Information structure in Kadorih

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1. Overview

1. Brief overview
2. Prosodic properties which signal information structure
3. Topic-comment, entity-introducing, event-reporting and identification
4. Formal coding and information status of discourse referent

- Kadorih has no formal coding which would directly indicate identifiability or activation state of discourse referents
- Entity-introducing constructions (§3.2) indirectly indicate that the introduced referents have the status of unidentifiable at the time of utterance
- Topic and focus relations can be expressed prosodically or syntactically (§2, §3.1)
- Focus relations can be expressed by constructions of:
  - topic-comment type (predicate-focus structure)
  - entity-introducing or event-reporting type (sentence-focus structure)
  - identification type (argument-focus structure)
- Identificational constructions in Kadorih can be called cleft constructions

2. The role of prosody

2.1 Prosodic properties directly signaling information structure

- the extract (1) is part of a clause uttered after introducing the main character Uhko
- (1) does not contain any prosodic notation

(1) jadi Uhko nakung buwu=oh ...
   ‘Then, Uhko carries his fish trap, …’

Figure 1. Acoustic analysis of topic-indicating pitch and pause
“Juncture pause” (Laver 1994: 537–38) with long breath (1,000 ms) vs. the length of *jadi Uhko* (840 ms) and *nakung buwu=oh* (930 ms)

The intentional use of such a juncture pause (not “hesitation pause”) is not observed after a non-topic argument.

Average F0 value of this whole extract (254Hz) vs. the topic argument (257–427Hz)

A sentence-initial argument serves as the topic argument of the sentence whenever it bears a rising pitch and is followed by a relatively long juncture pause.

### 2.2 Prosodic properties indirectly signaling information structure

- Appended/comment-topic construction: the topic argument *buvwu Uhko* is moved rightward from the pre-predicate position without any resumptive pronominal form.
- The canonical counterpart: [*buvwu Uhko*] [*tuwi mahpak*] [*kanuan ohcin naang*]
- Pitch and pause play a supplementary role to signal that the appended argument is the topic expression of the sentence.

\[(2) \quad \text{tuwi mahpak konuan ohcin naang, buwu Uhko.} \]
\[\text{filled.too.full by bird fish.trap (name)}\]
\[\text{‘[It is] full of birds, Uhko’s fish trap.’}\]

**Figure 2. Acoustic analysis of an appended construction**

- *naang* [nâáŋ] with rising-falling pitch contour (250–300–105 Hz)
- Sentence-final falling pitch is used in the middle of this sentence.
- *buvwu Uhko* with flat pitch.
- Perceptible intervening pause (115ms) vs. the second gap (77ms).
- (1) contains 3 syllables per second vs. (2) has 5 syllables per second.
- Prosodic properties can be the indirect or secondary formal indicator of information structure.

### 3. Information-signaling constructions

#### 3.1 Topic-comment and comment-topic constructions

A constituent is regarded as a topic expression “if the proposition expressed by the clause […] is pragmatically construed as conveying information about the referent of the constituent”\(^1\) (Lambrecht 1994: 131)

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\(^1\) “Topic” or “theme” has sometimes been characterized metaphorically as “it were the peg on which the message is

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• The pragmatic presuppositions: ‘Uhko’ in (1) and ‘Uhko’s fish trap’ in (2) are available as the topic for each narrative
• The pragmatic assertions: the establishment of aboutness relations between entities denoted by topic expressions and events denoted by the comment parts.

(3) a. Sentence: (jadi) Uhko, nakung buwu=oh,
   Pragmatic presupposition: Uhko is a topic for comment x
   Pragmatic assertion: x = carry Uhko’s fish trap
b. Sentence: tuwi mahpak kamuan ohcin naang, buwu Uhko.
   Pragmatic presupposition: Uhko’s fish trap is a topic for comment x
   Pragmatic assertion: x = be full with birds

(4) a. (From 2001 until 2002, here was a man from Tumbang Tuwe, Rungan River. The one who came to Tumbang Bolihkoi for treatment.)
   [TOP aran ulun orih], [CMT Liun].
   name human that (name)
   ‘That man’s name was Liun’.

b. (Then, amai Busun departed for Tumbang Tuwe (from Tumbang Bolihkoi).)
   [CMT ko-duo ondou ko-duo ngolomi] [TOP k-ahcu-i].
   total-two day total-two night (abstract.noun)-(far)-3sg.POSS
   ‘The distance, (it took) two whole days’.

(4b): ‘The distance was two whole days’
• The referent of kahcui is only loosely associated with the proposition “it takes two whole days”
• “Unlinked topic construction” (Lambrecht 1994: 193)

(5) a. [CMT Liun] [TOP aran ulun orih].
   ‘The man’s name was Liun’.

b. [TOP kahcui], [CMT koduo ondou koduo ngolomi].
   ‘The distance, (it took) two whole days’.

(6) a. Sentence: aran ulun orih, Liun. or
   Liun aran ulun orih.
   Pragmatic presupposition: the man’s name is a topic for comment x
   Pragmatic assertion: x = Liun

b. Sentence: koduo ondou koduo ngolomi kahcui. or
   kahcui, koduo ondou koduo ngolomi.
   Pragmatic presupposition: the distance is a topic for comment x
   Pragmatic assertion: x = two whole days

(7) a. (The nun saw that he would not be fully-healed. And the nun talked to the village people, “You village people, please help him, I can’t heal him anymore”)
   ihc0 mahi nyaro ulun lowu ijo kani dohop.
   one even/either not.exist humah village (relativizer) want help
   ‘As for someone who wanted to help, (among) village people, there was no such one’.

b. ijo kani dohop ihc0 mahi nyaro ulun lowu.
   (relativizer) want help one even/either not.exist human village

hung” (Halliday 1970: 161, as well as the “point of departure for the message” (p. 162)) or “the hitching post for the new knowledge” (Chafe 1976: 44).
2 More naturally, it will be said as Liun ara-i [(name) name-3sg.POSS] ‘His name was Liun’.
• Subject = ihco ‘one’, Predicate = nyaro ‘not exist’
• Comment part: nyaro or possibly ihco mahi nyaro
• Unlinked topics: 1. ulun lowu ‘(among) village people’, 2. ijo kani dohop ‘someone who wants to help’
• Main topic throughout the whole passage: ijo kani dohop ‘someone who wants to help’

(8) Sentence: ihco mahi nyaro ulun lowu ijo kani dohop or ijo kani dohop ihco mahi nyaro ulun lowu
Pragmatic presupposition: someone who helps him is a topic for comment x
Pragmatic sub-presupposition: ‘among the village people’ is a topic for comment x
Pragmatic assertion: x = there is no such one

• “Subjects are UNMARKED TOPICS and that the topic-comment articulation is the UNMARKED PRAGMATIC SENTENCE ARTICULATION” (Lambrecht 1994: 132)
• “The children went to school” (“What did the children do next?”)
• In Kadorih, topic-comment (or comment-topic) articulation is the unmarked pragmatic sentence articulation

3.2 Entity-introducing constructions
• Presentational constructions involving an existential tohko, a locational demonstrative anai ‘there (far afield)’, an intransitive verb lombut ‘come’, or the combination of these words
• Usually used at the beginning of a story or when introducing a new entity
• The entity is assumed to be unpredictable or non-recoverable for the addressee at the time of utterance
• The constituent order must be [predicate-argument] (not [argument-predicate])

(9) a. (At the beginning of a story)
   tohko ulun tahkan sungoi Rungan
   exist human from river (name)
   ‘There was a man from Rungan River’.
   b. anai ulun tahkan sungoi Rungan.
   ‘There was a man from Rungan River’.
   c. anai lombut ulun tahkan sungoi Rungan.
   ‘There came a man from Rungan River’.
   d. *ulun tahkan sungoi Rungan tohko/anai.

(10) Sentence: tohko/anai/anai lombut ulun tahkan sungoi Rungan.
Pragmatic presupposition: (no presupposition)
Pragmatic assertion: there was/came a man from Rungan River

• (11b) is only a topic-comment construction (as if he had made an appointment with anak palanduk)

(11) a. (I went fishing. Then I saw that a rambutan tree bore a lot of fruits. So, I looked for some fallen fruits.)
   beteng=ku jo=ngurah=ah, lombut anak palanduk.
   when=I (relativizer)=look.for=them come child chevrotain
   ‘When I was looking for them, the kid chevrotain appeared’.
   b. #beteng=ku jo=ngurah=ah, anak palanduk lombut.

• The existential tohko: an indicator of resultative perfect aspect which entails relevance to the resultant existence of an entity (Inagaki forthcoming: 108–109)
• Often utilized for making up a predicate which introduces an entity
(12) (On that day I didn’t meet anyone, I was lost. So, it got dark again, and I slept in the jungle (again) anyway. I haven’t met anyone for three days. My stomach was empty but there was nothing to eat.)

\[
\text{TOP ahku \ [CMT tohko nyombang=ih, duo kungan \ kolop],} \\
\text{I exist \ find=just \ two (classifier) tortoise} \\
\text{‘I just found two tortoises’}
\]

(because I had been traveling down a river. This river I don’t know. A small river. So, it seemed to me that those tortoises were mating in the river. Right away I smashed them, the two tortoises. I got both of the tortoises.)

- (12): the previous context; ‘my wandering in a jungle’ and ‘I’
- ‘Two tortoises’ has not yet been introduced
- Entity-introducing constructions are used for unpredictable or non-recoverable entities
- Tree, river, sun (nature world) or clothes, meal, house (daily-life and cultural world) are rarely introduced by a special construction
- Unless the speaker assesses that the addressee is not able to effectively process the referential expression at the time of utterance

3.3 Event-reporting constructions

- Event-reporting constructions: introduce a new event and new entity
- No formal characteristics such as prosody, syntax, or limited sets of predicates
- It is the existence of an event that the speaker wants to focus on by an event-reporting construction
- It is the existence of an entity that he or she wants to focus on by an entity-introducing construction.
- The event (baas) ngulam ngulam dinding dahpur=kai necessarily involves specific species of wild animals as an agentive entity or entities

(13) (When I was young, around 17 years old, I lived in Bolihkoi village here. There were few people in Bolihkoi village. Approximately there were 30 people. Houses were just humble. There were no people taking a walk along the road in the night.)

\[
\text{uhcang baas ngulam ngulam dinding dahpur=kai ndoi ngolomi.} \\
\text{deer strong chew chew wall kitchen=our(exclusive) if night} \\
\text{‘Deers/a deer always gnawed the wall of our kitchen in the night’.}
\]

(14) Sentence: \text{uhcang baas ngulam ngulam dinding dahpur=kai […]}
Pragmatic presupposition: (no presupposition)
Pragmatic assertion: deers always gnawed the wall of our kitchen […]

(15) (Speaker Q notices something happened to speaker R)

Q: \text{ombai ma?} \\
\text{why (form.of.address) ill belly=my} \\
\text{‘Why, my uncle?’} \\
R: \text{poros butui=ku.} \\
\text{‘I have a stomachache’}.

- Speaker R, the referent of ku ‘my, I’ is topical
- ‘My belly’ may become somewhat topical via the frame evoked by the possessor ‘I’
- Speaker R’s sentence is not a comment-topic construction

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Any topic of this conversation (except for the cases where the speaker herself is the topic) is not yet established

Possible topics for speaker R’s sentence: ‘my head’, ‘my nephew’, ‘my dog’, …

3.4 Identificational constructions

(16) a. #butui=ku poros.
   belly=my ill
b. butui=ku jo=poros.
   belly=my (relativizer)=ill
   ‘It is my belly that aches’.

(16b): a usual reply to narai jo=poros? [what (relativizer)=ill] ‘Where does it ache?’

Identificational construction: identifies an entity and fills the blank part of a presupposed open proposition with the identified entity.4

(17) Sentence: butui=ku jo=poros.
   Pragmatic presupposition: speaker’s x aches or x aches
   Pragmatic assertion: x = belly or x = speaker’s belly

Identificational constructions in Kadorih (cleft constructions): a kind of equational constructions in which a non-topical noun phrase equates a non-referring headless relative clause

(18) (I’m going to start talking about the descendants of these 8 people. Pulang is a person whose descendants live in Batu Nyiwuh, and (he is) a person who have Muang and Lupat as his children.)
   [topic NP] [referring headless relative clause]
   [Muang=tuh], wayah=tuh, [ijo anai=ka keturuna-i].
   (name)=this, period=this, (relativizer) there.far.a.field=also descendant-his
   ‘Muang is a person whose descendants are also living today’.

The headless relative clause ijo anai=ka keturuna-i:
- functions as the comment for the topic NP Muang=tuh
- refers to an identifiable set of individuals

4. Information status and realization of discourse referents

The analysis will be conducted on arguments and adjuncts, which can designate discourse referents
Verbal or adjectival predicates do not designate discourse referents

Chafe (1976: 39) “identifiable would be a better term than definite”

Lambrecht (1994: 77–78)
- An identifiable referent: “one for which a shared representation already exists in the speaker’s and the hearer’s mind at the time of utterance”
- An unidentifiable referent: “one for which a representation exists only in the speaker’s mind”

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4 This construction must be composed of a ‘new’ referring expression and a (‘given’) presuppositional expression. If it is composed of a ‘new’ non-referring predicate nominal and a ‘given’ referring expression (e.g. Eng. The ones who did that are my friends (Lambrecht 1994: 123)), then it is a simple comment-topic construction.
• The cognitive category of identifiability is presumably universal and that it partly matches the grammatical category of definiteness (Lambrecht 1994: 87)
• “Not only do people’s minds contain a large store of knowledge, they are also at any one moment in certain temporary states with relation to that knowledge” (Chafe 1976: 27–28) (careful attention to the importance of the addressee’s consciousness)

(19)
IDENTIFIABILITY

<table>
<thead>
<tr>
<th>Unidentifiable</th>
<th>anchored</th>
<th>_1</th>
<th>_2</th>
</tr>
</thead>
<tbody>
<tr>
<td>identifiable</td>
<td>inactive</td>
<td>_3</td>
<td>_4</td>
</tr>
<tr>
<td>activation</td>
<td>accessible</td>
<td>_5</td>
<td></td>
</tr>
</tbody>
</table>

• The storyteller (primary speaker) vs. the audience of the story (primary addressee)

(20) ‘The story of Uhko’ (the preceding part from the beginning)
a. this_4s title=its_4s [story Uhko walk check fish.trap]_1
b. so Uhko_4 [day that]_1 depart walk set fish.trap=his_4

c. then Uhko_5 carry fish.trap=his_5 [to 1(one) river]_1 and-he_5 set-it_5 [at there]_5 [(relativizer) inside=his]_4i
d. but vision-his_4i birds_1 many

e. “finished self=its_4i” said Uhko_5 “[=this_4s set-it_5 [at upper tree= just]_1”
f. then Uhko_5 set fish.trap_5 [at upper tree]_5

g. so [1(one) day that]_4i Uhko_5 wait=it_4i
h. filled.too.full by birds_5 [fish.trap Uhko]_5 “Oh!”
i. so Uhko_5 directly=just_4i he_5 climb walk check [fish.trap that]_4i
j. very=he_5 hit hit [birds many that]_4i
k. Ø_5 indeed [(relativizer)=sprawled.out]_4i [that’s the story]

• Unidentifiable and unanchored (_1)
  - The referent of the title phrase in (20a) (can be inactive or “unused” (Prince 1986) if the addressee knows the story)
  - ‘One day’ in (20b), ‘to a river’ in (20c), and ‘birds’ in (20d) cannot be inactive (diegetic referents in a fictional setting)

• Active (_5)
  - ‘Uhko’, ‘fish trap’, ‘(on) tree’ and ‘(in) river’

• ‘Uhko’ is coded by
  - Lexical item Uhko in (20abcefgih) (most frequent)
  - Pronoun ahku ‘I’ or io ‘he’ in (20ei)
  - Pronominal suffix -i (20cd) and enclitic =oh (20bcj)

• Kadorih storytellers often avoid referring to a character by means of pronouns or a phonologically null form
• ‘Birds’ is not coded in (20k) because of its active status

• Accessible (semi-active) (_4)
  - ‘Uhko’ in (20b) (first coding as an individual)
  - ‘Fish trap’ in (20b) (first coding as an instrument)
• **Situationally accessible (_4s)**
  - The referent coded by a pronoun *ahku* ‘I’ within a directly quoted sentence in (20e) (deictically anchored with reference to the text-internal deixic center)
  - The referent coded by a demonstrative *tuh* [this] in (20a) ‘now’ (deictically anchored with reference to the time of the storyteller’s utterance)
  - The referent coded by *jodol=oh* ‘its title’ in (20a) (inferred from the situation in the text-external world)

• ‘Fish trap’ is coded by
  - Lexical item *buwu* in (20abcfhi)
  - Pronominal suffix *-i* in (20ce)

• **Inferentially accessible (via the inference from the change of state) (_4i)**
  - The referent of *buwu atuh* [fish.trap that] in (20i) (the state of the fish trap is changed into ‘full of birds’ from the former state ‘empty’)
  - The referent of *ohcin aro atuh* ‘that many birds’

• **Inferentially accessible (via the inference from the semantic frame) (_4i)**
  - ‘His inside (=in his heart)’ in (20c)
  - ‘His vision (=to the eye of him)’ in (20d)

(21) ‘The story of Uhko’ (the following part)

a. then Uhko, go.home bring birds many [for Mulau] 1
b. and-he set-it again [at upper tree] 4t

c. A dialogue between Uhko and Mulau
   c. so “why=(particle) yours 4i (relativizer)=walk check fish.trap get birds many=(particle) Uhko 5” said Mulau
   d. “no Ø 5 be.set=I 5 [at upper tree] 1” said Uhko
   e. “most-excessive=(particle) yours 4i [stupidity your=this] 4i”
   f. “not (experiential.perfect) human 3 set fish.trap 5 [at upper tree] 5” said Mulau
   g. “[at water] 4i [at river] 4i” said Mulau for Uhko
   h. “vision-my 4i birds 5 many=(particle)” said Uhko “a.moment.ago 4s”
   i. “that 4t I 5 (relativizer)=set-it 5 [at upper tree] 5”
   j. (so he busy cook clean [birds (relativizer) result fish.trap that there])
   k. “excessive [stupidity your=this] 4i” said Mulau

l. be.beaten Mulau 5 by Uhko=his 5 [at there] 4i
m. lost throw.out [stone stupidity Uhko there] 5 intelligent=entirely Uhko 5 there=that 5
n. this 4s not=entirely he 5 stupid not=entirely he 5 be.stupid
o. throw.out lost=entirely [stone stupidity that] 5=entirely
p. [that’s story of] clever intelligent=entirely Uhko 5
q. that 4t finished [word story story Uhko=that] 4t [(relativizer)=stupid that] 4i
r. that’s all=just

• **Textually accessible (_4t)**
  - The place coded by *aang taruk kacu* ‘on a tree’ (the time and place in the text-internal world: the Uhko’s hunting scene → returning one, ‘on a tree’ is sufficiently deactivated by the scene change)
Text-internal dialogue is embedded in the discourse of the storytelling.
The storyteller (primary speaker) vs. the audience of the story (primary addressee).
Uhko (embedded speaker/addressee) vs. Mulau (embedded speaker/addresssee).

(21c–k): information status is given on the basis of the embedded speaker and addressee.

(21c): the proposition denoted by the relative clause is presupposed.
Mulau has known that Uhko carried his ‘fish trap’ and brought ‘birds’ home.
‘On a tree’ in (21d) has been unidentifiable at the moment ((21c) implies that the hunting process and place has not yet been identified by Mulau).

The subject ulun ‘human, people’ in (21f) is used as a generic noun phrase, not an indefinite one.
The referent of ulun will always be at least identifiable, usually just inactive (the referent of such a generic noun phrase is stored in the addressee’s long-term memory).

Unidentifiable and anchored (_2) items in Kadorih:
- often occur in an entity-introducing construction.
- do not usually occur at the beginning of folklore tales.
- typically occur at the beginning of temporary stories based on personal experience.

Phrases in square brackets: unidentifiable and anchored referents.

Words or phrases in bold: the anchoring discourse referents.

(22) a. tohko [ ulun tahkan sungoi Rungan_3 ]_2. (=9)
   ‘There was [ a man from Rungan River ].’

b. anai [ iheo ulun mondam tahkan Kalimantan Barat_3 ]_2, ijo arai Ranjung
   ‘There was [ an ill person from West Kalimantan, whose name was Ranjung ].’

c. ahku huang bakesah [ gawi-k_5 hondou=tuh_4s ]_2 ahkan Kasuya, ...
   ‘I’m going to tell Kazuya a story about jobs today that I did, …’

d. ahku huang mander [ panyala-k_5 ondou hawun_4s ]_2 ahkan Kazuya.
   ‘I’m going to report to Kazuya on a (small) trip tomorrow that I will make.

‘A man’ becomes more specific and the degree of its identifiability is increased through pragmatic anchoring.
‘Jobs’ in (22c) and ‘trip’ in (22d) are anchored
- by the currently active referent ‘me’
- by situationally accessible referents ‘today’ and ‘tomorrow’ respectively.

Some events such as ‘job’ or ‘trip’ can be anchored with reference to their agents.
Some semantically alienable entities such as ‘fish trap’ or ‘kitchen’ can only be loosely linked to their possessors.

Unidentifiable and anchored referents (_2).
Object arguments: accessible (_4) and active (_5) referents.
Subject arguments: accessible (_4) and active (_5) referents.
Subject arguments: unidentifiable (_1) and inactive (_3) referents.
Unidentifiable referents (_1).

5 “[M]any languages have grammatical constraints against indefinite NPs in initial subject (i.e. unmarked topic) position” (Lambrecht 1994: 166), and generic noun phrases can occur in topic positions whereas indefinites cannot (cf. Gundel 1988: 213–215).
5. Conclusion

- Rising pitch and juncture pause can be the formal indicator of information structure
- Different kinds of constructions which signal information structure
  - were classified from the discourse-pragmatic point of view
  - were described through the analysis of categories of presupposition and assertion
- Two kinds of ‘accessibility via inference’
  - Accessibility via inference from the change of referent’s state
  - Accessibility via inference from the semantic frame evoked by an activated referent
- Coding tendencies of subjects, objects and peripherals in a folklore text

References


Inagaki, Kazuya. forthcoming. TAME indicators in Kadorih. In Tense, Aspect, Mood and Evidentiality in Languages of Indonesia, ed. by John Bowden, volume 55 of NUSA, 95–121.


