This paper gives an overview of the lexical, morphological and syntactic strategies for expressing joint participation (associativity) and companionship (comitativity) and in the Takivatan dialect of Bunun. The most common way for expressing different forms of joint participation in an event are auxiliary verb constructions such as uskun ‘together’ and hasul ‘taken together’, and associative verbal prefixes such as ka-, which is used to mark dynamic group events. In addition, noun phrase apposition and inclusory-type constructions convey meanings that can get both an associative and a comitative interpretation. Thirdly, Takivatan has a dedicated adverbial construction with the preposition sin, for expressing accompaniment. I will discuss the semantic and functional differences and correspondences between these strategies and investigate to what extent they are related to more general strategies for clausal and phrasal coordination in Takivatan Bunun.

1. **Introduction**

Takivatan is one of the five dialects of Bunun and is spoken mainly in the county Hualien, although there is also a smaller Takivatan community in the county Nantou. There are probably around 1600 members of the Takivatan clan, but it is not likely that more than 60% still speaks their dialect fluently. Bunun dialects are largely agglutinative with a particularly rich verbal morphology, are V-initial, and have a Philippine-style voice system.

Before we start our overview of strategies for expressing joint participation in Takivatan, I will first delineate some of the relevant theoretical concepts as I will use them in this presentation. Comitativity is consistently identified in the literature as the expression of accompaniment.

```
(1) Villem jaluta-bisa-ga
    Villem go.for.a.walk-3S father-CMT

    ‘Willem is going for a walk with his father.’ (Estonian; Stolz et al. (2008))
```

Associativity – sometimes also referred to as sociativity – appears to be somewhat
more problematic. It is often considered synonymous to comitativity, especially in descriptions of case systems (cf. Blake (2006:212); see e.g. Schiffman (1999:34-35) for Tamil). Alternatively, it is interpreted as a grammatical function that indicates ‘the referent of the nominal […] plus one or more associated members’ (Corbett (2000:101ff)). An often-quoted example is from Hungarian:

(2) Pál-ék
   Paul-ASSOC

   ‘Paul and his friends’ (Hungarian; Daniel & Moravcsik (2008))

These ‘associated members’ are typically a group of people that are unambiguously associated with the referent (friends, family, colleagues, etc.). We will here adhere to this second interpretation. Associativity is often seen as a category of number, although in many languages there are problems with such an analysis; see e.g. Corbett & Mithun (1996) on Yup’ik where plural and associative morphemes go into different morphological slots.

In the remainder of this discussion, both comitativity and associativity will be interpreted as functional categories (cf. Haspelmath (2003)), rather than members of a grammatical category (e.g. associativity as a member of the number category or comitativity as a member of the case system).

Interestingly, despite the functional and formal difference between comitativity and associativity in many languages, both are in Takivatan actually best subsumed under a wider functional category joint action or joint participation, which will here be used to refer to any sort of formal (lexical, morphological, syntactic) marking that indicates or stresses that an action is performed jointly in a group rather than separately by one or more individuals. (An interesting question would be whether such a general category would be valid across more languages.)

2. **Verbal strategies for expressing joint action**

2.1. **Auxiliaries**

2.1.1. **Uskun**

Takivatan Bunun has three auxiliary verbs which each in their own way express that particular participants in the action expressed by the verb participate in the action in a group. The most common of these three is uskun and its derived forms.
(3) Namuskun ata maun.
   na-m-uskun\textsubscript{AUX} ata maun
   IRR-DYN-together 1.I.F eat
   ‘Let us eat together.’ (TVN-xx2-001: 66)

Associative-like meanings occur when there is a mismatch between the semantics of \textit{uskun} and the number expressed by the topic of the clause.

(4) Namuskunʔak maun qaisiŋ.
   na-m-uskun-ʔak\textsubscript{AG/TPC} maun qaisiŋ
   IRR-DYN-together-1S.F eat rice
   ‘Together (with others) I will eat rice.’ (TVN-xx2-001: 67)

Forms of \textit{uskun} always express joint participation of the topic of the construction. This implies that in an agent focus construction, such as (4), it is the agent (-ʔak ‘I’) who is involved in the joint participation, whereas in undergoer constructions like (5) it is the undergoer (-ʔak ‘me’) that is involved in performing a joint action and not the agent (\textit{binanauʔað ‘girls’}).

(5) Uskununʔak binanauʔað paqudavus.
    uskun-un-ʔak\textsubscript{UN/TPC} binanauʔað\textsubscript{AG} pa-qu-davus
    together-UF-1S.F girl CAUS.DYN-DRINK-alcohol
    ‘These girls treat me to drink alcohol with others.’ (TVN-xx2-005: 52)

\textit{Uskun} typically indicates that a group is jointly involved in an event because it members came together out of their own free will (internal instigation). This is the case whether the joint participants are agents or undergoers in the event: both in (4) and (5), the first person and the other persons involved in the action are not forced to eat or drink together, but rather take the initiative to do so out of their own free.

2.1.2. \textit{Hamu}

Like \textit{uskun}, the auxiliary \textit{hamu} indicates that it is the topic of the clause that is jointly participating in the event. In contrast to \textit{uskun}, however, \textit{hamu} typically implies that an external force has put together the group involved in the action.
(6) Hamunʔak paqudavus.

hamu-un-ʔak pa-qu-davus
together-UF-1S.F CAUS.DYN-DRINK-alcohol

‘I and many other people have been treated to drink.’ (TVN-xx2-005:01)

With inanimate targets, hamu can often be translated as ‘put/take together in order to’, as in (7).

(7) Nahamun qaimaŋsuð matakunav.

na-hamu-un qaimaŋsuð ma-takunav
IRR-together-UF thing DYN-throw.away

‘Take these things together with other things to throw them away.’ / ‘You can throw this thing away with the rest.’ (TVN-xx2-005:34)

Because it implies low agency of the joint group, hamu often occurs in the undergoer focus. In complex clauses, agent-focus constructions with hamu are possible. Hamu can also co-occur in a clause with uskun, as in the example below.

(8) Nahamuʔak muʔu muskun paintaivtaiv.

na-hamu-ʔak muʔu m-uskun paintaivtaiv
IRR-together-1S.F 2P.N DYN-together compete

‘I have been put in a group with you [pl.] to compete together [against someone else].’ (TVN-xx2-001:70)

2.1.3. Hasul

A third auxiliary, hasul, is agent-oriented rather than topic-oriented: when hasul is used, it is usually the agent that jointly participates in an event.

(9) Hasulunʔak maludaq.

hasul-un-ʔak ma-ludaq
together-UF-1S.F DYN-beat

‘I have been beaten up by a group.’ (TVN-xx2-005:48)

Contrast for instance the undergoer focus construction with hasul in (10) with the corresponding construction with hamu in (6): in the latter, the joint action is performed by the undergoer (i.e. the topic of the undergoer construction), whereas in (10) below it is the agent who performs the joint action.
(10) Hasulunʔak paqudavus.

hasul-unʔak pa-qu-davus

together-UF-1S.F CAUS.DYN-DRINK-alcohol

‘I have been treated to drink by many people.’ (TVN-xx2-005:49)

In contrast to the previous two auxiliaries, hasul does not necessarily implies that the joint participants are all participating in the event in a coherent group. In (10), for example, the first person is not treated on drinks by a group of people at the same time, but rather by individuals over a period of time.

<table>
<thead>
<tr>
<th>Orientation</th>
<th>Group created by</th>
<th>Nature of participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>uskun</td>
<td>topic-oriented</td>
<td>internal instigation</td>
</tr>
<tr>
<td>hamu</td>
<td>topic-oriented</td>
<td>external instigation</td>
</tr>
<tr>
<td>hasul</td>
<td>agent-oriented</td>
<td></td>
</tr>
</tbody>
</table>

Table 1 – Auxiliaries expressing joint participation

2.2. **Associative verbal prefixes**

The prefixes ka-, ku- and kin- are part of an extensive framework of verbal prefixes that encode different event types. As Table 2 concisely illustrates, many of these prefixes have causative and associative variants. (For an extensive discussion of verbal prefixes in Takivatan Bunun, see Chapter 7 of De Busser (2009)).

<table>
<thead>
<tr>
<th>Type</th>
<th>Neutral</th>
<th>Causative</th>
<th>Associative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Movement from</td>
<td>mu-</td>
<td>pu-</td>
<td>ku-</td>
</tr>
<tr>
<td>Dynamic event</td>
<td>ma-</td>
<td>pa-</td>
<td>ka-</td>
</tr>
<tr>
<td>Stative event</td>
<td>ma-/mi-</td>
<td>pi-</td>
<td>ka- / ki-</td>
</tr>
<tr>
<td>Inchoative event</td>
<td>min-</td>
<td>pin-</td>
<td>kin-</td>
</tr>
</tbody>
</table>

Table 2 – Associative prefixes in their context

Associative variants of verbal prefixes typically indicate that an event involves some sort of joint participation in the event. Below, we will focus on the most common associative prefix, ka-. Other associative alternates of verbal prefixes function in an analogous fashion.

In example (11), the associative marker ka- indicates that the speaker is not simply helping the hearer to talk, but that (s)he will help by talking together with the hearer, for instance in front of a crowd (dağad ‘help’ > kadąd ‘help by doing something together’).
(11) Kadaŋað baðbað.
    ka-daŋað baðbað
    ASSOC.DYN-help talk
    ‘I help you to talk’ / ‘I will speak in your place.’ (TVN-xx2-001:25)

In (12), the addition of ka- to the nominal stem ?asany ‘home village’ indicates that the
speaker arrives in his home village together with a group of friends.

(12) [...], madauki kaʔasaŋa
    ma-dau-ki kaʔasaŋ-a
    DYN-EMOT-DEF.SIT.PROX ASSOC.DYN-home.village-SUBORD
    ‘[...], we arrived together at the village.’ (TVN-012-002:169)

Interestingly, a prefix ka- is also used with nominal roots referring to crops to render
a verb with the meaning ‘to harvest X’ (where X is the root), as in (13)-(14).

(13) ka-maduq
    HARVEST-millet

(14) ka-tilas
    HARVEST-cereal

When ka- attaches to the root lumaq ‘house’, it results in a complex form meaning ‘to
build a house’.

(15) ka-lumaq
    BUILD-house

These forms might be simple extensions of the associative function of the prefix:
harvesting crops typically consists of gathering them together, and building a house
can be conceptualized as assembling the building materials together into a consistent
whole.

2.3. The preposition sin ‘together with’

The preposition sin unambiguously expresses accompaniment. However, it is
relatively rarely used (there are less than ten examples in the corpus used for this
study). Phrases with sin, like all other prepositional phrases, normally occur in
clause-final position.
(16) Pasihaulin sin nas-Tiaŋ Taiŋpadlaiʔana
    pasihaul-in   sin   nas-Tiaŋ   Taiŋpadlaiʔan-a
    go.down-PRV   with   deceased-PersName   FamilyName-LIG

    ‘I went down to the river together with the now-deceased Tiang Taidalaiʔan.’
    (TVN-008-002:68)

(17) [...] paun tu Haʔdula, sin Vilian, tamaki Vilanhuaʔa
    paun   tu   Hadul-a   sin   Vilian
    call+UF   COMPL   PersName-LIG   with   PersName
    tama-ki   Vilanhua-a
    father-DEF.SIT.PROX   FamilyName-LIG

    ‘[... and now they went to Sikav near Kivit, Vilian,] that is to say, Hadul,
    together with Vilian, the father of the family Vilanhua.’ (TVN-012-002:84)

2.4. Noun phrase concatenations

Finally, joint participation can be expressed by a sequence two (or sometimes three)
  nouns phrases. Below is an overview of all attested patterns, although none is
  sufficiently common in the corpus to draw any definitive conclusions.

2.4.1. Nj  +  Nj ‘i and j’

Interestingly, the apposition of two full nouns is only possible in an enumeration,
  where there is a clear pause between the two apposed nouns and optionally also an
  enumeration marker -a after each member of the enumeration.¹

(18) Pasiðaʔanin ŋabul, <pause> vanis.
    pasiðaʔan-in   ŋabul   vanis
    CAUS.DYN-take-LF-PRV   antler   wild.boar

    We could catch deer and wild boar. (TVN-008-002:47)

(19) pasiðaʔanin ŋabula, <pause> vanisa.

When two apposed nouns are part of the same intonation unit, the second almost
  invariably elaborates on or specifies the first, as (20) illustrates.

¹ The only exceptions are idiosyncratic constructions such as tama tina ‘mother and father’, which are
  clearly part of a single intonation unit.
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(20) Malansaupa Pusquta Pakðatan.

malan-saupa Pusqu-ta Pakðat-an
VIA-direction GeoName-DEF.REF.DIST GeoName-LO

‘We went in the direction of Pusqu, to Pakðat.’ (TVN-008-002:74)

Thus, apposition of two full nouns is never used in Takivatan to express joint participation; at best it enumerates participants in an event, but as the two examples above illustrate, these are normally never agents of a highly dynamic event.

2.4.2. \(-PRON_i + PRON_j\) ‘\(i\) and/with \(j\)’

Sequences of two pronouns, however, can be used express joint action and it appears to have comitative semantics. These sequences involve a bound pronoun referring to the topic of the clause and a free pronoun in the neutral case, which always indicates a non-topic agent. They are semantically fully compositional: each pronoun refers to one joint participant and their combination refers to both participants together.

An example is (8) on p. 4, here repeated as (21). The combination of a bound first person singular (\(-ʔak ‘I’\)) and the neutral form of a second person plural (\(muʔu ‘you’\)) renders a meaning ‘I together with you’.

(21) Nahamuʔak muʔu muskun paintaivtaiv.

na-hamu-ʔak muʔu m-uskun paintaivtaiv
IRR-together-1S.F 2P.N DYN-together compete

‘I and you (pl.) will compete together (i.e. as one group)’ (TVN-xx2-001:70)

Whether such constructions should really be called apposition is a bit doubtful, since both members clearly are syntactically distinct.

2.4.3. \((PRON[NUM/PRON]+NUM)_{i+j} + (N/PRON)\) ‘\(i\) and \(j\)’

A third construction contains two elements. A first element refers to all joint participants in the jointly performed action. This element can be expressed by a pronoun (as in (22)-(23)), a numeral (as in (24)), or a combination of a pronoun and a numeral (as in (25)). The second element of the construction is expressed by a pronoun (as in (22)) or a noun (all other examples) and refers to a meaningful subset of the joint participants, i.e. it explicitly expresses a participant that could otherwise not be derived from the context or that is in some way pragmatically prominent.

For instance, in (22), the first element, the personal pronoun \(ðami ‘we (excl.)’\) refers to the entire set of joint participants (i.e. ‘me and him’), and the second element \(istun\)
‘he’ to one of the members of that set.

(22) Đami istuna […]

Đami istun-a
1E.N 3S.MED-LDIS

‘Me and him [lit: we, including him], [when we both were very young, we were selected to participate …]’ (TVN-008-002:20)

(23) Dusaʔin sam Tiaŋta

dusa-in sam Tiaŋ-ta
two-PRV 1I.F PersName-DEF.REF.DIST

‘Me and Tiaŋ [lit: we, including Tian], it was just the two of us.’
(TVN-008-002:77)

(24) Masihal dusa binanauʔað munhan Sipun.

ma-sihal dusa binanauʔað mun-han Sipun
STAT-good two wife ALL-go Japan

It’s very good that you and your wife both [lit: the two of you, including your wife] went to Japan. (TVN-xxx-xx1:35)

(25) Muntaihukuʔam dusa Uli han lihai

mun-Taihuku-ʔam dusa Uli han lihai
ALL-Taipei-1E.F two PersName on Sunday

‘The two of us, me and Uli, are going to Taipei on Sunday.’ (TVN-xx2-001:26)

3. Relation between joint control and other functional categories

A hypothetical connection between associativity and comitativity has been established by Kiparsky (2009). The correlation between comitativity and a number of other functional categories has been postulated by Haspelmath (2003:226-230) and updated by Narrog & Ito (2007). The most conspicuous links are between comitatives and recipients, instrumentals, and NP conjunction. Associatives have been linked to different types of plurals and to inclusory constructions (see Moravcsik (2005) and Daniel & Moravcsik (2008)). The question arises whether similar relations also exist in Takivatan with the more general category of joint control.
3.1. Joint control vs. beneficiaries and instruments

Beneficiaries (including recipients) and instruments typically occur in the slot immediately after the agent and, when they are pronouns, are realized as neutral forms (rather than the focused agent form). Both characteristics corresponds to how the second element of the joint action constructions in 2.4.2-2.4.3 are realized (see e.g. muʔu in (21)).

However, neutral forms of the personal pronoun are – as the term indicates – the default choice for realizing an argument (they are used for non-topicalized agents, topicalized and non-topicalized undergoers and all other semantic roles). The only other form that occurs is used for topicalized agents. While it is interesting that the second element in joint participant constructions are, unlike the first element, not encoded as topicalized agents, the occurrence of neutral forms does therefore not necessarily mean that they should be interpreted as instruments or beneficiaries.

The position of joint participants in the second-position slot immediately after the focused agent is easily explained in terms of syntactic-functional iconicity: joint participants and agents are realized together because they participate as a group in the event expressed by the verb. In addition, both instrumental/beneficiary arguments and joint participants occur so rarely in the corpus that it is at the moment not possible to determine whether it is impossible for them to occur together.

Finally, both beneficiaries and instruments can in Takivatan be cross-referenced on the verb by specific verbal prefixes (ki- and is- respectively, see De Busser (2009:365, 357-9)). These prefixes never target joint participants.

3.2. Joint control vs. NP conjunction

NP conjunction (conjunction of the type ‘John and Bill are teachers’) is rare in Takivatan. As mentioned in 2.4.1, bare apposition of noun phrases is normally only used for elaboration or specification. Even when sequences of nouns belong to separated intonation units and when each member of the sequence is followed by an enumeration marker, they are only used for enumeration, typically of non-agentive arguments. As far as I can see, apposition of nouns is neither used for NP conjunction, nor for expressing comitative or associative meanings.

3.3. Joint control vs. plurals

Obligatory plural marking exists in Takivatan only for pronouns. As we have seen, plural pronouns figure prominently in some joint control constructions, but in themselves they can never get an associative reading. In certain contexts,
CV-reduplication in nouns has developed additive plural or collective semantics, but reduplication is in no way relevant in the joint control strategies described above.

### 3.4. Joint control vs. inclusory constructions

The construction in 2.4.3 ($X_{i+j} + Y_j \text{‘}i+j\text{’}$) is an inclusory construction of the implicit type according to Lichtenberk (2000).

### 4. Conclusion

Takivatan has a number of lexical, morphological and syntactic strategies for expressing joint participation. Assuming some definitional flexibility, some can be defined as comitative (the construction in 2.4.2) or associative (the prefixes in 2.2), but most express more general types of joint participation. The strategy in 2.4.3 can be defined as an implicit inclusory construction. None of the other strategies described above can be unambiguously linked to functional domains that in the literature have been linked to comitative or associative functions, such as the expression of instrumental or benefactive roles, NP conjunction, or plurality.

### List of abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1E</td>
<td>first person exclusive</td>
</tr>
<tr>
<td>1I</td>
<td>first person inclusive</td>
</tr>
<tr>
<td>1S</td>
<td>first person singular</td>
</tr>
<tr>
<td>2P</td>
<td>second person plural</td>
</tr>
<tr>
<td>3S</td>
<td>third person singular</td>
</tr>
<tr>
<td>ALL</td>
<td>allative prefix (movement toward)</td>
</tr>
<tr>
<td>ASSOC</td>
<td>associative prefix</td>
</tr>
<tr>
<td>AUX</td>
<td>auxiliary</td>
</tr>
<tr>
<td>CAUS</td>
<td>causative</td>
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<tr>
<td>CMT</td>
<td>comitative</td>
</tr>
<tr>
<td>COMPL</td>
<td>complementizer</td>
</tr>
<tr>
<td>DEF</td>
<td>definiteness marker</td>
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<td>DIST</td>
<td>distal</td>
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<tr>
<td>DYN</td>
<td>dynamic event type</td>
</tr>
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<td>EMOT</td>
<td>emotive word</td>
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<td>F</td>
<td>focussed form (of pronouns)</td>
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<tr>
<td>GeoName</td>
<td>toponym</td>
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<td>IRR</td>
<td>irrealis</td>
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<tr>
<td>LDIS</td>
<td>left-dislocating particle</td>
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<td>locative focus</td>
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<td>ligature</td>
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<td>locative case</td>
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<td>neutral form (of pronouns)</td>
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<td>PersName</td>
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<td>stative event type</td>
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<td>SUBORD</td>
<td>subordination marker</td>
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<td>UF</td>
<td>undergoer focus</td>
</tr>
<tr>
<td>VIA</td>
<td>viative prefix (movement along)</td>
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</table>

### Bibliography


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