprs.Gen   only-3S.Gen
        a-ol̩olai   <u>*ta*-kanə</u>.
        plur-child   SubjNmz-Dyn.NFin:eat
        'When someone made small glutinous cakes (saisakipi), only children (would) eat them.'

 b. mani   l̩ihoʔo   ʔoponoho   maavaʔi-ŋa
       then   Dyn.NFin:know   Mantauran   Dyn.Subj:come-already
       ta-alopo.
       SubjNmz-Dyn.NFin:hunt
       'Then the Mantauran people knew the hunters had already come back.'

b'. ðona   *ta*-l̥ihoʔo   o-vaʔa-iðə   ʔəməʔəməl̥ə,
    that   SubjNmz-Dyn.NFin:know   Dyn.Fin-give-3S.Obl   prize
    ta-ʔakaəa,   ʔakaðoʔa,   ʔakatol̥o.
    SubjNmz-first   second   third
    'The cleverest were given a prize (to show who was) the first, the second (and) the third.'

(20) a. onaʔi   aroŋo-ŋa-nai   moa   ʔina   tavaləʔəvəʔə,
    that   just-already-1PE.Gen   Dyn.Subj:go   this   place name
    ma-siʔi-na-nai   ocao.
    Stat.Fin-few-still-1PE.Nom   man
    'When we first arrived in Tavale'eve'e, we were (still) few (people).'

a'. o   *ta*-ka-siʔi   soso   ka   o-poa-ka-ða   ka
    that   SubjNmz-Stat.NFin-small   breast   Dyn.Fin-make-Neg-3S.Gen
    ʔi-toipi.
    wear-bra
    'As for those who had small breasts, they (would) not wear a bra.'

b. lo   pa-solatə-ð-inamə
    when   Caus-Dyn.NFin:study-3S.Gen-1PE.Obl
    o-l̥ihoʔo-ka-nai   ka   sialal̥a,
    Dyn.Fin-know-Neg-1PE.Gen   Dyn.Subj:hear
    ma-l̥ihili-ka-nai.
    Stat.Fin-clever-Neg-1PE.Gen
    'When they taught us, we did not understand, we were not clever.'

b'. ðona   *ta*-ka-l̥ihili,   ðona   ta-l̥ihoʔo
    that   SubjNmz-Stat.NFin-clever   that   SubjNmz-Dyn.NFin:know
    ʔa   mani   pa-ðaac-iliðə [...]
    Top   then   Caus-Dyn.NFin:leave-3P.Obl
    'Those (who were) clever, those (who) understood (would be) allowed to leave.'

3.2.2 Objective nouns

Objective nominalization is usually indicated by *a-...-aə* in dynamic verbs and by *...-aə* in stative verbs.

Table 3: Objective nominals

Types of verbs	Verbal stem	Objective nominal
Dynamic verbs	**o**-alopo 'hunt'	**a**-lop-**aə** 'game'
	o-kanə 'eat'	**a**-kan-**aə** 'food'
	o-ʔoŋolo 'drink'	**a**-ʔoŋol-**aə** 'drink'
	o-laŋai 'buy'	**a**-laŋaɭ-**aə** '(thing) bought, merchandise'
	o-vəɭətə 'pile up'	**a**-vəɭət-**aə** '(stones) piled up, wall'
	om-iki 'exist, be at'	**a**-iki-**ə** 'existence'
	pa-cəŋələ 'make...see'	**a**-*pa*-cəŋə-cəŋəl-**aə** solatə 'references'
Stative verbs	**ma**-ðalamə 'like, love'	*ka*-ðalam-**aə** 'the loved (one)'
	ma-səkəɭə 'angry'	*ka*-səkəɭ-**aə** 'the one being angered at'

(21) a.   <u>o-kanə-ŋa-ka-li</u>.
      Dyn.Fin-eat-already-Neg-1S.Gen
      'I have not eaten yet.'

   a'.   ðonaʔi   ʔa   kasa-ða   ðonaʔi   <u>*a*-kan-*aə*</u>-nai
      that   Top   only-3S.Gen   that   ObjNmz-Dyn.NFin:eat-ObjNmz
      'That was the only food we had.'

   b.   ðona   ka   <u>o-laŋai</u>-ka-nai   ka   toʔonai...
      that   Dyn.Fin-buy-Neg-1PE.Gen   any(thing)
      'We never bought anything.'

   b'.   [...] mani   aɭa   m-oa   loŋai   oʔi
            then   Dyn.NFin:take   Dyn.Subj-go   Dyn.Subj:buy   that
      moɭaə,   timo,   toʔonai   ðonaʔi
      fabric   salt   everything   that
      <u>*a*-laŋaɭ-*aə*</u>-liða.
      ObjNmz-Dyn.NFin:buy-ObjNmz-3P.Gen
      'Then, they would go and buy fabric, salt, everything they needed to buy.'

(22) a.   <u>ma-ðaa-ðalamə-ka-ʔ-inə</u>   ðipolo,
      Stat.Fin-Red-love-Neg-2S.Gen-3S.Obl   Dipolo
      <u>ma-ðaa-ðalamə-ka-ʔ-inə</u>   taotao?
      Stat.Fin-Red-love-Neg-2S.Gen-3S.Obl   Taotao
      'Do you prefer Zipolo or Taotao?'

a'. a-iki-ə-ni   ʔi
     ObjNmz-Dyn.NFin:exist-ObjNmz-3S.Gen
     <u>ka-ðaa-ðalam-aⱭ-ʔo?</u>
     Stat.NFin-Red-love-ObjNmz-2S.Gen
     'Which one do you prefer?'

b.   <u>ma-səkəḻ-inə</u>   ðipolo   taotao.
     Stat.Fin-angry-3S.Obl   Zipolo   Taotao
     'Taotao is/was angry at Zipolo.' ~ 'Zipolo is angry at Taotao.'

b'. aaŋa-i   <u>ka-səkəḻ-*aⱭ*-ni?</u>
     who-3S.Gen   Stat.NFin-angry-ObjNmz-3S.Gen
     'With whom is he angry?'

Another process has been reported in the Southeastern Rukai dialects as well as in other Formosan languages (Saisiyat, Atayal, Puyuma, Kavalan): the infixation of *<in>* that correlates an aspectual/modal distinction, i.e., perfective/realis vs. imperfective/irrealis (Teng 2001, Yeh 2000, Chen 1999). In Saisiyat, for instance, the distinction between "past" and "future" is usually expressed through a different device, e.g., *<in>* vs. *ka-...-ən*.

(23) Saisiyat (Yeh 2000)
     a.   t-*in*-awbon   'something pounded, rice cake'
     a'. *ka*-tawbon-*ən*   'something to be pounded'
     b.   t-*in*-alək   'something cooked, wine'
     b'. *ka*-talək-*ən*   'something to be cooked'

The infix *<in>* is found in a very few fossilized lexical items in the Northern Rukai dialects (Mantauran, Tona and Maga).[5] In Mantauran, the realis/irrealis distinction mentioned above is also found (cf. the contrast between *-a* vs. *a-...-aə*) but is pending further investigation:

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[5] The word *c<in>əkəlaə* 'villager' might tentatively be treated as deriving from the verb *o-cəkəlaə* 'all' but it represents the only instance uncovered so far in Mantauran.

(24) a.   kana-ni   <u>kan-*a*</u>-ʔo?[6]
        what-3S.Gen   Dyn.NFin:eat-ObjNmz-2S.Gen
        'What do you want to eat?'

   a'.   kana-ni   *a*-kan-*aə*-ʔo?
        what-3S.Gen   ObjNmz-Dyn.NFin:eat-ObjNmz-2S.Gen
        'What did you eat?'

   b.   kana-ni   ʔoŋol-*a*-ʔo?
        what-3S.Gen   Dyn.NFin:drink-ObjNmz-2S.Gen
        'What do you want to drink?'

   b'.   kana-ni   *a*-ʔoŋol-*aə*-ʔo?
        what-3S.Gen   ObjNmz-Dyn.NFin:drink-ObjNmz-2S.Gen
        'What did you drink?'

3.2.3 Locative nouns

Locative nominalization (which implies that "X is the place where Y did/does something") manifests itself through the circumfixation of *ta-...-aə* to the verb base. Only one locative nominal—derived from the verb *omiki* 'be at, exist'—was found to be formed by the suffixation of *-aə* (and not the circumfixation of *ta-...-aə*); cf. *kiki-**aə*** 'space'.

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[6] Another form, exemplified in (ia) was found, remains also ill-understood:

(i)   a.   <u>oa-***i***</u>-ʔo?
        Dyn.NFin:go-ObjNmz-2S.Gen
        'Where are you going?'

     b.   <u>*a*-oa-*ə*</u>-ʔo?
        ObjNmz-Dyn.NFin:go-ObjNmz-2S.Gen
        'Where did you go?'

Table 4: Locative nominals

Types of verbs	Verbal stem	Locative nominal
Dynamic verbs	**o**-cikipi 'sew'	**ta**-cikip-**aə** 'seam, stitch'
	o-ðomiŋi 'white-wash'	**ta**-ðomi-ðomiŋ-**aə** 'wall'
	o-kəɭai 'hang'	**ta**-kəɭa-kəɭ-**aə** 'hanger'
	o-laŋai 'buy'	**ta**-laŋaɭ-**aə** ~ **ta**-laŋa-laŋaɭ-**aə** 'store'
	o-saosi 'lock (the door)'	**ta**-sao-saosi-**ə** 'lock'
	o-sokovo 'bend (one's head)'	**ta**-soko-sokov-**aə** 'church'
	o-solatə 'study, write'	**ta**-sola-solat-**aə** 'school'
	o-vəɭətə 'pile up'	**ta**-vəɭət-**aə** 'wall' (lit: place where stones are piled up)
	o-ʔavolo 'bury'	**ta**-ʔavo-ʔavol-**aə** 'tomb'
	o-ʔosario 'play'	**ta**-ʔosari-sari-**aə** 'running field, touristic area'
	m-aavanao 'wash (body)'	**ta**-paa-vaa-van-**aə** 'bathroom'
	m-oʔaɭo 'draw water'	**ta**-oʔaɭo-ʔaɭo-**ə** 'well'
	om-iki 'exist, be at'	**ta**-iki-**ə** 'place where...is', **ta**-iki-ki-**aə** 'room'
	om-oa 'go'	**ta**-oa-**ə** 'place to go' (**ta**-oao-**aə**) mo-**ta**-vilavilaʔa-**ə** 'toilet'
	pa-ʔototalo 'make...put away'	**ta**-*pa*-ʔototalo-**ə** solatə 'schoolbag' (Lit: place where books are put away) **ta**-*pa*-ʔototalo-**ə** moɭaə 'cupboard' (Lit: place where belongings are put away)
	pa-ʔənao 'make...wash'	**ta**-*pa*-ʔəna-ʔən-**aə** 'washing machine'
	po-acilai 'water (flowers)'	**ta**-*po*-acilaɭ-**aə** 'paddy field'
	to-poi 'make a fire'	**ta**-potopoɭ-**aə** 'fire place'
	ʔi-liŋo 'look (oneself) in a mirror'	**ta**-*ʔi*-liŋo-liŋo-**ə** 'dresser'[7]
	ʔaliki '(come) from'	**ta**-ʔaliki-ki-**aə** mokavolə 'origin'
Stative verbs	**ma**-ɔcəɭəŋə 'black'	**ta**-*ka*-ɔcəɭaŋ-**aə** 'dirt' (Lit: dark spot)
	ma-taaði'i 'good'	**ta**-*ka*-taaðiaʔ-**ə** 'advantage' (Lit: good place)
	ma-takoɭa 'good'	**ta**-*ka*-takoɭ-**aə** 'disadvantage' (Lit: bad place)
	ma-təətələkə 'cooler'	**ta**-*pa*-*ka*-təətələk-**aə** ʔaðamaðamai aʔoŋoloŋolaə 'fridge' (Lit: place that keeps dishes and drinks cool(er))

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[7] A doublet form *ta ʔiliŋiliŋoə* was recorded.

(25) a.　mani　pa-vaɭisi　　　　　　avo-avoko　<u>cikipi</u>　　　votoɭoʔo-ða...
　　　　　then　Caus-Dyn.NFin:change　Red-blanket　Dyn.Subj:sew　body-3S.Gen
　　　　　'(The bride would) be put on a blanket (we) saw around her body...'
　　a'.　araʔəvə　lo　　ma-raðiʔi-ŋ-iðə　　　　　　ðonaʔi
　　　　　but　　when　Stat.Subj-heal-already-3S.Obl　　that
　　　　　<u>*ta*-cikip-*aə*-n-iðə</u>
　　　　　LocNmz-Dyn.NFin:sew-LocNmz-3S.Gen-3S.Obl
　　　　　maɭa-ŋa-nai
　　　　　Dyn.Subj:take-already-1PE.Nom
　　　　　ʔini-ka-ka-mamai　　　ʔo-cikipi.
　　　　　self-Ca-Stat.NFin-self　　take off-Dyn.NFin:sew
　　　　　'When the wound had healed and (we had to) take off the stitches, then
　　　　　we could do that by ourselves.'
　　b.　ðonaʔi　ta-iki-ə-ða　　　　　　　　　　ʔapəʔapəcə
　　　　　that　　LocNmz-Dyn.NFin:be at-LocNmz-3S.Gen　　Dyn.Subj:lay
　　　　　ɭoolai　saloðiri　mani　po-iðə　　　　　　oʔi　toloŋo　　la
　　　　　child　cradle　　then　Dyn.NFin:make-3S.Obl　that　receptacle　and
　　　　　akoʔəðə　<u>kəɭai</u>.
　　　　　knife　　Dyn.Subj:hang
　　　　　'The receptacle and the knife were hung on the cradle where the baby
　　　　　slept.'
　　b'.　onaʔi　a-kaavaʔi-ŋa-ða　　　　　　　　　　ʔaomo,
　　　　　that　　ClsNmz-Dyn.NFin:come-already-3S.Gen　　Japanese
　　　　　o-ðoɭo-ŋa-nai　　　　　　　loŋai　　　　kavanə,
　　　　　Dyn.Fin-come-already-1PE.Nom　　Dyn.Subj:buy　　wardrobes
　　　　　<u>*ta*-kəɭa-kəɭaɭ-*aə*,</u>　　　　　　kovokovo　　　　　　la
　　　　　LocNmz-Red-Dyn.NFin:hang-LocNmz　ActNmz:Dyn.NFin:cover　and
　　　　　<u>*ta*-ʔi-liŋo-liŋo-*ə*.</u>
　　　　　LocNmz-look at-Red-mirror-LocNmz
　　　　　'When the Japanese came, we were able to buy wardrobes, coat hangers,
　　　　　mosquito nets and dressers.'
(26) a.　<u>ma-əcəɭaŋə</u>　　ðonaʔi　　moɭaə.
　　　　　Stat.Fin-black　　that　　　cloth
　　　　　'That cloth is black.'
　　a'.　mani　aɭa-nai　　　　　　　ʔi　　ðaʔə　　poa
　　　　　then　Dyn.NFin:take-1PE.Nom　　　mud　　Dyn.Subj:make
　　　　　liŋao　　　　　piʔamaðalaə　ʔoɭa
　　　　　Dyn.Subj:wash　　first　　　　take off

ᵃ_ta_-ka-əcəɭaŋ-*aə*.
LocNmz-Stat.NFin-black-LocNmz
'We (would) use some mud to wash (the dishes) to first take off the dirt.'

b. ma-taaði?i   toramoro.
Stat.Fin-good   very
'It is very good.' ~ 'It was very good.'

b'. ora?əvə la   _ta_-ka-taaðia?-*ə*   ma-ðao-ŋa
but   and LocNmz-Stat.NFin-good-LocNmz Stat.Dyn-many-alread
ta-totiamə   ?ina?i   kataɭisiə [...]
SubjNmz-open:store   this   aborigine
'However, the advantage (is that) there are many aborigines who are
making loans (to open stores)...'

Other locative nouns will be examined below, which are derived from original nouns through quite the same morphological processes.

3.2.4 Instrumental, manner and result nouns

Morphologically speaking, instrumental, manner and result nominals are treated the same in Mantauran (see Tables 5-7). This type of nominalization is indicated through the prefixing of _?a-_ (< P(roto) R(ukai) *sa-) to the verb base. The main distinction lies in the fact that an "instrumental"[8] meaning is obtained if the verb is dynamic (Table 5) while a "manner" interpretation is perceived if the verb is inherently stative (Table 6). If a stative verb has previously undergone another morpho-syntactic process (e.g., causativization), then the derived nominal might be instrumental, cf. _ma-poli_ 'white' > _pa-ka-poli_ 'make...white' > _**?a**-pa-ka-poli-poli_ 'detergent', _ma-?ətə_ > _pa-ka-?ətə_ > _**?a**-pa-ka-?ətə-?ətə_ 'anaesthesia'. In co-occurrence with other prefixes (e.g., _po-_ 'put, give, make'), _?a-_ conveys another interpretation: "as a result of..." (Table 7).

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[8] No _Ca_-reduplication pattern yielding an instrumental meaning, as reported in Blust (1998), is found in Mantauran.

Table 5: Instrumental, manner and result nominals

Types of verbs	Verbal stem	Instrumental nominal
Dynamic verbs	**o**-cəŋaʔa 'drive in a nail'	**ʔa**-cəŋa-cəŋaʔa 'nail'
	o-ðaḷi 'pave the floor with slates'	**ʔa**-ðaḷi-ðaḷi 'floor, slate (used to pave the floor, the soil)'
	o-ko-ŋiʔaŋiʔi 'shave (beard)'	**ʔa**-*ko*-ŋiʔa-ŋiʔaŋiʔi 'twizzers, razor'
	o-hisihisi 'saw'	**ʔa**-hisi-hisihisi 'saw'
	o-ḷakipi 'stick'	**ʔa**-ḷaki-ḷakipi 'glue'
	o-liŋao 'wash (dishes)'	**ʔa**-liŋao-ŋao 'washing up liquid, sponge'
	o-moromoro 'clean one's teeth, rinse'	**ʔa**-moro-moromoro 'toothbrush'
	o-pana 'shoot (with a bow)'	**ʔa**-pana 'arrow'
	o-solatə 'study, write'	**ʔa**-sola-solatə 'pencil'
	o-taŋətaŋə 'beat' (with a board)	**ʔa**-taŋə-taŋətaŋə 'wash board'
	o-ʔənao 'wash (clothes)'	**ʔa**-əna-ʔənao 'washing powder'
	o-ʔoðoʔoðo 'mop (the floor)'	**ʔa**-oðo-ʔoðoʔoðo 'mop'
	o-ʔosario 'play'	**ʔa**-osari-sario 'toy'
	m-aavanao 'wash (body)'	**ʔa**-paavaa-vanao 'soap'

(27) a. ʔinaʔi   mənə-ŋa   toʔonai-ŋa   ma-ðao   ʔinaʔi   pakisa,
this   now-Sup   any(thing)-Sup   Stat.Fin-many   this   plain
mani   ðoḷo-ŋ-inamə   loŋai   solatə,
then   Dyn.NFin:can-already-1PE.Obl   Dyn.Subj:buy   book
<u>ʔa-sola-solatə</u>,   <u>ʔa-ḷaki-ḷakipi</u>...
InstNmz-Red-Dyn.NFin:write   InstNmz-Red-Dyn.NFin:stick
'Nowadays, there are everything in the plain, and we can afford to buy
books (or paper), pencils and glue (to our children) ...'

b. o-kaoð-inamə   <u>ʔa-hisi-hisihisi</u>   la
Dyn.Fin-not exist-1PE.Obl   InstNmz-Red-Dyn.NFin:saw   and
<u>ʔa-paḷi-paḷipaḷici</u>.
InstNmz-Red-Dyn.NFin:drive in a nail
'(In the past), we did not have saws or screwdrivers.'

Table 6: Manner nominals

Types of verbs	Verbal stem	Manner nominal
Stative verbs	**ma**-taaðiʔi 'good'	ʔa-*ka*-taaðiʔi '(how) good'
	ma-kəcəl̪ə 'cold'	ʔa-*ka*-kəcəl̪ə '(how) cold'
	ma-l̪ihili 'clever, smart'	ʔa-*ka*-l̪ihili '(how) clever/smart'
	ma-riðarə 'fast'	ʔa-*ka*-riðarə '(how) fast'

(28) a.   <u>ma-riðarə</u>   l̪ol̪amə.
         Stat.Fin-fast   Dyn.Subj:run
         'He runs fast.'

    a'. amokoa-ni   <u>*ʔa*-ka-riðai-ni</u>   lo
         how-3S.Gen   ManNmz-Stat.NFin-fast-3S.Gen   when
         ðoaðaacə-ni.
         Dyn.Subj:walk-3S.Gen
         'How fast does he walk?'

    b. <u>ma-l̪ihili-ŋa-l̪ao.</u>
         Stat.Fin-clever-Sup-1S.Nom
         'I am the cleverest.'

    b'. amokoa-ni   <u>*ʔa*-ka-l̪ihili-ni</u>   omalə.
         how-3S.Gen   ManNmz-Stat.NFin-clever-3S.Gen   Dyn.Subj:sing
         'How well does he sing?'

Table 7: Result nominals

Types of verbs	Verbal stem	Instrumental nominal
Deverbal nouns	**po**-timo 'put on salt'	ʔa-*po*-timo 'as a result of salting'[9]

3.2.5 Temporal nouns

Temporal nouns are formed through the circumfixation of *kala*-...-*aə*[10] to the verb base yielding the meaning 'season' (e.g., 'cold season', i.e., 'winter'; 'rainy season', i.e., 'monsoon').

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[9] Only one such occurrence was found.

[10] Whether this circumfix should be decomposed as *ka-la*-...*aə* is still under investigation.

Table 8: Temporal nominals

Types of verbs	Verbal stem	Temporal nominal
Dynamic verbs	**o**-ðaʔolo 'rain'	**kala**-ðo-ðaʔol-**aə** 'rainy season'
Stative verbs	**ma**-kəcəɭə 'cold'	**kala**-kəcəɭ-**aə** 'winter'[11]
	ma-ɭapaʔa 'burning hot'	**kala**-*ka*-ɭapaʔ-**aə** 'summer'

(29) a. amo-<u>ðaʔolo</u>   lo ʔiða.
       will-Dyn.NFin:rain   tomorrow
       'It will rain tomorrow.'

     b. olo   *kala*-ðo-ðaʔol-*aə*   lo i-vaɭi-vaɭio-mao,
       when TempNmz-Red-Dyn.NFin:rain if   stay-Red-village-Imprs.Gen.
       ki-oa-mao   ooma...
       Neg-Dyn.NFin:go-3Imprs.Nom   field
       'During the rainy season, if one stayed home, one would not go to the
       field ...'

(30) a. lo   toramoro-ða <u>ma-kəcəɭə</u>   ðonaʔi a-vaɭovaɭo   ka
       when   very-3S.Gen Stat.Subj-cold   that   plur-young woman
       o-ðoɭo-ka-ða   ʔi-kariði,   ma-ʔino.
       Dyn.Fin-can-Neg-3S.Gen wear-sleeveless garment Stat.Fin-embarrassed
       'When it was very cold, young women did not dare to wear sleeveless
       (fur) jackets (because) they were (too) embarrassed (to do so).'

     b. *kala*-kəcəɭ-*aə*   ʔa   o-əcəvə-mao
       TempNmz-cold-TempNmz   Top Dyn.Fin-cross on foot-Imprs.Nom
       motaɭovaɭə.
       to:opposite side of the river bank
       'During the winter, (it was possible) to cross the river on foot.'

3.3 Nouns turning into other (abstract) nouns

Two major classes of nouns turning into other (abstract) nouns through a process of nominalization have been found: locative and temporal nouns. These are examined in turn below.

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[11] Expected form: *kala-ka-kəcəɭ-aə*. Why *ka-* does not occur in this derived nominal remains unaccounted for.

3.3.1 Locative nouns

I showed in Zeitoun (1995:143) that there are three major ways of referring to a location in Mantauran: the suffix *-aə* (PR *-anə) is added to [–human] nouns, e.g., *i-viliɭ-aə* 'behind'; *-naə* (< *-n-aə*) is added to [+human, –personal] nouns, e.g., *ðaʔan-a-naə* 'household'; and *-inə* is added to [+human, +personal] nouns occurring in the oblique case, e.g., *ipol-inə* 'Ipolo (Obl)'. Among these, the first two represent instances of nominalization, whereby a noun turns into another noun. Since then, two other nominalization processes have been uncovered: the first consists of the circumfixation of *ta-...-aə* to a [–human] base; the second does not allow any type of affixation, but reduplication of the [+human] base implies a location. These four types of nominalization—*ta*-N[–human]*-aə*, (Red-)N[–human]*-aə*, N[+human]*-naə*, Red-N[+human]—do not only differ in terms of the morphological process involved, but also in terms of the semantic interpretation attributed to the derived nominal.

Table 9: Locative nominals (derived from nouns)

Types of nouns	Nominal stem	Derived nominal
[–human]	acilai 'water'	**ta**-cilaɭ-**aə** 'spring'
	ɭima 'hand'	**ta**-ɭima-**ə** 'sleeve'
	ovəʔəkə 'pig'	**ta**-vəʔək-**aə** 'pigpen'
	paloŋo 'pot'	**ta**-paloŋ-**aə** 'hearth'
	ʔaəɭəŋə 'flower'	**ta**-ʔaəɭəŋ-**aə** 'garden'
	ʔaɲato 'wood, brushwood'[12]	**ta**-ʔaɲato-**ə** 'woodshed'
	acilai 'water'	acilaɭ-**aə** 'pound'
	ðakəralə 'river'	ðakəra-kəral-**aə** 'river bank'
	ðaʔanə 'house'	ðaa-ða-ðaʔan-**aə** 'place full of houses'
	mairaŋə 'sweet potato'	mairai-raŋ-**aə** 'place full of sweet potatoes'
[+human]	ðaʔanə 'house'	ðaʔana-**naə** 'household'
	ʔavai 'girl, woman'	ʔavai-**naə** 'girl/bride's family'
	ʔaolai 'male, boy, man'	ʔaolaɭa-**naə** 'boy/groom's family'
	a-oɭolai 'children'	*a*-oɭo-oɭolai 'place full of children'[13]

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[12] Doublet forms include: *ŋaʔato* 'wood, brushwood' ~ ***ta-ŋaʔato-ə*** 'woodshed'.

[13] Only one such occurrence was found.

(31) a.   amo-ðoɭo-ka-li   ʔoŋolo
          will-Dyn.NFin:can-Neg-1S.Gen   Dyn.Subj:drink
          ta-ka-tətələkə   <u>acilai</u>?
          SubjNmz-Stat.NFin-cold   water
          'Can I drink cold water?' (Based on Lin, 1999: Vol.6:46)

    a'.   "lo   m-oa-ʔo   <u>*ta*-cilaɭ-*aə*</u>   ʔa
          if   Dyn.Subj-go-2S.Gen   LocNmz-water-LocNmz   Top
          m-oɭəðə-moʔo,   ma-ʔətə."
          Dyn.Fin-sink-2S.Nom   Stat.Fin-die
          "If you go to the spring, you will sink and die."

    a".   lo...   omiki-ŋa-mao   vaɭəvaɭəʔaə   maavanao,
          when   Dyn.Subj:exist-already-Imprs.Gen   road   Dyn.Subj:bath
          lo   ɭivatə-mao   <u>aicilaɭ-*aə*</u>.
          when   Dyn.Subj:cross-Imprs.Gen   water-LocNmz
          'We washed ourselves on the road if we came across a pond of water.'

    b.   ma-əaəa   <u>ðakəralə</u>   aləvə   ʔoponoho.
          Stat.Fin-one   river   below   place name
          'There was a river on the foot of the (old) village.'

    b'.   ðonaʔi   viɭilaə-ŋa   mani   po-inamə
          that   after-Sup   then   Dyn.NFin:make-1PE.Obl
          ta-sola-solat-aə   piki   ɭaoðo
          LocNmz-Red-Dyn.NFin-study-LocNmz   Dyn.Subj:put   down
          <u>ða-kəra-kəral-*aə*</u>.
          river-Red-river-LocNmz
          'Afterwards, a school opened, (which) was situated on the river banks.'

    c.   ʔinikakakamai-nai   ɭoŋəʔə   poa-nai
          self-1PE.Nom   Dyn.Subj:cultivate   Dyn.Subj:make-1PE.Nom
          poɭavo   <u>mairaŋə</u>.
          plant   sweet potato
          'We planted sweet potatoes ourselves.'

    c'.   ðonaʔi   vəkənəɭə   ʔa   <u>mai-raa-raŋ-*aə*</u>.
          that   land   Top sweet potato-Red-sweet potato-LocNmz
          'That place is full of sweet potatoes.'

(32) a.   ðona   <u>ðaʔanə</u>-liða   a-oɭolai,   ʔanomaəlaə   ma-taaði?i.
          that   house-3P.Gen   plur-child   especially   Stat.Subj-good
          'As for the house of the children, it was really beautiful.'

a'. lo   ʔiðanaə-ŋa   mani   vaʔoro   ʔaolai
when   day after-Sup   then   Dyn.NFin:cook rice   male
<u>ðaʔana-*naə*</u>-liða.
house-LocNmz-3P.Gen
'The day after, the groom's family (would) cook rice.'

b. ...mani   avil-iðə   vaɭovaɭo   ʔiiðəmə
then   Dyn.NFin:carry-3S.Obl   young woman   toward
ðaʔanə-ða   <u>ʔaolai</u>.
house-3S.Gen   male
'The young woman (would) be carried to the groom's house.'

b'. ðonaʔi   <u>ʔaolaɭa-*naə*</u>   mani   aɭa   ðonaʔi cacavakə,
that   male-LocNmz   then   Dyn.NFin:take   that   pottery jar
cəʔəɭə,   livasə...
necklace   knife
'The groom's family then take pottery jars, necklaces, knives...'

3.3.2 Temporal nouns

At least two morphological processes whereby temporal nouns turn into other (temporal) nouns have been identified.

The first, which consists of the circumfixation of *kala-...-aə* 'season' to [–temporal] nouns, is productive to the extent that even loans (e.g., *ʔaomo* 'Japanese', *ciokoko* 'Chinese') can be taken as the base of derivation. The second consists of the suffixation of *-naə* to the base to form temporal adjuncts.

Table 10: Temporal nominals (derived from nouns)

Types of nouns	Nominal stem	Derived nominal
[–temporal]	pahai 'rice'	**kala**-pahaɭ-**aə** 'harvest season (rice)'
	ʔaomo 'Japanese'	**kala**-ʔaom-**aə** 'Under the Japanese'
	ciokoko 'Chinese'	**kala**-ciokok-**aə** 'Under the Chinese'
[+temporal]	ðoma 'other'	ðoma-**naə** 'sometimes, when?'
	ʔiða 'day'	ʔiða-**naə** 'afterwards, when?'
	mənə 'now, day'	mənə-**naə** 'which day?'
		mən*a*-**naə** 'day, time'[14]

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[14] As opposed to 'space'.

(33) *kala-ʔaom-aə*   a-pa-sola-solatə.
    TempNmz-Japanese-TempNmz   ActNmz-Caus-Red-Dyn.NFin:study
    'Japanese education'

(34) a.   ʔiða-*naə*   lo   maavaʔi-nomi ?
        day-TempNmz   if   Dyn.Subj:come-2P.Gen
        'When will you come again?'

    b.   mənə-*naə*   lo   maavaʔi-nomi ?
        day-TempNmz   if   Dyn.Subj:come-2P.Gen
        'Which day will you come?'

    b'. mani   iki   məna-*naə*   ðonaʔi   laməŋaə-ða   pəəɭəŋaə
        then   exist   day-TempNmz   that   spouse-3S.Gen   Peelengae
        "amo-ðaacə-ɭao   olopo"   mani   ia.
        will-Dyn.NFin:leave-1S.Nom   Dyn.Subj:hunt   then   Dyn.NFin:so
        'One day, her husband Peelengae said: "I am going hunting." '

3.4 Clausal nominalization

Comrie and Thompson (1985:392) use the term "clausal nominalization" to refer to the process by which clauses are nominalized. Though I have dubbed this process "adverbial nominalization" (so-called because one of the structures in question can be glossed as "when X happened/happens") in a recent paper (see Zeitoun 2000), I am adopting Comrie and Thompson's terminology for the sake of clarity.

This type of nominalization process is readily seen in temporal, conditional, and concessive clauses in Mantauran. Three different processes are involved:

(i)   If the verb refers to a situation that has already taken place, it is prefixed by *a-* (temporal clauses); see Table 11.

(ii) If the verb refers to a situation that is to happen or may happen, it appears in its subjunctive form (conditional/hypothetical clauses); see Table 12.

(iii) If the verb indicates a concession, it is circumfixed by *ni-...-a(ə)* (concessive clauses); see Table 13:

Table 11: Clausal nominals (1)

Morphological process	Types of verb	Verbal stem	Clausal nominal
a- [temporal clauses]	**Dynamic verbs**	**o**-ðaacə 'leave'	**a**-ðaacə 'when...left'
		o-kanə 'eat'	**a**-kanə 'when...ate'
		o-ḷihoʔo 'know'	**a**-ḷihoʔo 'when...knew'
		o-tovi 'cry'	**a**-tovi 'when...cried'
		m-aavaʔi 'come'	**a**-kaavaʔi 'when...come'
		om-oa 'go'	**a**-oa 'when...went'
		om-iki 'exist'	**a**-iki 'when...were'
		ʔitovoḷo 'ask'	**a**-ʔitovoḷo 'when...asked'
	Stative verbs	**ma**-oloho 'grow up'	**a**-*ka*-aloho 'when...grown up'
		ma-ðao 'a lot, many'	**a**-*ka*-ðao 'when...a lot, many'
		ma-ḷoolai 'be young (child)'	**a**-*ka*-ḷoolai 'as a child'
		ma-savarə 'be young (man)'	**a**-*ka*-savarə 'as a young man'
		ma-vaḷovaḷo 'be young (woman)'	**a**-*ka*-vaḷovaḷo 'as a young woman'

(35) a.   onaʔi   <u>*a*-iki-na-nai</u>   kaʔoponohaə,
         that   ClsNmz-Dyn.NFin:exist-still-1PE.Gen   place name
         <u>om-iki</u>-nomi   ta-səʔəsəʔə   koliʔi
         Dyn.Fin-exist-1PE.Nom   SubjNmz-Dyn.NFin:rise   sun
         om-i-inamə   lo   cəŋələ-n-inamə   vaḷavaḷaə.
         Dyn.Fin-so-1PE.Obl   if   Dyn.Subj:see-3S.Gen-1PE.Obl   outsiders
         'When we still were in the old village [Ka'oponohae], outsiders (would)
         tell us that we were located in the east, when they came to see us.'

    b.   <u>ma-ḷoolai</u>-na   lalakə-li
         Stat.Fin-young-still   child-1S.Gen
         'My child is still young.'

    b'.   mani   <u>*a*-ka-ḷoolai</u>-li   o-ḷihoʔo-ka-li
         then   ClsNmz-Stat.NFin-young-1S.Gen   Dyn.Fin-know-Neg-1S.Gen
         om-iki   vaḷinaə   ðaʔanə   mia.
         Dyn.Fin-exist   place name   house   Dyn.Subj:so
         'When I was young, I did not know that there were houses in Valinae.'

Table 12: Clausal nominals (2)

Morphological process	Types of verb	Verbal stem	Clausal nominal
Vsubj [hyp/cond. clauses]	**Dynamic verbs**	**o-**ðapələ 'fish (by poisoning)'	ð**o**pələ 'if...fish (by poisoning)'
		o-kanə 'eat'	k**o**nə 'if...eat'
		o-cəŋələ 'see'	cəŋələ 'see'
		o-tovi 'cry'	tovi 'if...cry'
		m-aavaʔi 'come'	**m-**aavaʔi 'if...come'
		om-oa 'go'	**m-**oa 'if...go'
		om-aḷa 'take'	**m-**aḷa 'if...take'
		ʔitovoḷo 'ask'	ʔitovoḷo 'if...ask'
	Stative verbs	**ma-**aloho 'grow up'	**ma-**aloho 'if...grow up'
		ma-ðao 'a lot, many'	**ma-**ðao 'if...a lot, many'
		ma-ḷoolai 'be young (child)'	**ma-**ḷoolai 'if...be young (child)'
		ma-savarə 'be young (man)'	**ma-**savarə 'if...be young (man)'
		ma-vaḷovaḷo 'be young (woman)'	**ma-**vaḷovaḷo 'if...be young (woman)'

(36) a. olo   ðomanaə,   mani   ðapələ-nai   to-kaʔa-kaʔaŋə
　　　　 when   sometimes   then   Dyn.NFin:fish-1PE.Nom   do-Red-fish
　　　　 ḷoikii-kisi...
　　　　 Red-Dyn.Subj:fish
　　　　 'Sometimes, we (would) go fishing...'

　　a'. ðonaʔi   lo   ðopələ-nai   maḷa   oʔi   kaʔaŋə...
　　　　 that   when   Dyn.Subj:fish-1PE.Gen   Dyn.Subj:take   that   fish
　　　　 'If we had been fishing and caught fish...'

　　b. om-aḷa-ḷao   to-ðoʔa.
　　　　 Dyn.Fin-take-1S.Nom   do-two
　　　　 'I caught two.'

　　b'. cəəla   ʔi   vaḷavaḷaə   lo   m-aḷa-nai
　　　　 look   outsider(s)   when   Dyn.Subj-take-1PE.Gen
　　　　 siriri   ka   mati-ḷihoʔo-ka-i
　　　　 Dyn.Subj:take as wife:Red   well-Dyn.NFin:know-Neg-3S.Gen
　　　　 m-iiʔa   vaha-nai.
　　　　 Dyn.Subj-like   language-1PE.Gen

'Look at those outsiders; (even) if they inter-marry with the Mantauran, they do not understand our language very well.'

Table 13: Clausal nominals (3)

Morphological process	Types of verb	Verbal stem	Clausal nominal
ni*-V-*a(ə) [concessive clauses]	**Dynamic verbs**	**o**-kaoðo 'there is/was not'	**ni**-kaoðo-**a** 'even if...there is/was not'
		o-ðoḻo 'can'	**ni**-*ɲ̃*-ðoḻo-**a** 'even if... can'[15]
	Stative verbs	**ka**-(ma)mai 'self'	**ni**-*ka*-mamaḻ-**a** 'even if...self'

(37) a. <u>o-kaoð</u>-inamə   paiso.
        Dyn.Fin-not exist-1PE.Obl   money
        'We do/did not have money.'

   a'. <u>*ni*-kaoðo-*a*</u>-ð-inamə   paiso,   ka
        CncNmz-Dyn.NFin:not exist-CncNmz-3S.Gen-1PE.Obl   money
        ma-koa-ka-i.
        Stat.Fin-matter-Neg-3S.Gen
        'Even if we did not have any money, it did not matter.'

   b.   <u>*ni*-ʔiðoḻo-*a*</u>-ða   matakataka   ðonaʔi
        CncNmz-Dyn.NFin:can-CncNmz-3S.Gen Stat:Red:elder sibling   that
        ʔavai   <u>o-ðoḻo</u>-ka-ða   ʔi-ðaʔanə.
        woman   Dyn.Fin-can-Neg-3S.Gen   at-home
        'Even eldest daughters could not stay in (their ancestral) home.'

   c.   lo   ma-taaði?i   ðona   ʔaolai,
        if   Dyn.Subj-good   that   male
        <u>*ni*-ka-ʔamaḻ-*a*</u>-ða
        CncNmz-Stat.NFin-self-CncNmz-3S.Gen
        ðona   vaḻovaḻo,   o-ðoḻo   a-itina
        that   young woman   Dyn.Fin-can   plur-middle-aged woman
        a-tamatama   <u>kaamai</u> poa   pa-ʔacakəlaə.
        plur-middle-aged man   self   Dyn.Subj:make   Caus-marry
        'If the boy was good/kind, the parents could have them marry, even if the girl disliked him.'

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[15] The meaning of the prefix *ɲ̃*- in this particular environment is still unclear.

3.5 Summary

In the foregoing subsections, I have outlined the different nominalization processes that have been uncovered in Mantauran so far. This derivational process, which is very productive and fairly predictable, can be said to be unconstrained because:

(i)   loan words and compounds can undergo nominalization, cf. **kala-ʔaom-aə** 'Japanese era/occupation' and **ta-pa-ʔototalo-ə** *solatə* 'schoolbag';

(ii) a verb can undergo different types of nominalization; e.g., action nominalization *kanə* 'eating', Subject(ive) nominalization **ta-kanə** '(who) eats/ate', objective nominalization **a-kan-aə** 'food', locative nominalization **ta-kanəkan-aə** 'restaurant', instrumental nominalization **ʔa-kanə** 'instrument used to eat; e.g., fork', etc.;

(iii) it is not blocked because of the existence of lexical items "already filling the 'slot' which the derived form" might occupy, as argued by Comrie and Thompson (1985:358), cf. *ʔa-pana* 'arrow' (< *o-pana* 'shoot (with a bow))' vs. *ɬaili* 'arrow'.

Table 14 provides a recapitulation of these different processes.

Table 14: Types of nominalizations in Mantauran Rukai

ACTION/STATE NOMINALS			
Action/state nominal	**a**-V	**a**-pasolatə	'education'
		a-kaʔaaʔaa	'flirt'
State nominal	V-**aə**	caʔəm-**aə**	'disease'
Action nominal	V	kanə	'eating'
	V$_{Fin}$	oðaacə(-ni)	'(when) did (he)...?'
	V$_{Subj}$	ðoacə(-ni)	'(when) will (he)...?'
ARGUMENT NOMINALIZATION			
Subject(ive)	**ta**-V	**ta**-ɭihoʔo	'(who) knows'
		ta-karoðaŋə	'old people'
Objective	**a**-V-**aə**	**a**-kan-**aə**	'food'
	V-**aə**	kasəkəɭ-**aə**	'angered about'
Locative	**ta**-V-**aə**	**ta**-oa-**ə**	'place where ...go'
		ta-kaəcəɭaŋ-**aə**	'dirt'
Instrumental	**ʔa**-V	**ʔa**-osarisario	'toy'
Manner		**ʔa**-kataaði?i	'how good'
Result	**ʔa-po**-V	**ʔa-po**-timo	'as a result of salting'
Temporal	**kala**-V-**aə**	**kala**-ðoðaʔol-**aə**	'rainy season'
		kala-kaɭapaʔ-**aə**	'summer'

CLAUSAL NOMINALIZATION				
Temporal (past)		**a**-V	**a**-iki	'when...were'
			a-kaḷoolai	'when...a child'
Conditonal, hypothetical		V_{Subj}	ðoaðaacə	'(If)...walk'
			maravərəvərə(-ni)	'(If)...happy'
Concessive		**ni**-V-**aə**	**ni**-kaoðo-**a**	'Even if there is not'
			ni-kamamaḷ-**a**	'Even if...self'
ABSTRACT NOUNS				
Locative	**–human**	**ta**-N-**aə**	**ta**-vəʔək-**aə**	'pigpen'
		N-**aə**	acilaḷ-**aə**	'pound'
	+human	N-**naə**	ʔavai-**naə**	'girl/bride's family'
		Red-N	aoḷoololai	'place full of children'
Temporal		**kala**-N-**aə**	**kala**-pahaḷ-**aə**	'harvest season'
		N-**naə**	ðoma-**naə**	'sometimes, when'

3.6 Phonologically and morphologically unpredictable instances

The aforementioned different morphological processes might trigger a number of morphophonological alternations, which, though they do not result from nominalization alone, are worth mentioning.

3.6.1 Alternation between *i (y)* ~ *ḷ*

Li (1973 and 1977b) showed that glides (among other types of consonants) might alternate with liquids as a result of suffixation in many Formosan languages. While I am not inclined anymore to recognize /y/ as a phoneme in Mantauran, it is true that the suffixation of -*a* (either in imperative constructions or derived nominals) triggers the alternation between *i (y)* and *ḷ*:

(38) a. okəla**i**   'hang'   ~   ta-kəlakəlaḷ-aə   'hanger'
     b. olaŋa**i**   'buy'   ~   a-laŋaḷ-aə   'merchandise'
                                          ta-laŋaḷ-aə   'store'
     c. kamama**i**   '(one)self'   ~   ni-kamamaḷ-a   'even if...(one)self'
     d. poacila**i**   'water (flowers)' ~   ta-poacilaḷ-aə   'paddy field'
     e. acila**i**   'water'   ~   acilaḷ-aə   'pound'
     f. paha**i**   'rice'   ~   kala-pahaḷ-aə   'harvest season (rice)'
     g. ʔaola**i**   'male'   ~   ʔaolaḷ-a-naə   'groom's family'

3.6.2 Epenthetic vowel -*a*-

An epenthetic vowel -*a*- is inserted in the following examples:

(39) a. ʔaolai 'male, man, boy'   ~ ʔaolaḷ-a-naə 'groom's family'
                         vs. * ʔaolai-naə
     a'. ðaʔanə 'house'   ~ ðaʔan-a-**naə** 'household'
                         vs. * ðaʔanə-**naə**
     b. ʔavai 'female, woman, girl' ~ ʔavai-naə 'bride's family'
                         vs. * ʔavaḷ-a-naə
     c. mənə 'now, day'   ~ mən-a-**naə** 'time'
                    &   mənə-**naə** 'which day'

3.6.3 Suffixation of -*aə* vs. -*ə*

A phonological rule on the deletion of -*a* (< -*aə*) can be written as follows after the vowels /i, a, o/:

$$(40) \quad \text{-aə} \quad > \text{-ə} \quad / \quad - \begin{bmatrix} a \underline{\hspace{1em}} \\ i \underline{\hspace{1em}} \\ o \underline{\hspace{1em}} \end{bmatrix}$$

Examples are plentiful. Consider, for instance:

(41) a. om-ik*i* 'exist, be at'   ~   a-ik*i*-ə (-ʔo)   'where are (you)?'
                    and not * a-ik*i*-aə (-ʔo)
     b. ʔaŋat*o* 'brushwood'   ~   ta-ʔaŋat*o*-ə   'woodshed'
                    and not * ta-ʔaŋat*o*-aə
     c. om-oa 'go'   ~   ta-o*a*-ə   'place where (one) goes...'
                    and not * ta-o*a*-aə

There are, however, counterexamples to this rule, which thus far remain unaccounted for:

(42) om-ik*i* 'exist, be at' ~   kik*i*-**aə**   'space' vs. *kik*i*-ə
                  ~   ta-ik*i*-**aə**   'room'
                  but ta-iki-ə   'the place where...is'
                  and to-ta-ikik*i*-ə 'build a room/ bed' (lit: build a place
                              to stay...)

3.6.4 "Glottal-hopping"

I use the term "glottal-hopping" to refer to the displacement of the glottal stop in word-initial (42) or word-final position (43):

(43)   o-**ʔo**sario 'play' ~ **ʔa**-osarisario   'toy'
                    and not: *ʔa-ʔosarisario
(44) a. o-ɭiho**ʔo**   'know' ~ ki-ɭiho**aʔə**-nai   '...that we (did) not know (about)'
                    and not: * ki-ɭiho**ʔaə**-nai
      b. ma-taaði**ʔi** 'good' ~ kataaðia**ʔə**   'advantage'
                    and not: * kataaði**ʔaə**
      c. pi**ʔa**   'do'   ~ tapapia**ʔə**   'way, custom'
                    and not: * tapapi**ʔaə**

3.6.5 Reduplication

In certain nominalization patterns (e.g., locative and instrumental nominals derived lexically), reduplication is compulsory—compare, for instance, (45a-a'); but not if a nominal is syntactically derived (see sec. 4). However, the contrast between (45b-b') still needs to be accounted for:

(45) a.   ta-ʔosario   'player'   vs.   ta-ʔosari-sario   'players'
      a'. *ʔaosario   'toy'   vs.   ʔaosarisario   'toy(s)'
      b. acilaɭaə   'pound'   &   acilacilaɭaə   'pound'
      b'. *ðakəralaə   'river bank' vs. ðakərakəralaə   'river bank'

4. Related issues

The morphological resemblance between (finite) verbs and derived nominals has been recognized by many scholars (e.g., Starosta et al. 1982, Ferrell 1982, Cauquelin 1991a-b, Ross 1995, among others) and has led to a questioning of the nominal nature of what apparently seem to be verbal sentences (Haudricourt 1979). The Rukai dialects differ from the other Formosan languages in their verbal morphology, in that they primarily distinguish two voices, active vs. passive. In Mantauran, the distinction between a verb and its nominal counterpart is, to some extent, easy to establish because verbal prefixes and verbalizers are quite different in shape from nominalizers. In cases where ambiguity arises, e.g., bare roots might be either be treated as non-finite verb forms or nouns, the categorial nature of a word must be determined through its syntactic

distribution (see sec. 2). As amply exemplified in section 3, the dynamic/stative contrast that verbs exhibit is retained—nominals derived from dynamic verbs are unmarked; those derived from stative verbs are prefixed by *ka-* (for details, see Zeitoun 2000)—and the occurrence of verbalizers such as *to-* 'do, make, build' and *pa-* 'causative' is compulsory.

Below, I try to show that a distinction should be established between lexical and syntactic nominalization, but none can be reached at this point between nominalization and relativization.

I showed in section 2 that derived nominals exhibit six morpho-syntactic properties that help identify them as nouns. They can: (i) occur in an NP position; (ii) be modified by another noun; (iii) co-occur with a genitive pronoun; (iv) undergo topicalization; (v) be marked for plurality or circumfixed by a quantifier depending on their categorial nature; and (vi) trigger verbal agreement.

The following examples show that the same morphological processes are actually used to derive nominals both through lexical and syntactic processes:

(46) a.   Lexically derived action nominal
      kala-ʔaom-aə   *a*-pa-sola-solatə
      TempNmz-Japanese-TempNmz   ActNmz-Caus-Red-Dyn.NFin:study
      'Japanese education'
  a'.   Syntactically derived clausal nominal
      ðonaʔi   *a*-pa-sola-solatə-ð-inamə...
      that   ClsNmz-Caus-Red-Dyn.NFin:study-3S.Gen-1PE.Obl
      'At that time, when they taught us...'
  b.   Lexically derived objective nominal
      ðonaʔi   ʔa   kasa-ða   ðonaʔi
      that   Top   only-3S.Gen   that
      a-kan-*aə*-nai.
      ObjNmz-Dyn.NFin:eat-ObjNmz-1PE.Gen
      'That was the only food we had.'
  b'.   Syntactically derived objective nominal
      ma-taaði?i   konə   *a*-akan-*aə*-ni
      Dyn.Fin-good   Dyn.Subj:eat   ObjNmz-Dyn.NFin:eat-ObjzNmz
      mairaŋə.
      sweet potato
      'The sweet potato he ate was good.'

These two types of nominals exhibit different morpho-syntactic properties that are enumerated and illustrated in turn below.

(i) The occurrence of a genitive pronoun after syntactically derived nominals is obligatory, optional with lexically derived nominals.

(47) a. Lexically derived nominal
to?a-cakar-iðə   valəvalə   ðona
use for-Dyn.NFin:tie-3S.Obl   bamboo   that
<u>ta-iki-ki-aə</u>   ?apəcə.
LocNmz-Red-Dyn.NFin:be at-LocNmz   Dyn.Subj:sleep
'(Strings of) bamboo were fixed together to form the (upper) place where (men) slept.'

b. Syntactically derived nominal
ðona?i   patoʟaŋə   ta-piki-ki-ə-nai
that   chest   LocNmz-Dyn.NFin:put-Red-LocNmz-1PE.Nom
moʟaə   o-piki-mao   ?i   sororo
belongings   Dyn.Fin-put-Imprs.Nom   stone bed
<u>ta-iki-ki-aə*(-mao)</u>   ?apəcə.
LocNmz-Red-Dyn.NFin:be at-LocNmz-Imprs.Gen   sleep
'We (would) place the chest where we put away our clothes on the stone bed where we slept.

(ii) Syntactically derived nominals may occur with aspectual suffixes; lexically derived nominals do not.

(48) a. ona?i   <u>a-iki-*na*-nai</u>   ?oponoho...
that   ClsNmz-Dyn.NFin:be at-still-1PE.Gen   place name
'When we still were in the old village...'

b. ona?i   <u>a-kaava?i-*ŋa*-ða</u>   ?aomo...
that   ClsNmz-Dyn.NFin:come-already-3S.Gen   Japanese
'After the Japanese came...' ~ 'When the Japanese had come...'

(iii) Syntactically derived nominals may be negated; lexically derived nominals cannot.

(49) ðona   ta-ka-kociŋai   ca?əm-aə
that   SubjNmz-Stat.NFin-serious   sick-StatNmz
<u>*ki*-ʟihoa?-ə-nai</u>
Neg-Dyn.NFin:know-ObjNmz-1PE.Gen
<u>*ki*-ðoʟo-ə-nai</u>,   mani   pato?o-na-inə
Neg-Dyn.NFin:know-ObjNmz-1PE.Gen   then   tell-1PE.Nom-3S.Obl
cara?ə-nai.
chief-1PE.Gen
'If the disease was (more) serious and we did not know how to (treat the patient), we (would) tell the (doctor-in) chief.

(iv) Syntactically derived nominals may take an object; lexically derived nominals cannot.

   (50) olo   ki-ḻihoʔo-nai   ðonaʔi
         when   Neg-Dyn.NFin:know-1PE.Gen   that
         a-patoʔo-toʔo-ð-inamə,
         ClsNmz-tell-Red-3S.Gen-1PE.Obl
         maatar-inamə   ma-haʔaoco...
         Dyn.Fin:take one-1PE.Obl   Stat.Subj-scold
         'If we did not understand our teachers (lit: when they taught us), we (would) be scolded one by one...'

(v) Syntactically derived clausal nominals agree in plurality with certain genitive subjects; their lexically derived action nominal counterparts do not.[16]

   (51) a.   Lexically derived action nominal
              a-ka-ḻoolai/*a-ka-a-oḽolai
              ActNmz-Stat.NFin-child/ActNmz-Sta.NFin-plur-child
       b.   onai a-ka-ḻoolai-li.../*a-ka-a-oḽolai-li...
           that ActNmz-Stat.NFin-child-1S.Gen/ActNmz-Stat.NFin-plur-child-1S.Gen
           'When I was a child...'
       b'.   onai a-ka-a-oḽolai-nai.../*a-ka-ḻoolai-nai...
           that ActNmz-Stat.NFin-plur-child-1PE.Gen/ActNmz-Stat.NFin-child-1PE.Gen
           'When we were children...'

(vi) Lexically derived nominals can undergo (re-)verbalization, usually through the prefixation of *to-* 'do, make, build'. No syntactically derived nominals were found to undergo such a process in the corpus collected.

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[16] Why certain types of nominal predicates require subject agreement, as in (i)-(ii), is still unclear to me at this stage.

  (i) a.   iḻaə   ʔa   ʔavai-ḻao/*aʔivivai-ḻao
          1S.Top Top   woman-1S.Nom/plur:woman-1S.Nom
          'As for me, I am a woman.'
      b.   inamə   ʔa   *avai-nai/aʔivivai-nai
          1PE.Top Top   woman-1PE.Nom/plur:woman-1PE.Nom
          'As for us, we are women.'
  (ii) a.   iḻaə   ʔa   ʔoponoho-ḻao
          1S.Top Top   Mantauran-1S.Nom
          'As for me, I am a woman.'
      b.   inamə   ʔa   ʔoponoho-nai   (no other form could be elicited)
          1PE.Top Top   Mantauran-1PE.Nom
          'As for us, we are Mantauran.'

(52) ðona   lo   maka-to-taʔonaə-ŋa-mao   o-po-iðə
     that   when finish-build-hut-already-Imprs.Gen Dyn.Fin-make-3S.Obl
     to-[ta-iki-ki-ə]   ʔapəcə...,   mani
     build-LocNmz-Red-Dyn.NFin:be at-LocNmz Dyn.Subj:sleep then
     poa-mao   *to*-[ta-paloŋ-aə].
     Dyn.NFin:make-Imprs.Nom   build-LocNmz-cooking pot-LocNmz
     'When we had finished the construction of the hut, we (would) make a bed ...
     and we (would) build a cooking stove (with stones).'

(vii) Lexically derived locative and instrumental nominals usually undergo
      reduplication; syntactically derived nominals do not.

(53) a.   lo   moromoro-mao,   o-kaoðo
          when   Dyn.Subj:rinse-Imprs.Gen Dyn.Fin-Neg
          ʔa-moro-moromoro/?*ʔa-moromoro.
          InstNmz-Red-Dyn.NFin:rinse/InstNmz-Dyn.NFin:rinse
          'If we (wanted to) clean our teeth, there was no toothpaste/toohbrush.'
     b.   araʔəvə lo   ma-raðiʔi-ŋ-iðə   ðonaʔi
          but   when   Stat:Subj:heal-already-3S.Obl   that
          ta-cikip-*aə*-n-iðə/
          LocNmz-Dyn.NFin:sew-LocNmz-3S.Gen-3S.Obl/
          *?*ta*-cikicikip-*aə*-n-iðə
          LocNmz-Red-Dyn.NFin:sew-LocNmz-3S.Gen-3S.Obl
          om-aḷa-ŋa-nai   ʔinikakamamai ʔo-cikipi.
          Dyn.Fin-take-already-1PE.Nom self   take off-Dyn.NFin:sew
          'When the wound had healed and (we had to) take off the stitches, then
          we could do it by ourselves.'

    Subject(ive) nominals function like other syntactically derived nominals in that
they retain the aforementioned verbal properties (54), but their impossible
co-occurrence with genitive pronouns (55) remains, at this stage, to be accounted for.

(54) a.   olo pasolatə-ð-inamə   'aaŋa-i   ta-*(a)mo*-ḷihoʔo ?'
          if teach-3S.Gen-1PE.Obl   who-3S.Gen SubjNmz-will-Dyn.NFin:know?
          lo   mia-ða.
          if   Dyn.Subj:say-3S.Gen
          'When we were at school, we would sometimes take exams. '
          (Lit: When they taught us, they would say: "Who will know?")

b. onaʔi a-oɭolai la onaʔi ta-a-ʔacakəlaə-*ŋa*
that plur-child and that SubjNmz-plur-married-already
ta-ka-a-roðaŋə oðoɭo-nai ʔikariði
SubjNmz-Stat-plur-old can-1PE.Nom wear:fur jacket
'Children, already married (women) and old people could wear fur jacket.'

c. ðona ta-*ki*-kanə vaʔoro, o-ðoɭo-ka-i ka
that SubjNmz-Neg-Dyn:NFin:eat rice Dyn.Fin-can-Neg-3S.Gen
molataðə ʔolilio.
outside Dyn.Subj:play
'Those who have not eaten cannot go outside to play.'

d. lo ʔi-raʔopo-ða ʔa-pakaʔətə-ʔətə mani
when Pass-inject-3S.Gen InstNmz-Red-Dyn.NFin:kill then
ʔi-vorovoro-ða, o-ðoɭo-ka-nai ka ʔinikakamamai
Pass-operate-3S.Gen Dyn.Fin-can-Neg-1PE.Gen self
piʔa, onaʔi ta-patoʔotoʔ-*inamə* ta-piʔa.
do that SubjNmz-Red:tell-1PE.Obl SubjNmz-Dyn.NFin:do
'If we had to give (the patient) an anaesthesia and operate, then we could not do it by ourselves.'

(55) a. ana latəŋə ʔa ta-ɭəðəkə(*-ni) taotao.
that vegetable Top SubjNmz-Dyn.NFin:plant-3S.Gen Taotao
'Those vegetables, it is Taotao who planted (them).'
(Lit: Those vegetables, Taotao is the one who planted them)

b. ana latəŋə ʔa ɭəðəkə*(-ni) taotao.
that vegetable Top ActNmz:Dyn.NFin:plant-3S.Gen Taotao
'Those vegetables, it is Taotao who planted (them)'
(Lit: Those vegetables, (they are) Taotato's planting)

Below a panorama of all the types of constructions that trigger (syntactic) nominalization in Mantauran—wh-questions (56), subordinate (57), pseudo-cleft (58), and relative clauses (59), as well as negative existential (60) and imperative (61) sentences—is offerered, that shows that there seems to be no distinction whatsoever between syntactic nominalization and relativization in Mantauran.

(56) a. aaŋa-i ta-ʔokoloð-imiaʔə?
who-3S.Gen SubjNmz-afraid-2S.Obl
'Who is afraid of you?'

b. aaŋa-i　　　　ʔokoloð-aə-ʔo?
who-3S.Gen　　afraid-ObjNmz-2S.Gen
'Whom are you afraid of?'

c. kani　piʔa-ʔo　　　　　　　　　　m-oa　　　　taipakə?
why　ActNmz:Dyn.NFin:do-2S.Gen　　Dyn.Subj-go　place name
'Why did you go to Taipei?'

d. amokoa-ni　　ʔa-ka-taaðiʔi-ni　　　　　　takaocaə-ni
how-3S.Gen　ManNmz-Stat.NFin-fast-3S.Gen　character-3S.Gen
'How nice is she?'

e. ʔiðanaə　　lo　　maavaʔi-nomi ?
when　　　if　　Dyn.Subj:come-2P.Gen
'When will you come again?'

(57) a. onaʔi　*a-kaavaʔi-ða*　　　　　　ðipolo...
that　　ClsNmz-Dyn.NFin:come-3S.Gen　Zipolo
'When Zipolo came...'

b. ...lo　　patoʔo-ð-inamə　　　　　　　*a-ʔiaʔipi* ...
when　　Dyn.Subj:teach-3S.Gen-1PI.Nom　ActNmz-Dyn.NFin:count
'...when they taught us arithmetic...'

c. *ni-kaoðo-a*-ð-inamə　　　　　　　　paiso....
CncNmz-not exist-CncNmz-3S.Gen-1PE.Obl　money
'Even if we had no money...'

(58) a. aaŋa-li　　ta-tipitip-inə　　　　　　　ana　ɭoolai
who-1S.Gen　SubjNmz-Dyn.NFin:beat-3S.Obl　that　child
'It is me who beat the child.'

b. onaʔi　a-tipitip-aə-l-inə　　　　　　　　anaʔi　ɭoolai
that　ObjNmz-Dyn.NFin:beat-ObjNmz-1S.Gen-3S.Obl　that　child
'That is the child I beat.'

(59) a. anaʔi　ta-ʔi-kipiŋi　　　　　taðiliaŋə　lalakə-li　　ana
that　SubjNmz-wear-clothes　red　　　　child-1S.Gen　that
'The one who wears red clothes is my child.'

b. a-kan-aə-ni　　　　　　　　　　　vələvələ　masiʔi
ObjNmz-Dyn.NFin:eat-ObjNmz-3S.Gen　banana　　small
'The banana he eats/ate is small.'

(60) a. *akaoðo*　ka　ki-ɭihoaʔ-ə-li
not exist　　　Neg-Dyn.NFin:know-ObjNmz-1S.Gen
'There is nothing that I do not know.'

    b.   *akaoðo*   ka   <u>toŋotoaʔ-ə</u>   kipiŋi.
        not exist   short-ObjNmz   clothes
        '[At that time] there weren't short clothes.'

(61) a.   a-kan-aə-ʔo!
        ObjNmz-Dyn.NFin:eat-ObjNmz-2S.Gen
        'Don't eat!'

    b.   a-ʔoŋol-aə-ʔo!
        ObjNmz-Dyn.NFin:drink-ObjNmz-2S.Gen
        'Don't drink!'

5. Conclusion

This paper represents a preliminary study of nominalization in Mantauran, but I hope to have shown that this very regular and productive process poses empirical and theoretical problems in this dialect/language worth studying in even greater detail.

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Institute of Linguistics, Preparatory Office
Academia Sinica
130, Sec. 2, Academia Road
Nankang, Taipei 115, Taiwan
hsez@ccvax.sinica.edu.tw

魯凱語萬山方言名物化結構探究

齊莉莎

中央研究院

　　本篇論文主要以大量的長篇語料爲依據來探討魯凱語萬山方言名物化結構。文中所使用的構詞及句法的證明是用來進一步識別派生名詞與動詞以及區分發生在詞彙及句法兩個層面的名物化結構。再者，本篇論文試圖證明，魯凱語萬山方言中名物化與關係子句的相似性。

關鍵詞：名物化，魯凱語，萬山方言，詞彙名物化結構，句法名物化結構，
　　　　關係子句