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Levels of structure within the paragraph
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In this paper I am concerned with the internal organization of paragraphs in conversation. I first demonstrate that conversations are organized in terms of paragraphs, and then I show how paragraphs are structured internally. The data I adduce to support my claims come from Japanese audio- and video-tape spontaneous conversations and interviews, but I believe the principles operate across a wide variety of languages.

Conversations, as well as other discourse genre [see Longacre (1976) and Hinds (1976c)], are organized in terms of paragraphs, or units of speech which maintain a uniform spatial, temporal, participant, or thematic orientation [see Grimes (1976), Hays (1974), Hinds (1976a), Phillips (1975)]. Conversations progress when a given unit of uniform orientation changes to another unit of uniform orientation. Examples (1) and (2) illustrate this progression.

- (1) K-1. ... gosyuziN to hutari de hima no toki ni doNna koto suru no?
 ... What kind of things do you do with your husband when you have some free time?
- A-2. haikiNgu da toka, NN, uti no syuziN ga, anoo, syasiN toru no suki da kara yoku dekakete; atasi wa naNni mo, syatta wa, usiro ni tuite ru desu kara.
 Hiking and things like that, mm, my husband, well, he likes to take pictures, so we do that a lot; I don't know anything about cameras and stuff, so I just tag along.
- K-3. tada, koo, mite aruku wake, sizeN o?
 So, you just sort of walk and look at nature?
- A-4. soo ne.
 Yes.
- K-5. a so-sosite, kore kara ne, issyoo hawai ni, koo, sumu wake? sumu wake tte okasii kedo, sumitai wake?
 Oh, well, from now on, is it that you will live the rest of your lives in Hawaii? "You will live" is funny, is it that you want to live in Hawaii?
- (2) Y-1. ... kaiwa tte no wa yappari nigate da naa.
 ... In the final analysis, [we're] really bad at [English] conversation.
- H-2. uN, kaiwa mo nigate da si, buNsyoo mo.
 Yeah, [we're] bad at both conversation and sentence structure.
- Y-3. buNsyoo mo. buNpoo demo kitui si, yappari, koo, gogaku wa, koo, naNte iu ka na, haruka, koo, te no todokanai tokoro ni aru tte iu.

- Sentence structure too. Grammar isn't too good either. After all, languages are, what should I say, completely outside our grasp.
- H-4. uN, dakedo, hanasi ni kiku to, hoka no miNzoku tte no wa soNna ni gogaku ni taisite, koo, kyoo-hu-syoo mitai na no nai tte iu desyoo?
- Yeah, you know, I've heard that people from other nations don't have a phobia against learning languages.
- Y-5. uN, hoka no miNzoku to wa?
- What do you mean, people from other nations?
- H-6. tatoeba,
- For example,
- Y-7. zeNsekai, ippaN tte iu koto?
- In the world, in general?
- H-8. tatoeba, isuraeruziN toka, tyuugokuziN no kakyoo toka sa, nai zya nai? umai tte iwarete ru zya nai?
- For example, Israelis, Chinese in Japan, and so on, they don't have phobias. They say they're good at languages.

In (1), the first paragraph topic is "What A and her husband do in their free time". This is a unit of thematic orientation. This topic concludes, and in (1K-5), the second unit of uniform thematic orientation is initiated: "Whether A and her husband would like to live in Hawaii for the rest of their lives". In (2), the first unit of thematic orientation is "The poor language abilities of the Japanese". This changes to the second unit of thematic orientation: "The skill with which other peoples learn languages", in (2H-4).

The reality of the boundary which separates one paragraph from another may be demonstrated by two separate types of evidence. First, following a suggestion made in Schegloff (to appear), self-repair occurs regularly in first sentences in topic-initial turns or in first sentences in topic-shift position. Examine (1K-5) again, the first sentence in topic-shift position in (1). K asks issyoo hawai ni, koo, sumu wake? 'Is it that you will, um, live in Hawaii for the rest of your life?'. She then immediately repairs this question to sumitai wake? 'Is it that you want to live ...'.

As illustrated in (2Y-5), other-repair [Schegloff et al (1977)] can also occur as a result of the first sentence in topic-shift position. In (2H-4), H had used the term hoka no miNzoku 'people from other nations', and Y questions the referent of this term.

The second type of evidence for a boundary between paragraphs is related to the way certain anaphoric phenomena operate. Within a single paragraph, ellipsis, pronominalization, and definitization occur relatively freely in Japanese [see Hinds (to appear), Hinds and Hinds (to appear), and Hinds and Shibatani (1977)]. These processes are illustrated in (3) through (5), respectively.

(3) [THEME SONG]

U-1. utsumi midori no "hutari de hanaseba".
This is Midori Utsumi bringing you "Let's talk together".

[Kagami sung by Peggy Hayama]

U-2. ohayoo gozaimasu. koNsyuu no okyakusama kasyu no
pegii hayama saN desu.

Good morning. This week's guest is Peggy Hayama.

U-3. konoo, ohayoo gozaimasu. ohayoo gozaimasu.
So, well good morning. Good morning.

H-4. hai,
Yes,

U-5. kore moo otonappoi ii uta desu nee.
This is really a good, adult-sounding song.

→ H-6. [Ø] teraoka saN no uta na no yo.

→ U-7. [It] 's a song by Teraoka.

→ U-7. [Ø] naN to iu taitoru desu ka?
What is [its] title?

(4) Y-1. sono hito wa, kekkyoku, betonamuziN datta wake na
N desu ne.

That person was, after all, Vietnamese.

→ Y-2. sonoo, kekkyoku, ryuugakusei de, kekkyoku, sore de,
motomoto kare wa huraNsugo na wake da yo.

So, um, he was an exchange student, and after all,
his native language was French.

(5) A-1. iroi-ro heN na zikkeN o sita wake.
So they did a lot of strange experiments.

Y-2. ikusuperimeNto sita no?
Did you do your experiment?

A-3. soo soo soo.
Oh yes.

→ A-4. sono zikkeN ga iikageN na zikkeN de sa,
That experiment wasn't a very good experiment,
because,

In (3), the topic at the initial stage in the interview is the song sung by Peggy Hayama. The song is referred to specifically as kore 'this' in (3U-5), and then is referred to by ellipsis in both (3H-6) and (3U-7). In the conversation leading up to (4), Y and H have been talking about Y's chance encounter with a student on his campus. In (4Y-1), the student is identified as a Vietnamese student; and in (4Y-2), this student is referred to by the pronoun kare 'he'. In (5), A and Y are talking about experiments being conducted for a linguistics class they are taking together. In (5Y-2), Y asks A if she has done her own experiment [note, incidentally, that A is referred to in this sentence with ellipsis]; and in (5A-3) this experiment is definitized as sono zikkeN 'that experiment'.

All three of these processes are blocked across paragraph boundaries, although for lack of time I will only illustrate the phenomena with reference to ellipsis. In (6), the two male participants are recorded in the United States, and they have been discussing a hijacking from Japan to North Korea that they have just

read about in a weekly news magazine M has received from Japan.

- (6) T-1. yoo suru ni kono haizyakku tte moN wa mokuteki
nai N da.
After all, this hijacking itself doesn't have any
purpose.
- M-2. uN, sore de sa, sore to ne, kekkyoku, kore wa nik-
koo to ne, nihoN kookuu to no seihi to no ne,
naNka, tunagari tte iu no ga hizyoo ni akiraka
ni sareta wake da ne.
Right, yeah, so, this makes it perfectly clear
that JAL, Japan Airlines that is, and the
Japanese government have some kind of connec-
tion.
- T-3. aa, maa, soo ne.
Well, yeah, it does.
- M-4. sono kekka wa ne, nani ga akiraka ni sareta tte
iu to ne, nihoN e no ne, hikookitiN hikookidai
sugoku takai wake yo, amerika to nihoN no aida
ga.
The result of that, the thing that becomes so
transparent, is that the transportation fee is
extremely high, between Japan and America that
is.
- T-5. aa, sorya takai yo.
Yeah, that's really expensive.
- M-6. sore wa ne, kekkyoku, nikkoo to seihi no musubi-
tuki tte iu koto wa ne, soo iu toko kara mo
akiraka ni sarete sa, ima da ni site nedaN ga
zeNzeN sagaranai wake da ne.
The connection between JAL and the Japanese govern-
ment is getting to be perfectly clear from that
kind of thing, why, even now, the fare never
gets any lower.
- T-7. agatte N zya nai ka, ne!
I think it's even going up!
- M-8. taiheN da ne.
It's tough.
- T-9. taiheN na kotta yo.
Yes it is.
- M-10. taiheN na koto desita.
It's really hard.
- T-11. kaerenai yo, watasitati.
It's impossible to return, for us that is.

As was pointed out in reference to (5) above, participants in a Japanese conversation refer to themselves with ellipsis except when a paragraph topic has changed [apparent exceptions to this claim are discussed in Hinds (to appear)]. In this section of conversation, the participants have shifted from a specific hijacking in (6T-1); to how the facts about the hijacking prove the connection between JAL and the Japanese government in (6M-2); to how this

connection is going to cause air fares to rise between Japan and the United States in (6M-4); and finally to the completely separate paragraph topic: "The fact that the participants in the conversation will not be able to afford to return to Japan" in (6T-11).

Of interest here is (6T-11). There is a process in Japanese known as postposing [see Hinds (1976b), Kuno (1973), Muraki (1974), Nishimitsu (1977)]. This process takes a constituent of the sentence and places it after the verb, violating the normal verb final nature of Japanese sentences. The reason this is done, as pointed out in Hinds (1976b:123), 'is to put into a sentence something the speaker did not originally think was necessary; it is put in either for emphasis or to avoid ambiguity'. This is the best type of evidence in natural conversation for a constraint which blocks ellipsis. That is, the speaker first tries to utter the sentence using ellipsis, realizes that he cannot, and so he then belatedly inserts the incorrectly ellipted element into the postposed position. In (6T-11), T attempts to elipt the personal pronoun watasitai 'we'. After stating kaerenai yo 'it's impossible to return' he realizes that the paragraph topic has changed and that unless he specifies an agent overtly, M may misinterpret the agent of the verb.

I have devoted considerable space to justifying the claim that paragraph boundaries can be determined and that the paragraph is a coherent unit. The reason I have done this is to lay the background for my remarks about the internal organization of paragraphs. This paragraph internal organization involves a shift from the general paragraph topic to a more detailed subtopic. This delimitation of paragraph topics can occur an indeterminate number of times within a single paragraph, each time delimiting the current topic into successively detailed subtopics. As is the case with paragraph boundaries, subtopic boundaries are also created.

In order to discuss the concept of subtopics and their boundaries most effectively, I will first present a rudimentary system of constraints on what form delimitations can take, and then I will present evidence that these delimitations comprise structural levels within the paragraph.

Paragraph topics are delimited in terms of perspectives on the topic. The term perspective should be taken in a loose sense. The perspectives on a paragraph topic are those paradigmatic associations a given participant has as a result of his interaction with his present addressee(s). The two major types of perspectives reflect entities and emotions associated with the topic. In the case of entities, I make a distinction, following Grimes (1976), between animate and inanimate entities, or between participants and props. This distinction, as pointed out by Grimes (1976:43ff), is frequently blurred, but I believe it reflects a basic perceptual dichotomy. In the case of emotions, perspectives take the form of evaluations and agreements. In addition, two final types of perspectives may be mentioned: these are instantiations and generalizations; an instantiation taking the topic and giving a specific instance, and a generalization discussing the topic in broader terms.

The section of dialogue which appears in (8) is concerned with

the topic cheating on exams [kaNniNgu]. If we give some thought to the concept of cheating on exams, I believe each of us would come up with a listing similar to the following. This listing corresponds fairly closely to the perspectives from which this topic could be discussed.

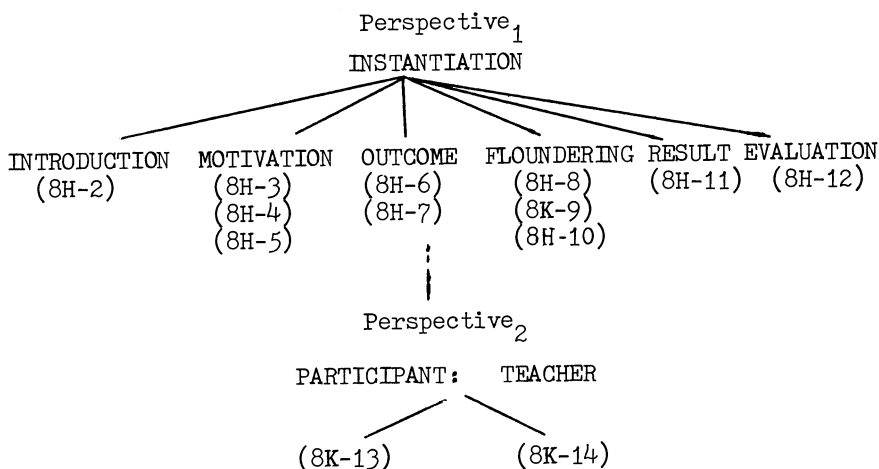
(7)	PARTICIPANTS	PROPS	EMOTIONS
	the cheater(s)	location	deplorable/
	possible collaborators	(classroom)	acceptable
	a monitor	test paper	necessary/
	innocent bystanders	device for cheating	unnecessary
		motivation	

- (8) H-1. uN, dakara, kaNniNgu ni tuite wa ne, iroiro--
Yeah, well, about cheating, there are lots--
- H-2. ore ima made itido mo yatta koto nakatta keredomo ne.
I had never cheated even once before this, but
- H-3. kono mae no sikeN de ne, anoo, tonari no gotoo ni sa, -ko-tira tto miro tte itte yokosita N da yo.
On the test before this, um, Goto who was next to me, um, he said 'Look' and he passed his test over to me.
- H-4. ore ga kurusiNde ru no mite sa.
He saw that I was suffering.
- H-5. sore de, kono mae minakattara okorareta no.
And, you know, on the test before I didn't look so he got mad at me.
- H-6. de, koNdo wa mita wake da.
So this time I looked.
- H-7. sositara sore de tasukatta wake da na.
So it really helped.
- H-8. naN toka, kore de,
So, you know, this
- K-9. kaketa to.
So you answered the questions.
- H-10. uN, kaketa tte iu ka.
Yes, answered the questions.
- H-11. maa, ka ni naru teido wa ne, huka ni naranai teido ni wa kaketa to.
Well, I got a C rather than an F.
- H-12. de, hidokatta ne, ano kaNniNgu wa, moo, hizyoo ni, sikeNzyoo de.
Well, it was terrible, that cheating, really, in the exam room.
- K-13. soo ne, kyoosi ni yoru kedo.
Yeah, but it depends on the teacher.
- K-14. koo, hitori de kite mae no hoo de pokeetto suwatte ru yoo da to yappari, koo, naNtonaku yaranakya.
If he sits down in front, well, you just have to.

The topic of cheating on exams is established in (8H-1). In (8H-2), H initiates an instantiation of this topic; an anecdote about a personal experience with cheating he has had. In (8H-3) H sets this anecdote in its temporal location [kono mae no siken 'the test before this']. He also introduces another participant besides himself: Goto, and a prop: Goto's test paper. In (8H-4) he gives a motivation for Goto's action and this motivation is elaborated in (8H-5) [for comments on elaborations, see Hinds (1976a)]. In (8H-6), H explains that he cheated this time and in (8H-7) he elaborates on this to say that the cheating helped him. K picks up the conversational ball in (8K-9) when H stumbles in (8H-8). In (8H-10), H echoes K's statement and in (8H-11) he elaborates this comment slightly. In (8H-12) this perspective is summed up with a comment that the cheating was awful. In (8K-13) a second perspective which concerns cheating from the perspective of one of the participants, the monitor, is introduced. (8K-14) explains why the decision to cheat or not depends on the monitor [see once again Hinds (1976a) for comments on explanations].

This section of the conversation breaks naturally into two perspectives, the first being an anecdote about H's personal experience and the second being a look at cheating from the perspective of the monitor. The diagram in (9) gives a very rough indication of the structural properties of this section of conversation.

(9) TOPIC ESTABLISHED: cheating on exams
(8H-1)



The first perspective actually has many of the salient characteristics of a narrative [see especially Kintsch and van Dijk (1975), Labov and Waletzky (1967), Meyer (1975), Rumelhart (1975), and Thorndyke (1977) for details]. The major deviation is the constituent termed floundering, and this of course concerns a mix-up in successful turn-taking behavior [see Duncan (1972)]. The second

perspective is concerned with what happens depending on the monitor. Both of these perspectives are concerned with the same general topic: Cheating.

Although they share this similar concern, a boundary, somewhat attenuated to be sure, has been established between these two perspectives. Reference to the subject of (8K-14) is with ellipsis. According to the principle discussed in reference to (6), the antecedent for an instance of ellipsis must be within the same paragraph. Because the antecedent of the subject in (8K-14) is unambiguously the teacher, this principle must be modified to state that the antecedent of an instance of ellipsis must be within the same perspective. Despite the fact that within the same paragraph there are three possible antecedents mentioned recently (H, Goto, and the teacher), the fact that only the teacher is a possible antecedent demonstrates the existence of a perspective boundary.

The same type of repair mechanisms that operates in first-sentence in topic initial position operates on perspective boundaries as well. In (10), the paragraph topic is Tokyo. As in (8), a set of participants, props, and emotions could be formulated to correspond to an individual's cognitive map of the topic. The fact that both participants are from Tokyo, and are in Tokyo at the time of taping, influences the perspective from which they discuss this topic.

- (10) H-1. ...tookyo tte no wa geNzitu ni bokura no seikatu
no naka desyoo.
...Tokyo is a reality for us.
H-2. de, maa, koo, keti ga tuku wa ne.
Well, anyway, they say a lot of mean things.
→ H-3. anoo, tatoeba, koo, oosaka no hito ga sa,
tookyo no udoN wa naNda, to ne, makkurokute
kuenee zya nee ka to ka sa.
Um, for example, people from Osaka say that Tokyo
noodles are awful, 'They're black and they ain't
no good' and stuff like that.

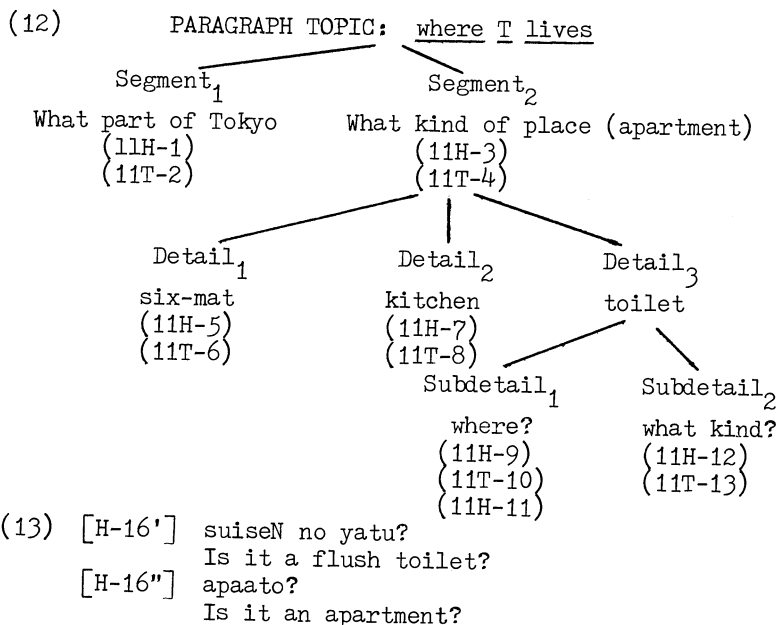
Evidence from self-repair is evident in (10H-3). There are two instances of hesitation phenomena, both of which have been underlined. Quite clearly H is having the same difficulties introducing this perspective on Tokyo as he would have trying to initiate a completely new paragraph topic [cf. (1K-5) in which similar hesitation phenomena occur].

Evidence from other-repair for the existence of perspective boundaries may be found as well. In (11), there are in fact several successive delimitations of the paragraph topic: where T lives in Tokyo. The paragraph topic has already been established prior to this section of dialogue. In (11H-1) and (11T-2), the participants discuss this topic from the perspective of where T's home is. In (11H-3) and (11T-4) they determine that T lives in an apartment. In (11H-5) through (11T-8) details about the apartment are discussed. The first perspective is the living room [(11H-5) and (11T-6)]; the second is the kitchen [(11H-7) and (11T-8)]. In (11H-9) a third perspective on the apartment, the toilet, is introduced. At this

point, the toilet is discussed from two different perspectives: whether it is a community toilet [(11H-9) through (11H-11)], and whether it is a flush toilet [(11H-12) and (11T-13)]. This section of dialogue is diagrammed in (12) to display its structure more clearly.

- (11) H-1. tookyoo no doko desu ka?
Where in Tokyo?
- T-2. setagaya desu.
Setagaya.
- H-3. ha, soko wa do-apaato desu ka 'tomo gesyuku desu ka?
Oh, that place, wh-is it an apartment, or a room?
- T-4. apaato de.
It's an apartment.
- H-5. aaa, rokuzyoo hitoma toka to.
Oh, a six-mat room, huh?
- T-6. rokuzyoo hitoma ne.
Yeah.
- H-7. kittiN nasi de toka.
No kitchen, huh?
- T-8. kittiN wa ne, kittiN to ieru hodo no moN de wa nai
N da kedo ne, suiziba to, sore kara ato koNro to
ne, tuite te.
No, the kitchen, well, it's not really what you
could call a kitchen, but there's a place to
cook, and there's a hot plate.
- H-9. otearai soto?
The toilet's outside?
- T-10. aa, soo, kyoodoo ne.
Yeah, it's a community toilet.
- H-11. kyoodoo de.
Oh, a community toilet.
- H-12. suiseN no yatu?
Is it a flush toilet?
- T-13. N, koo, potaaN to iu yatu ne.
No, it's like, you know, one where it goes plop.
- H-14. de, ima wa?
And now?
- T-15. ima wa ne, anoo ...
Now, well, ...
- H-16. suNde ru tokoro doko?
Where are you living?

The expression in (11H-14) is commonly used to change either paragraphs or perspectives, and so is ambiguous in this case. T realizes this but is unable to comprehend what H wishes to change to. (11T-15) reflects this confusion. In actual fact, as shown by (11H-16), H is asking T where he is living now, an entirely different paragraph topic. Of significance here is the fact that H could have been changing perspectives in two, and only two, other ways and still maintain anything like a normal conversation. These two other ways would take the forms presented in (13).



These questions correspond to each of the levels of structure between the paragraph topic and the sentence. Thus, with this example we see fairly straightforward evidence, not only for a perspective boundary from other-repairs, but also for the existence of levels of structure within the paragraph: levels I term segments, details, and subdetails.

As a final statement I would like to point out that the existence of these levels of structure and the potential ambiguities created at boundaries may be exploited for various reasons. In (14) H has been interviewing W. They are currently discussing W's taste in music. All of H's questions are written on a piece of paper which she keeps in front of her. When she initiates a new topic, she looks at the piece of paper, uses a hesitation expression, and then asks her question. This is the pattern which has developed in the preceding section of interview.

- (14) H-1. ...yappari piano ga itibaN suki? sore tomo, ookesutora toka?
...Um, do you like the piano best? Or an orchestra?
W-2. baioriN demo naNdemo ii. ookesutora demo.
The violin is OK, anything is OK. Even orchestra.
→ H-3. a, dare ga suki? [AFTER LOOKING AT PAPER]
Um, who do you like?
W-4. dare ga suki?
Who do I like?
H-5. anoo, oNgakka N naka de.
I mean, among musicians.

In (14H-1) and (14W-2), they are discussing the type of music W likes. In (14H-3), H consciously looks down at the piece of paper, then leans forward conspiratorily and asks her question. Following the previous pattern of this interview of jumping from topic to topic, W believes that the topic is changing from her taste in music to her love life. She reflects this surprise in (14W-4). H, in all innocence, repairs her question to indicate that she did not intend to change the paragraph topic, despite all of her outward manifestations of that, but that she meant merely to change the paragraph perspective from what kind of music W likes to what musicians W likes.

Footnotes

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¹Preliminary work of my own on English and Korean suggests that the principles apply. Work by Susan Phillips on the Warm Springs Reservation may force a modification of these principles.

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