Information structure in Takivatan Bunun: topicality and the role of ellipsis

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This talk will give an overview of the various grammatical mechanisms in Takivatan Bunun that are involved in the realization of topicality and topic continuity. I will argue that such an account needs to allow for the occurrence of multiple topics per clause. Takivatan is typologically uncommon in that it allows for the deletion of almost all elements in a clause, both free and bound, that can be recovered from the discourse context, with the exception of the verbal root and some associated bound morphemes. Section 4 will discuss the role that the non-expression of information plays in the realization of topical and non-topical information.

1. Introduction

1.1. Takivatan Bunun

Bunun is one of the Austronesian languages spoken on Taiwan. As far as the historical record goes back, the Bunun have been hunters living in the mountainous interior of the country. The exact relationship of Bunun to other Austronesian languages of Taiwan (often referred to as Formosan languages) is not yet resolved.

There are five dialects, subdivided in the three dialect groups. Takivatan, together with Takbanuað, belong to the Central group; Isbukun, the largest dialect, is the only member in the Southern group; and Takibakha and Takituduh form the Northern group. These groups were already recognized more than a hundred year ago by Ogawa & Asai (1935) and are linguistically well-motivated (see De Busser 2009:85–91). Important to the discussion at hand, there are marked morphological differences between the dialects, and it is expected – though not investigated in sufficient depth – that this also the case for syntax.

1.2. Some theoretical preliminaries

Focus. The term focus does in this talk – somewhat confusingly – refer to "a system of verbal cross-referencing that is peculiar to a sizeable group of Austronesian languages of Taiwan and the Philippines. This system is used for expressing functional relationships between the predicate and pragmatically privileged arguments in the predicate-argument complex" (De Busser 2011:526). It does not to the concept of focus as introduced by the Prague School and later applied to the study of information structure (see e.g. Lambrecht 1996 or Van Valin & LaPolla 1997).

Topic. Unless clearly indicated otherwise, the term topic refers to the clausal topic, as opposed to the discourse topic. The topic of a clause (or sentence) is often simply defined as "what the clause is about". It typically encodes a referent.

Internal vs. external topic. For the purpose of the analysis of Takivatan Bunun, we will make a distinction between a clause-internal and a clause-external, or extraposed, topic. (A similar distinction was made as early as Chafe 1976). The former refers to topical arguments that fulfill a normal grammatical function within a clause, occur in their predicted position inside the clause and exhibit a whole range of grammatical properties typically associated with that position within the clause.

The clause-external topic is a topical argument that, usually for reasons to do with pragmatic stress, has been moved in front of their matrix clause by using one of two topicalization constructions. Clause-external topics might or might not correspond to the clause-internal topic, but in Takivatan – unlike languages like Japanese – they must always correspond to an actual participant in their matrix clause, i.e. it must be possible to express them as an argument of some sort in the matrix clause without changing the intended meaning of the matrix clause.

An implied consequence of the division between clause-internal and clause-external topic is that individual clauses can potentially have more than one topic (see e.g. Nikolaeva 2001; Lambrecht 1996:146ff).

2. The clause-internal topic

Within the structure of the main clause, information structure is realized through a combination of morphosyntactic mechanisms.

2.1. Verbal alignment morphology

Takivatan has an argument alignment system that is traditionally called a Philippine-style focus system and can put stress on the agent, undergoer (typically a patient, but sometimes also instrument or beneficiary), and locative argument of a clause. For the sake of simplicity, we will restrict this discussion of focus marking as much as possible to bivalent dynamic verb roots (so excluding stative roots and minor verb types). I will also analyze the Takivatan verbal focus marking as consisting of suffixal marking only, contrary to common practice in Austronesian linguistics which tends to combine prefixes, suffixes, and sometimes infixes and reduplication in a single focus paradigm.[1]

Actor focus (AF) constructions have no suffix, as in (1).

(1) *siða   malŋaŋaus-ta   maduq-ta*
     take   shaman-DEF.REF.DIST   millet-DEF.REF.DIST
     The shaman took millet (simplified from TVN-012-001:69)[2]

In undergoer focus (UF) constructions, the verb is marked with a suffix *-un*.

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[1] For an argumentation of why this better reflects the Takivatan data, see De Busser (2009:266–281).
[2] Codes at the end of examples refer to the location in the Takivatan corpus. Sequences of the letter *x* in a code indicate that this belongs to a set of elicited examples.

(2) *siða-un   asik*
     take-UF   shrub
     they gathered the shrubs (simplified from TVN-012-001:24)

Finally, locative focus (LF) constructions have a verb marked with a suffix *-an*.

(3) *maqtu   pa-siða-an-in   ŋabul   vanis*
     can   CAUS.DYN-take-LF-PRV   antler   wild.boar
     We could [in that place] catch deer and wild boar (TVN-008-002:47)

The interpretation of focus suffixes function as cross-reference markers suggests that they put the cross-referenced argument in a pragmatically privileged position of some sort, and in general, it seems to make sense to interpret this position as the clause-internal topic.[3] This elevation to topic status is associated with certain grammatical properties:

- Internal topics can be left-dislocated by means of the linker *-a* (see 3.1).

- When appearing as a bound pronoun, they appear in the topic case (see 2.3).

- When expressed by a free personal pronoun, they appear in the topical agent form in the AF and as a neutral form in all other focus types (see 2.3).

These pragmatic and grammatical properties clearly hold for actor focus and undergoer construction, but locative focus constructions with the suffix *-an* are a lot trickier. LF constructions are relatively uncommon and it is not clear from the examples in the present Takivatan corpus that they are realized with a topicalized locative argument (LO).

(4) *na-ka-lumaq-an   ma-sihal-a*
     IRR-MAKE-house-LF   STAT-good-LNK
     'The land is suitable for building houses.' (lit: It is good to build a house there.) (TVN-012-002:131)

This appears to be related to a general tendency in Formosan languages in which locative focus tends to erode. Very often, it either disappears, or is incorporated in the undergoer focus, and locative focus marking ends up being mainly or exclusively used in nominalizations.

2.2. Argument order and number

Free arguments in Takivatan Bunun occur in a fixed order in the clause:

VERB < AGENT < INSTRUMENT < BENEFICIARY

< PATIENT < LOCATION < PERIPHERAL

This argument order is inferred through a comparison of examples in the corpus and elicitation, and is not exceptionless (as will be demonstrated below). The following two examples illustrate this order for all core constituents realized as free forms apart from the locative argument.

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[3] Whether this argument is also a subject in Philippine-type argument alignment systems is the topic of heated debate; see Schachter (1976) for an important early discussion. Since there is a strong tendency for subjects to be topics (see Lambrecht 1996:131ff), we will ignore this issue in the present discussion.

(5) *na-is-kalat-un* *ðaku* *tuqnað-i* *asu*
  IRR-INSTR-bite-UF 1S.N bone-PRT dog
           ACTOR INSTRUMENT BENEFICIARY
  I want to give the bone to a dog to bite it (TVN-xx2-005:65)

(6) *maqtu-ʔas* *pa-simul*   *ðaku*   *qaimaŋsuð*
  can-2S.TOP CAUS.DYN-borrow 1S.N   thing
   (ACTOR)   BENEFICIARY PATIENT
  Can you lend me the thing? (TVN-xx2:004:4)

In reality, it is not possible in Takivatan for more than three arguments to occur in a simple clause at any time. In fact, an overwhelming majority of clauses in the corpus has no more than a single argument, especially in real-world text. When only a single argument is expressed, its grammatical role is inferred from its semantics and that of the verb and from the general context.

All this means that word order plays a less central role in the realization of information contrast than in languages with a more flexible word order. For instance, in English, atypical word orders can be used to create topical contrast.

(7) The man went to work.

(8) To work the man went.

The contrast between (7) and (8) is realized mainly by the alternation between the pragmatically unmarked order in (7) and the marked order in (8). In Takivatan, such an alternation tends to be impossible or switch around grammatical roles.

(9) *k<in>alat-un* *aipi*   *asu*
  <PST>bite-UF DEM.S.PROX.VIS dog
  He has been bitten by a dog. (TVN-xx2-005:74)

(10) *k<in>alat-un* *asu* *aipi*
  <PST>bite-UF dog DEM.S.PROX.VIS
  The dog has been bitten by it/him. (constructed)

There appears to be variation in the position of locative arguments, although it is difficult to ascertain the restrictions on this positional variation due to the rarity of locative arguments in multi-argument constructions.

A vast majority of locative constructions does not contain an explicitly expressed locative argument in the same clause

(11) … *ʔiti* *ka-lumaq* *na* *pa-daŋi-an*   *maduq-a*
   here MAKE-house well CAUS.DYN-place-LF millet-LNK
  … and here they built a house, well, in order to store the millet in it. (TVN-008-002:42)

In constructions where variation of certain arguments is possible, their position appears to be related to the general principle that important information tends to occur towards the beginning of a clause.

Note that there are idiosyncratic constructions that break the fixed argument order postulated above. For instance, in example (12) below, the patientive argument occurs before the Agent.

(12) *kalat-un-ʔak*   *bantas*   *asu*
      bite-UF-1S.TOP   leg.and.foot   dog
      (BENEFICIARY)   PATIENT / AFFECTED OBJ   ACTOR
      I have been bitten in the leg by a dog. (TVN-xx2-005:61)

(13) * *kalat-un-ʔak*   *asu*   *bantas*
        bite-UF-1S.TOP   dog   leg.and.foot

2.3. Pronominal marking

Personal pronouns are the only constituents in Takivatan that get any form of argument marking. All other noun phrases are normally unmarked and are recognized by their fixed position in a clause and by inference. Takivatan has a set of bound and free pronouns (Table adapted from De Busser 2011).

Table 2.1 - Takivatan Bunun pronouns

	Bound		Free				
	Topic	**Non-topical agent**	**Neutral**	**Topical agent**	**Locative**	**Possessive pre-nominal**	**Possessive post-nominal**
	(TOP)	(NTOP.AG)	(N)	(TOP.AG)	(LO)	(POSS)	
1S	*-(ʔ)ak*	*-(ʔ)uk*	*ðaku, nak*	*sak, saikin*	*ðakuʔan*	*inak*	*nak*
2S	*-(ʔ)as*	—	*suʔu, su*	—	*suʔuʔan*	*isu*	*su*
1I	—	—	*mita*	*ʔata, inʔata*	*mitaʔan*	*imita*	—
1E	*-(ʔ)am*	—	*ðami, nam*	*ðamu, sam*	*ðamiʔan*	*inam*	*nam*
2P	*-(ʔ)am*	—	*muʔu, mu*	*amu*	*muʔuʔan*	*imu*	*mu*

Importantly, both in the bound and the free paradigm, the distinctions that are made between forms are not based on abstract syntactic categories, as would have been the case in an accusative or an ergative marking scheme. Instead, they are best explained in terms of semantic roles and – importantly to the discussion at hand – topicality. Note that the bound pronominal paradigm and the free pronominal paradigm make different distinctions.

Most bound forms mark the topic of the clause, as indicated by focus cross-referencing. This is demonstrated in (14) and (15) for the first person singular pronoun. Example (14) is an AF construction, in which the bound first person singular functions as an agentive topic.

(14) *laupaŋ-ʔak*   *taldanav-in*
      a.moment.ago-1S.TOP   wash-PRV
      I just finished washing. (TVN-xxx-xx1:166)

Example (15) is an undergoer focus construction (indicated by UF *-un*). The same bound pronoun here functions as an undergoer topic.

(15) *hasul-un-ʔak*   *ma-ludaq*
together-UF-1S.TOP   DYN-beat
I have been beaten by many people (TVN-xx2-005:48)

The only exception to the topical character of bound pronouns is the form *-(ʔ)uk*, a portmanteau morpheme marking the non-topical agent in undergoer focus constructions.

(16) *madam-uk-i*   *talikuan*
catch-1S.NTOP.AG-PRT   butterfly
I was catching butterflies (TVN-008-002:138)

Free pronominal forms cut up the functional space in a different way: they distinguish between an agent topic form (which only occurs in AF constructions) and a neutral form that marks everything else with the exception of certain locative forms and the possessive. This includes (demonstrated with first and second person singular forms):

a.   non-topical agents (see also (20) *ðaku*)

(17) *duq*   *ludaq-un*   *suʔu*
whether   beat-UF   2S.N
Did you maybe/by any means hit it? (TVN-xx2-001:97)

b.   undergoer topics (see also (20) *suʔu*)

(18) *antalam-ʔak*   *suʔu*
answer-1S.TOP   2S.N
I answer you (TVN-xx2-001:2)

c.   non-topical undergoers

(19) *antalam-un*   *suʔu*
answer-UF   2S.N
I answer you. (TVN-xx2-001:2)

If two pronominal forms occur in a single clause without any extraposed topics, particularly both are free forms, there tends to be a person hierarchy: the first person overwhelmingly marks an agent, and the second an undergoer. This is illustrated in (20) with two free forms, and in (18) with a bound and a free form.

(20) *antalam-un*   *ðaku*   *suʔu*
answer-UF   1S.N   2S.N
I answer you. (TVN-xx2-001:3)

Neutral forms are also used for extraposed pronominal topics (see 3.1).

Figure 1 visualizes the differences in how the bound and free pronominal paradigms divide up the functional-pragmatic space of pronominal deixis based on two main parameters: topicality and agentivity.
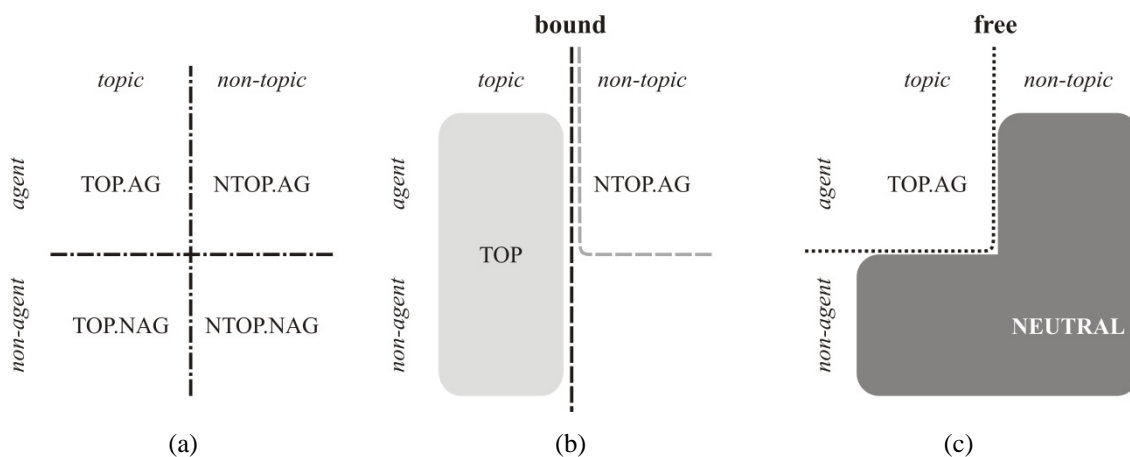
Figure 1. Segmentation of functional space of bound and free pronouns

Bound pronouns mainly mark topical arguments, more specifically first and second person topical arguments, disregarding whether they encode an agent or any other functional role. Free pronouns make a basic distinction between the topical agent, on the one hand, and everything else, on the other.

Importantly, these two systems are not fully complementary: there is a certain degree of overlap between the unmarked form of the bound paradigm (TOP) and that of the free paradigm (NEUTR). Note also that these distinctions do not neatly correspond to traditional grammatical distinctions in nominative or ergative systems. This appears to indicate that the Takivatan pronominal paradigms primarily encode a combination of pragmatic and functional distinctions, rather than more unified and abstract grammatical concepts, such as case.

2.5. Argument ellipsis

Ellipsis will be discussed in 4.

3. The clause-external topic

3.1. *Initial constructions with* -a

The morpheme -*a* (or *a*; it is not entirely clear whether it is best analyzed as a free or bound morpheme) is has multiple functions in Takivatan.[4] A subset of these can be interpreted in terms of a general linking function connecting a grammatically subordinate element in a sentence or clause to its superordinate. We are here mainly interested in situations where -*a* is unambiguously used for left-dislocating the clause-internal topic, i.e. the constituent within the clause that is targeted by the suffixal focus

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[4] The morpheme -*a* has various other functions and can occur at various positions in the sentence. It is not clear whether these all represent allomorphs of a single morpheme with a broad functional reach, or whether some are just homophones that go back to different historical sources and represent completely different functions. This problem of analysis regarding -*a* or functionally homologous morphemes is very common in other Austronesian languages of Taiwan. Since the historical corpus is absent or highly limited and – bar the discovery of some unknown lost manuscript – fixed for all Formosan languages, it is not likely that this problem will ever be resolved.

morphology or that in any other way functions as the topical argument within the clause. Some examples:

a. The actor in an AF construction with a dyadic dynamic verb

(21) *tini   Tiaŋ-a   haiða   sia   dusa   p<in>anaq*
     alone   T.-LNK   have   ANAPH   two   <PST>shoot
     Tiang by himself already managed to shoot two (TVN-008-002:119)

b. The actor in an AF construction with a monadic dynamic verb

(22) *aki-a   matað-in*
     grandfather-LDIS   die-PRV
     Grandfather, he has died (TVN-xxx-xx1:230)

c. The topical argument of an AF construction with a stative verb

(23) *aipun-a   ma-sihal   tu   bunun*
     DEM.S.MED.VIS-LDIS   STAT-good   ATTR   people
     He is a good man (TVN-xxx-xx1:71)

d. The topical argument of an UF construction with a stative verb

(24) *ma-aipi-a   ka-pisiŋ-un*
     DYN-DEM.S.PROX.VIS-LDIS   ASSOC.DYN-afraid-UF
     This here is a dangerous place (TVN-xx2-001:56)

e. The locative argument of a LF construction with a dyadic dynamic verb

(25) *kahaŋ-a   ma   ni   sadu-an*
     high.grass-LDIS   INTER   NEG   see-LF
     In the high grass, I did not see [the deer] there.

These extraposed topics can be nominal phrases or pronouns. If they are the latter, they can occur either as such, or (as in (24) above) in a verbalized form.

This might give us a clue as how the linker *-a* developed into a topicalizer in the first place. The morpheme *-a* also functions as linking element in what could be called a subordinating construction. These constructions connect an initial clause, which tends to be grammatically light in that it usually has at most a single core argument and no peripheral arguments, to a main clause. Typically, the linker *-a* occurs on the final element if it is verbal in nature or if there is no clear predicate verb in the subordinate clause.

(26) *min-suma-in-a   maqai   ʔuka   lumaq*
     INCH-return-PRV-LNK   if   NEG.have   home
     na   mun-han-in   kiukai
     CONS   ALL-go.to-PRV   church
     When you come back, if there is nobody at home, I have gone to the church
     (TVN-xx2-002:3)

(27) *tuqas*   *istun*   *ʔita-a*   *pan-ma-ka-ʔita-in*
older.sibling 3S.MED there.DIST-LNK ITIN-DYN-HI.AG-there.DIST-PRV
Her older sister was also there, and she had come over. (TVN-008-002-192)

If the verbal predicate is followed by any arguments, *-a* can occur on every word starting from the verbal head of the subordinate clause

(28) *i-<lu>lusʔan-aŋ-a*   *ma-daiŋ-ʔað-a,*   *a,*
LOC-<RED>ritual-PROG-LNK DYN-large-PERSON-LNK INTER
qaðmaŋ   *baðbað*
meaningless have.conversation
When the elders were worshipping, they spoke random talk (TVN-008-002:129)

Often, these constructions indicate temporal succession or causality.

Interestingly, the functional distribution of *-a* varies considerably between Bunun dialects. In the Isbukun dialect, the topicaliser used for left-dislocating the internal topic is not *-a* but *hai*.

(29) *tama hai ma-ludah ðaku*
father LDIS DYN-beat me
'Father, he beats me.'

The marker *–a* is used in Isbukun for extraposing arguments not targeted by focus morphology (and is therefore the functional equivalent of *maq … a* in Takivatan)

(30) *ðaku a ma-ludah tama*
me LDIS DYN-beat father
'I, father beats me.'

At least one of these morphemes (*hai* or *–a*) must have been a relatively recent innovation. (It seems relatively unlikely that proto-Bunun would have had multiple left-dislocation markers and that two would have developed in external topic markers in different dialects.)

3.2. Sentence-initial constructions with maq (a) … a

The construction *maq (a) … a* can be used for the extraposition of any core argument, disregarding its pragmatic status. However, the vast majority of occurrences in the corpus involves extraposition of the clause-internal topic (in which case it appears to function as a slightly more emphatic version of topicalization with *-a*). In (31), the actor of the locative verb is extraposed.

(31) *maq*   *aiŋka-a*   *taki-han*   *ludun*
DEFIN DEM.P.DIST.VIS-LNK LIVE.IN-be.at mountain
As for them, they are living in the mountains. (TVN-xx2-003:55)

In example (32), the extraposed element corresponds to the locative topic of the main clause.

(32) *maq   a   naipa   a   ma<i>lan-kinuð-in-an*
     DEFIN LNK DEM.S.DIST.NVIS LNK <PST>VIA-afterwards-PRV-LF
     niap-in   tu   u   mu-lusqun   ʔita
     know-PRV   COMPL yes   ALL-move   there.DIST
     To that one [that new school], I know we only moved there in later times. (TVN-
     008-002:13)

In contrast to topicalization with *-a*, the construction involving *maq (a) ... a* can also be
used for extraposing non-topical arguments. For instance, in (33), the extraposed
argument, the toponym *Haul Madaiŋaðan*, cannot possible function as the topic of the
complex verb phrase *haiða ... matað* 'has died'.

(33) *a   maq   a   Haul Madaiŋʔaðan-a   haiða-dau-ka*
     INTER   DEFIN LNK H.M.-LNK   have-EMO-DEF.SIT.DIST
     tan-<di>dip   qabas   matað-a
     DIR-INTENS-then   in.former.times   die-LNK
     As for H. M., somebody had died there in those days long ago, … (TVN-012-
     002:158)

Similarly, it is unlikely that *maupati tu siniqumus* 'this kind of life' in (34) is the topic
of *isanin madaiŋʔaðin* 'have reached old age' (although this interpretation cannot be
excluded with absolute certainty).

(34) *aupa   min-liskin   tu*
     thus   INCH-believe   COMPL
     maq   a   maupa-ti   tu   sin-iqumis   a
     DEFIN LNK thus-DEF.REF.PROX   COMPL   RES.OBJ-life   LNK
     i-san-in   ma-daiŋʔað-in-a   …
     LOC-be.at-PRV   STAT-old-PRV-LNK
     Thus, I believe that, as for this kind of life, when one has reached old age, …
     (TVN-008-002:4)

The Takivatan corpus even contains a lonely example of a possessor to an noun phrase
being extraposed. In (35), *nak* 'me' can only be meaningfully interpreted as the
possessor of *lumaqti* 'house'.

(35) *maq   nak   a   i-han   lumaq-ti*
     DEFIN 1S.N   LNK LOC-be.at   home-DEF.REF.PROX
     ʔasaŋ-ti   laupa-dau-ka
     village-DEF.REF.PROX   now-EMO-DEF.SIT.DIST
     As for me, my house is in the village now, … (TVN-003-xxx:5)

Sometimes, the extraposed element is reprised in the matrix clause by a pronoun or
demonstrative, as in (36), or – much more uncommonly – a noun, as in (37). In example
(36), the extraposed topic *bananʔað* returns in the matrix clause as the distal
demonstrative *aiŋka*.

(36) *maq   a   bananʔað-a pan-qailað   aiŋka*
     DEFIN INTER man-LNK   ITIN-come.together DEM.P.DIST.VIS
     'As for the men, they came together' (TVN-012-001:60)

In (37), it is the head of the extraposed noun phrase (*iðuq*) which is repeated in the matrix clause.

(37) *maq   a   sin-suað-in   t[u]   iðuq   a*
      DEFIN   LNK   RES.OBJ-sow-PRV   ATTR   orange   LNK
      ma-visqa-in-u-ka   iðuq
      STAT-abundant.with.fruit-PRV-???-DEF.SIT.DIST   orange
      at-mu-suqais-in
      RETURN-ALL-go.and.come.back-PRV
      As for the oranges that they had planted, they were full of fruits when they had returned back home … (TVN-012-001:27)

When the *maq (a) … a* construction extraposes an argument that is not the clause-internal topic, or when it is reprised in the matrix clause as a pronominal form, it creates a situation where a single clause has a different clause-internal and clause-external topic. Alternatively, one could analyze the topicalization construction with *maq (a) … a* as a subordinate clause construction, with *maq* functioning as a verbal predicate. This makes sense for two reasons.

First, the construction involving *maq (a) … a* allows for a reprisal of the extraposed element in the matrix clause. The fact that omission of the extraposed element in the matrix clause is not obligatory suggests that this is not topic extraposition in a monoclausal construction, but that in fact, the topic is introduced in an initial definitional clause, which is linked to a second clause by means of a clause-final linker *a*.

Second, the morpheme *maq* in these constructions in all likelihood goes back to an indefinite pronoun meaning 'what' or 'whatever', which in its turn is related to the question word *maq* 'what?' . Question words (38) and indefinite pronouns (39) in Takivatan Bunun exhibit a number of properties associated with verbs and are able to function as the head of predicates: they occur in clause-initial position, and the can occasional occur with certain verbal morphemes.

(38) *maq   aipa   ?*
      what   DEM.S.DIST.VIS
      What is that? (TVN-xxx-xx1:73)

(39) … *aupa   maq   aipun-a*
        because   DEFIN   DEM.S.MED.VIS-LNK
      … because that is who he is. (TVN-003-xxx:10)

The indefinite pronoun is also used in definitional constructions ('this is what…'), as in (40) and the complement clause in (41).

(40) *maq   a   kitŋa   ma-daiŋʔað tupa   tu*[5]
      DEFIN   INTER   begin   STAT-old   tell   COMPL
      Here begins what the elders told. (TVN-012-001:11)

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[5] The particle *tu* is here used as a trailing complementizer: it marks an unexpressed complement clause.

(41) *min-liskin-aŋ*   *tu*   *maq*   *a*   *lainiqaiban-i*   *a*   …
INCH-believe-PROG   COMPL   DEFIN   INTER   life-PRT   SUBORD
In thinking about how my life happened, [one cannot forget it without mention …] (TVN-008-002:219)

It is not difficult to see how such a construction could later be appropriated for the extraposition of contrastive topics.

4. A note on ellipsis

Winkler (2006) defines ellipsis, perhaps in an overly general fashion, as "the omission of linguistic material, structure, and sound." Ellipsis tends to be governed by principles related to recoverability: a string can be ellipted if it can somehow be reconstituted from the discourse context, which in certain linguistic frameworks this refers to the immediate linguistic context, but for our purposes here will always include the extra-linguistic context shared by all discourse participants. It has been observed in many languages that the topic of a clause is more likely to remain unrealized than non-topical elements. The explanation for this is that topics are typically realizing information that easily recoverable from the discourse or external context. Topical arguments are regularly omitted in Takivatan real-world text, both in narrative text and in spontaneous conversation, and in elicited examples.

For instance, in (42) the undergoer topic of the UF construction and its attributive quantifier 'many sweet potatoes' are omitted.[6]

(42) *sauðunin ðaku*
suað-un-in   *ðaku*
sow-UF-PRV   1S.N
[Did you plant a lot of sweet potatoes? –]
       A: I planted [many sweet potatoes]. (TVN-xx2-003:39)

In (43), the actor of *tupa* 'speak' is left unexpressed because it is easily recoverable from the preceding linguistic context.

(43) *tupa*   *tu*   *asa*   *maupa-ta*   *dau*   *m-iqumis*
say   COMPL   have.to   thus-DEF.REF.DIST   EMO   DYN-life
[Our father] told that one had to live like that. (TVN-013-001:12)

In Takivatan, as in many Austronesian language, any argument in a clause can also remain remained unrealized when it can be inferred from the wider discourse context.

In fact, the omission of arguments in general, whether or not they are the topic of the clause, is exceedingly common in the Takivatan dialect of Bunun. For example, in the sentence below, none of the core arguments (indicated by square brackets) is explicitly expressed, since all can be inferred from the preceding discourse.

(44) a. *maupa-ta*   *qa<i>-qansiap-an*   *tudip-i*
     thus-DEF.REF.DIST   understand-LF   that.time - PRT
     As such, [I] formed an impression of [the situation] in those days, …

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[6] Omitted arguments are indicated in the translation by means of [angular brackets].

b. *aupa   matqas-i   ma-qansiap*
   thus   clear-PRT   DYN-understand
   so that [I] clearly understand [it]. (TVN-008-002:32)

A second example, which occurs later on in the same story as (43), illustrates that only new information is explicitly expressed.

(45) a. *haiða   han   saupa   hatal   daiŋ-ʔað*
         have   at   in.direction.of   bridge   large-ADJR
         In that direction there was a large bridge, …

      b. *haiða   ʔita   mal-ʔasaŋ   Bantalaŋ-a*
         have   there.DIST   STATE-home.village   Amis-LNK
         and there was the village of the Amis, …

      c. *makanipa-ta*
         pass.by-DEF.REF.DIST
         [we] passed it …

      d. *tan-ʔanak   minkaun-an   ludun   a*
         DIR-self   climb-LF   mountain   LNK
         and [we] climbed the mountain by ourselves …

      e. *muqaiv*
         go.over.top
         and when [we] had gone over the top

      f. *na-mun-han   paun   tu   Qusunsubali*
         IRR-ALL-go.to   be.said   COMPL   Q.
         [we] had arrived at so-called Qusunsubali, …

      g. *tama-ki   sia   tu   Maia   dʒulu-ta*
         father-DEF.SIT.PROX   ANAPH   ATTR   M.   elder-DEF.REF.DIST
         [the place of] the father of deacon Maia. (TVN-008-002:75)

In sentence (44), the speaker assumes that his audience knows that this is a story about him and his friends going on a hunting trip, and therefore omits any reference to the first person plural. In most clauses, this corresponds to the agentive topic, but not always: clause (44), for example, is an LF constructions, and its topic is therefore the locative argument *ludun*.

The two longer examples above brings us to a first question. The 'classical' case of ellipsis is probably best interpreted as a process in which arguments are under certain conditions when they are recoverable from the context. One could argue that the opposite is happening in Takivatan: arguments are only expressed if there is a distinct need to do so. In all other situations, their realization is optional. This phenomenon is not unusual among the Austronesian languages of Taiwan, the Philippines, and Indonesia.

However, Takivatan goes a step further. It is not only possible to omit arguments, or other phrases, from a clause: almost any bound or free element, including bound

pronouns and most verbal affixes, can be omitted from a clause if they can be inferred from the context. For instance, since it is clear in (45) that the speaker inquires about a movement away from the deictic center, it is possible in informal speech to omit the allative prefix, as in (46).

(46) *mun-ʔita-ʔas* ?
ALL-there.DIST-2S.TOP
Do you want to go there? (TVN-xx2-005:23)

(47) *ʔita-ʔas* ?
there.DIST-2S.TOP
Do you want to go there/to that place? (TVN-xx2-005:22)

Let's illustrate the full potential of ellipsis and affix omission with an example. A question often asked to young bachelors entering a Bunun village is whether they are already married. A proper answer would be:

(48) *ni-aŋ-ʔak* *pa-siða* *nauʔað*
NEG-PROG-1S.TOP RECIP-take woman
I didn't marry to a girl yet. (TVN-xxx-xx1:101)

This is already a shortened version of the following clause, which omitted the nominalizing prefix and CV-reduplication on *nauʔað*.

(49) *ni-aŋ-ʔak* *pa-siða* *bi-<na>nauʔað*
NEG-PROG-1S.TOP RECIP-take NMZ-INTENS-beautiful
I didn't marry to a girl (lit: one that is very beautiful) yet. (constructed)

However, it is clear from the preceding question that the speaker is talking about himself marrying to a woman, so the following construction is possible (omission of the first singular pronoun and the direct object).

(50) *ni-aŋ* *pa-siða*
NEG-PROG RECIP-take
I didn't marry yet. (construction)

Since it is also evident that the answer to the question has to do with marriage, it is not necessary to express the reciprocal prefix.

(51) *ni-aŋ* *siða*
NEG-PROG take
I didn't marry yet. (construction)

It is obviously not possible to omit the negator, as this would change the meaning of the answer. The progressive suffix can also not normally be dropped: *ni siða* would me 'I won't marry', something that would be exceedingly strange in Bunun culture, unless one is a Catholic priest.

Similarly, a clause like (49) can in the correct context be shortened to (50), a single stative root without the stative prefix *ma-*.

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(52) *ma-sihal   qu   danum*
STAT-good   drink   water
This water is very good to drink. (TVN-xxx-xx1:206)

(53) sihal
good (constructed)

A consequence is that the minimal clause in Takivatan is a predicate consisting of a bare root (typically verbal, sometimes another word class). In fact, in casual conversations, it is not uncommon for entire question-answer sequences to mostly consist of bare root utterances.

A second question is why such extreme forms of pragmatically conditioned omission exist. Communicative economy appears to be an important motivator: when almost everything in a clause is omitted and only the predicate root remains, conversations need not take much time. This increases communicative efficiency within relatively small speech communities with an extensive and relatively stable shared extra-linguistic discursive context, but it is difficult to see how such a system would be more efficient in a large heterogeneous speech community, where it is much more difficult to keep track of all inferred participants and grammatical properties implied.

The potential omission of bound morphemes might have been facilitated by the fact that Takivatan Bunun has an extremely large affix inventory (over 200 affixes have been attested, most of them occur on verbal roots). There is no clear distinction between inflectional and derivational affixes, and a gradual transition from strongly bound affixes to loosely bound clitics.

One important final remark: although there appears to be a tendency to omit actors and topics, recoverability rather than topicality appears to be the main factor in restrictions on argument and affix omission.

6. Conclusion

In this talk, I gave an overview of grammatical mechanisms involved in the expression of the clause-internal and the clause-external topic. The clause-internal topic is realized through an interaction of a number of grammatical subsystems: verbal cross-referencing, argument order, and pronominal marking. It was especially clear from a comparison of the free and bound pronominal paradigm that although these different grammatical subsystems are involved in the realization of information structure, they do not necessarily make complementary distinctions in cutting up the functional-pragmatic space into meaningful grammatical categories. At least in the pronominal paradigms, it is clear that the main dimensions in this process of categorization are topicality and agentivity.

In the second part of this talk, I discussed the commonality of argument omission in Takivatan Bunun. I demonstrated that it is even possible to omit many bound morphemes when they are recoverable from the context. Since almost anything in a clause can be omitted and, especially in informal speech, the non-expression of recoverable information is norm rather than exception, the question arises whether this should in fact be analyzed as a form of ellipsis or omission, or whether we can just say

that in languages like Takivatan the expression of any form of recoverable information is optional. Finally, we concluded that, although topics are often left unexpressed and contrary to expectation, there is no demonstrable relationship between topicality and argument ellipsis.

Abbreviations

1S: 1st person singular
2S: 2nd person singular
3S: 3rd person singular
ALL: allative
ANAPH: anaphoric
ASSOC: associative
ATTR: attributive marker
CAUS: causative
COMPL: complementizer
CONS: consequence
DEF: definiteness marker
DEFIN: definitional marker
DEM: demonstrative
DIR: directional
DIST: distal
DYN: dynamic
DYN: dynamic verbal prefix

EMO: emotive particle
HI.AG: heightened agency
INCH: inchoative
INSTR: instrumental
INTENS: intensifying
INTER: interjection
IRR: irrealis
ITIN: itinerary
LDIS: left-dislocator
LF: locative focus
LNK: linker
LOC: locational
MED: medial
N: neutral
NEG: negator
NTOP.AG: non-topical agent
NVIS: non-visual

P: plural
PROG: progressive
PROX: proximal
PRT: particle
PRV: perfective
PST: past
RED: reduplication
REF: referential
RES.OBJ: resultative object
S: singular
SIT: situational
STAT: stative
TOP: topic
UF: undergoer focus
VIA: viative
VIS: visual

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