

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 (name) carry fish.trap=his
 ‘Then, Uhko carries his fish trap, ...’

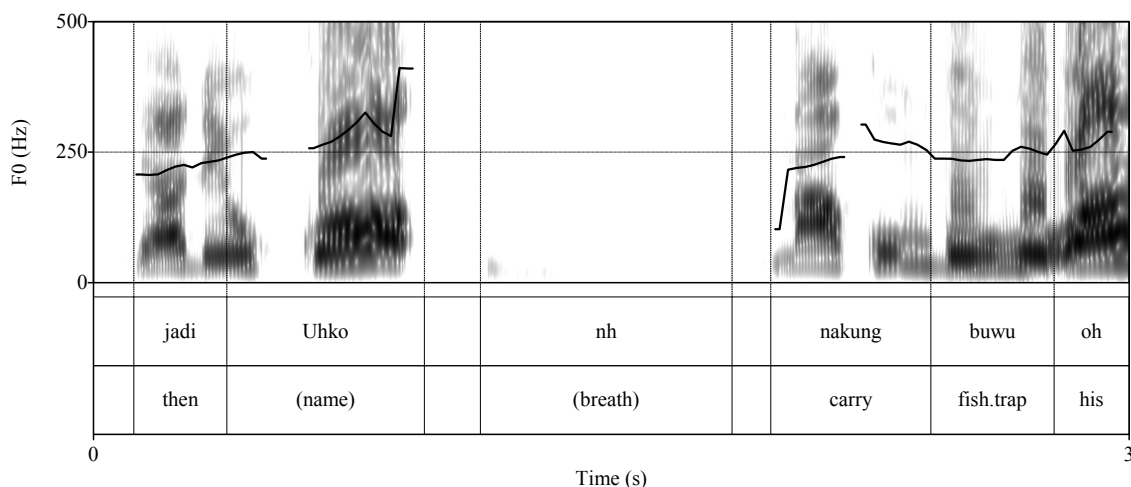


Figure 1. Acoustic analysis of topic-indicating pitch and pause

- “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 *buwu Uhko* is moved rightward from the pre-predicate position without any resumptive pronominal form
- The canonical counterpart: [*buwu 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) *tuwi mahpak konuan ohcin naang, buwu Uhko.*
filled.too.full by bird fish.trap (name)
‘[It is] full of birds, Uhko’s fish trap.’

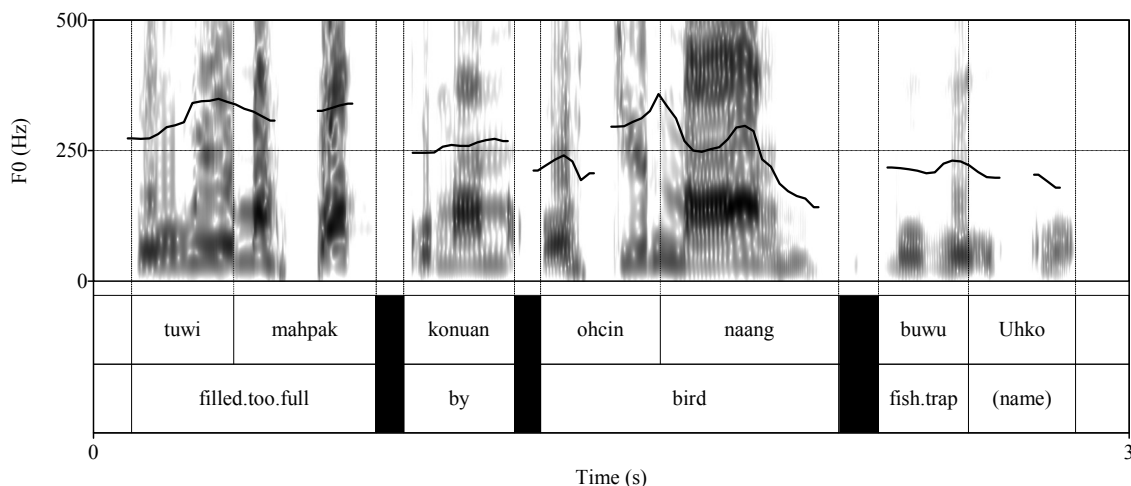


Figure 2. Acoustic analysis of an appended construction

- *naang* [nàáŋ] with rising-falling pitch contour (250–300–105 Hz)
- Sentence-final falling pitch is used in the middle of this sentence
- *buwu 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)

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

- 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 kanuan 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*].²

‘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”)

ihco 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 ihco 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.)

[TOP *ahku*] [CMT *tohko nyombang=ih, duo kungan kolop*].

I exist find=just two (classifier) tortoise

‘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.³
- 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.)

uhcang baas ngulam ngulam dinding dahpur=kai ndoi ngolomi.

deer strong chew chew wall kitchen=our(exclusive) if night

‘Deers/a deer always gnawed the wall of our kitchen in the night’.

- (14) Sentence: *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: *ombai ma?* — R: *poros butui=ku.*

why (form.of.address) ill belly=my

‘Why, my uncle?’ — ‘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

³ Sasse (1987: 526–527) makes the distinction between “entity-central and event-central thetic expressions”. Lambrecht (1994), following Sasse’s (1987) distinction, uses the term “thetic sentences” “to designate a superordinate information-structure category which includes the categories “event-reporting sentence” and “presentational sentence”” (Lambrecht 1994: 144).

- 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’.

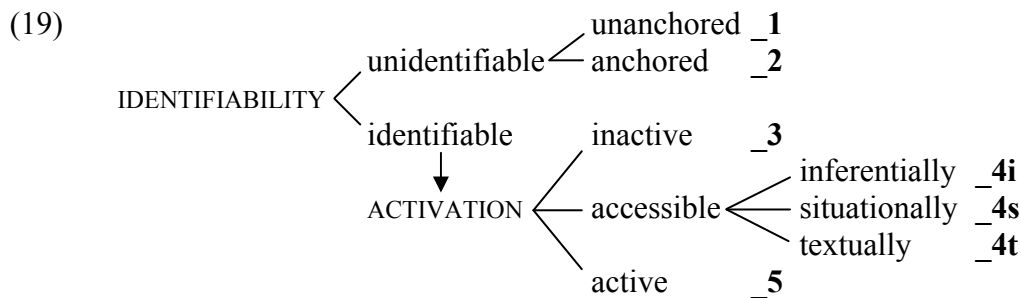
- The headless relative clause *ijo anai=ka keturunai*:
 - functions as the comment for the topic NP *Muang=tuh*
 - refers to an identifiable set of individuals

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”

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)



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

- (20) ‘The story of Uhko’ (the preceding part from the beginning)
- this_4s title=its_4s [story Uhko walk check fish.trap]_1
 - so Uhko_4 [day that]_1 depart walk set fish.trap=his_4
 - 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
 - but vision-his_4i birds_1 many
 - “finished self-its_4i” said Uhko_5 “I=this_4s set-it_5 [at upper tree= just]_1”
 - then Uhko_5 set fish.trap_5 [at upper tree]_5
 - so [1(one) day that]_4i Uhko_5 wait=it_4i
 - filled.too.full by birds_5 [fish.trap Uhko]_5 “Oh!”
 - so Uhko_5 directly=just_4i he_5 climb walk check [fish.trap that]_4i
 - very=he_5 hit hit [birds many that]_4i
 - 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 (20abcefgi) (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 pronominals 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 deictic 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_5 go.home bring birds_5 many [for Mulau]_1
 - b. and-he_5 set-it_5 again [at upper tree]_4t
- A dialogue between Uhko and Mulau*
- c. so “why=(particle) yours_4i (relativizer)=walk check fish.trap_5 get birds_5 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=this_5 [at there]_4i
 - m. lost thrown.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. thrown.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/addressee)
- (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.⁵
- 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* [*ihco 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).

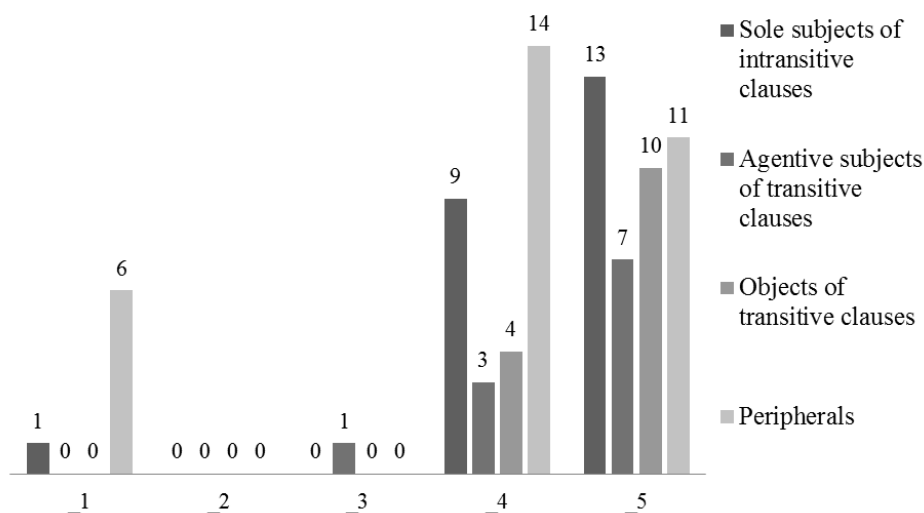


Figure 3. Information statuses and grammatical relations

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

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