

The relationships between phonological size and the role of intonation units in Japanese discourse

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08/08/2008

2nd UK Post Graduate Conference in Cognitive Linguistics
at University of Brighton

Overview

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- We study one of the functions of intonation units (Chafe 1994) in discourse structure.
- We propose that importance as well as oldness of a noun motivate linguistic forms.
- We study Japanese as an example.

What is IU?

The definition of IU

- An IU (an intonation unit) is defined as a stretch of speech occurring under a single intonation contour, which can be perceived from
 - lag & rush
 - boundary tone
 - pitch reset
 - pause
 - and so on.

(cf. Chafe (1994: Ch.5), Du Bois et al. (1993))

A Typical IU in English

- Corresponds to **a clause**
(i.e. (an) argument(s) and a predicate)

(cf. Chafe (1994))

Introduction to Japanese

Characteristics of Japanese

- Head final
- SOV basic word order
- Basic CV syllable structure
- Agglutinative language

(Shibatani 1990: Ch 4)

General issues

Two kinds of IUs in Japanese

- Corresponds to **a clause** → **C-IU**
- Corresponds to **a phrase** (i.e. an argument and a particle). → **P-IU**
(cf. Iwasaki (1993))

General Question

- What's the difference between C-IUs and P-IUs?

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Example of C-IU in Japanese

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- A single proposition is expressed by a single IU.
- A single IU has both a predicate and the arguments of the predicate.
- C-IUs are common in English.

Example

- a. ..ryokoo-ni **iku**-to:
 travel-to **go**-when
- b. moo ano goruhu-baggu-o **katui**-de
 FILLER FILLER golf-bag-ACC **carry**-and
- c. ...ano: hikooki-ni **noru**-tteiuyoona
 FILLER airplane-to **get.on**-such.as

“So when (we) go travelling, (we) carry our golf bags and get on the airplane.”

(CSJ: S00F0014)

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- A single proposition is expressed by four IUs.
- Only one predicate in the four IUs.
- Arguments of the predicate are scattered in the four IUs.

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- a. atashi wa ne?
I TOP IP
- b. uti-de kii-ta no ne?
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"I heard that broadcast at home (with my family)."

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Previous Study

How to make P-IUs

- Clauses in Japanese can be divided into P-IUs typically by interactive markers such as *ne* and *yo*.

Examples

a. Mami-ni dake wa ne
 Mami(name)-to only TOP IP

b. **ik**-ase-ta rashii no yo
go-CAUS-PAST seem SE IP

“It seems that (she) let only Mami go.”

(Iwasaki 1993: 45)

SE=sentence extension, IP=interactional particle

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Remaining Issue

- We don't know when speakers use P-IUs and when they use C-IUs.

Question

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- Do Japanese P-IUs have special function in discourse?
If the answer is “yes”, what function?

Hypothesis

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- There is a difference in role in terms of **discourse structure** between C-IUs and P-IUs.
 - P-IUs introduce **new and important information**.
 - C-IUs do not introduce important information.
 - We study only nouns here.

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Corpus

- Use CSJ (*Corpus of Spontaneous Japanese*)
 - 1269-second monologue (S00F0014)
 - Travel to Hawaii
 - 747 IUs and 974 nouns are identified.

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What are RD and Persistence?

Referential Distance (RD)

- Approximates the newness of a noun
- The number of IUs between
 - an IU where the referent in question is referred to and
 - the last IU the referent is referred to.

(cf. Givón 1993: 13ff.)

Persistence

- Approximates the importance of a noun
- The number of IUs which refer to the referent in question after it is mentioned in an IU.

(ibid.)

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Examples of RD and Persistence

	RD	Persistence
a. ... syoo-doobutu -ga koo tyokotyoko-to ki-ta-n-desu-ne "An small animal came (to us)."	100	3
b. ...de saisyo koo "and at first uh"	-	-
c. ...ano sotira-no soto-no-hoo-kara ϕ nozoi-ta-mon-desu-kara "uh it looked at us from that direction, so"	2	2
d. ...watasi-wa saisyo "I thought at first"	-	-
e. ... ϕ risu-kana-to omot-ta-n-desu " it was a squirrel."	2	1
f. ...de "and"	-	-
g. ...t= sat-to koo "quickly"	-	-
h. ...are-to omot-te it-tara "when I was thinking something,"	-	-
i. ...sat-to ϕ nige-tyai-masi-te " it quickly ran away, and"	4	0

(CSJ: S00F0014)

Implications of RD and Persistence

Implications of RD

- **Greater RD** means **newer information**. (maximum: 100)
- **Smaller RD** means **older information**. (minimum: 0)

Implications of Persistence

- **Smaller Persistence** means **less important information**. (minimum: 0)
- **Greater Persistence** means **more important information**. (maximum: 200)

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IUs excluded from the results

Existentials

- Existential sentences (4)
 - Nouns in **existentials** appear in C-IUs but they are new and important information.
(cf. *There*-construction)

Others

- IUs containing **Complements of clefts** (5) → “clefts”
- IUs containing **listed nouns** (15) → “list”
- IUs containing **nouns modifying other nouns** (28) → “modifying”
- IUs containing **nouns which combine with *o-suru* “acc-do” and express events** (22) → “do-construction”
- IUs containing **predicative nouns** (40) → “predicative”
 - They don't have predicates.

Results of Corpus Investigation

Number of C-IUs and P-IUs identified

- C-IUs: 116
- P-IUs: 80

RD and Persistence of C-IUs and P-IUs

	Nouns in C-IU	Nouns in P-IU	Existentials
Referential Distance	66.6	63.2	100.0
Persistence	0.9	1.7	3.4

- Nouns in C-IUs refer to unimportant information.
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Results of Corpus Investigation II

Persistence of C-IUs and P-IUs which refer to only new information

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Examples of C-IUs

Characteristics of C-IUs

- C-IUs refer to new but trivial information.

Examples

	RD	Persistence
a. ...ryokoo-ni iku-to travel-to go-when	–	–
b. ...moo ano: goruhu-baggu-o katui-de FILLER FILLER golf-bag-ACC carry-and	100	0
c. ...ano: hikooki-ni noru-tte-iu-yoona FILLER airplane-to get.ON-QUOTE-called-like	100	0

“Whenever (we) travel, (we) carry our golf bags and get on the airplane.”

(CSJ: S00F0014)

Examples of P-IUs

Characteristics of P-IUs

- P-IUs introduce important information.

Examples

	RD	Persistence
a. maunakea "Mauna Kea"	100	4
b. maunaroa "Mauna Loa"	100	4
c. toiu hutatu-no called two-GEN	–	–
d. ano yama-ga FILLER mountain-NOM	2	3
e. sobie-teru-n-desu-keredomo soar-STATE-SE-POLITE-though	–	–
f. sono yama-to-iu-no-ga this mountain-QUOTE-called-NOMINL-NOM	2	2
g. huji-san-kurai-no takasa-ga aru-n-desu-ne Fuji-mountain-approximate-GEN height-NOM exist-SE-POLITE-IP	–	–

"(In Hawaii Island) there are two mountains called Mauna Kea and Mauna Loa, which are as high as Mt. Fuii." (CSJ: S00F0014)

Counterexamples

Important nouns in C-IUs

- An important noun is referred to in a C-IU when it is embedded in a relative clause.

Example

	RD	Persistence
a. sizen -o taisetuni- suru tokoro nature-ACC preserve-DO place	100	9
b. de-wa LOC-TOP	-	-
c. ano: FILLER	-	-
d. moo sinkokuna mondai-ni FILLER serious problem-to	-	-
e. nari-tutuaru-yoo-desu become-PROG-SEEM-POLITE	-	-
f. desukara so	-	-
g. yahari sizen -no yutakana tokoro-ni iki-masu-to after.all nature-NOM rich place-to go-POLITE-when	6	8

"Where people try to preserve the environment, foreign animals cause serious problems. So, When we go to this kind of place...."

(CSJ: S00F0014)

Counterexamples

- A trivial noun is referred in a P-IU when it is long.

Example

		RD	Persistence
a.	tikatetu-toka sorekara ma ano: basu-rosen-toka sorekara subway-and moreover FILLER FILLER bus-lines-and moreover	-	-
b.	ma densya-toka-ga hattatu-si-te-nai-yoona tokoro-wa FILLER train-and-NOM develop-do-and-NEG-like place-TOP	100	0
c.	moo hontooni FILLER really	-	-
d.	kuruma-wa moo hissu-jooken-toiuka car-TOP FILLER crucial-condition-you.may.call.it	-	-

“Where there is no subways, buses, and trains, we crucially need cars.”

(CSJ: S00F0014)

Construction Similar to P-IUs

Left-dislocation sentences

- Left-dislocation sentences functions like P-IUs.
 - (i) Preposed elements correspond to a coherent contour by themselves.
(Keenan & Schieffelin 1976)
 - (ii) L-dis sentences (re)introduce the idea into discourse.
 - (iii) Preposed elements are important topic in the following proposition.
(Givón 1983)

Example

A: What happened to Tom?

B: ??Concerning Tom, he left.

B': ?Tom, he left.

B'': His car, it broke down, and he's depressed.

Conclusion

Summary

- (i) One of P-IUs' function in Japanese is to introduce **new and important information**
- (ii) C-IUs tend to refer to **trivial information**.
- (iii) P-IUs in Japanese share the function and the phonetic characteristics with left-dislocation sentences in English and other languages.

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Theoretical implications

- (i) Chafe's "one new idea constraint" can be revised into "one new and important idea constraint."
- (ii) The distinctions between new/old and important/trivial are more fundamental.

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(i) One new and important idea constraint?

Chafe (1994)

- Chafe argues that each IU can introduce only one new idea (one new idea constraint).
But there are many exceptions. (Chafe 1994, Du Bois et al. 1993)
- Japanese speakers seem to introduce new and important idea by P-IU, which seems to relate to this constraint.

Our proposal

- The one new idea constraint can be revised into “one new and important idea constraint.”

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(ii) New/old and important/trivial distinction

Fraurud (1996)

- Many of the definite NPs with non-human referents are antecedentless and appear only once.
 - 96% of the definite NPs with **non-human** referents are antecedentless
 - 34% of the definite NPs with **human** referents are antecedentless.
- “Givenness account” (e.g. Ariel 1990, Gundel et al. 1993) cannot capture those facts.

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- Important/trivial distinction is also necessary.

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Remaining Issues

- (i) Other forms (constructions) in Japanese and other languages which introduce a new and important idea.
- (ii) Other kinds of P-IUs which do not introduce new and important information.
- (iii) Constructions which presuppose that the idea is already introduced in the discourse.

Thank You!

- the first author's email address: nakagawanatuko@gmail.com
- We say “thank you” especially the following people:
 - Masaya Ideguchi (Kyoto Univ.)
 - Shoichi Iwasaki (UCLA)
 - Masanobu Masuda (Koshien Univ.)
 - Naoki Otani (Kyoto Univ.)
 - Katsuya Takanashi (Kyoto Univ.)
 - Yuji Togo (Kyoto Univ.)

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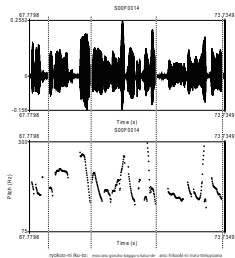
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play

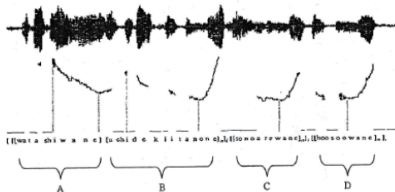
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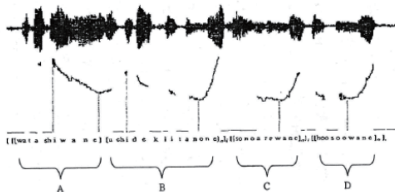
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