

Strategies for linking information by German and Japanese native Speakers and by German learners of Japanese

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Abstract

The study examines which strategies native speakers of German, native speakers of Japanese and advanced German learners of Japanese adopt when linking information in narrative texts (film retellings). The main results are as follows: (a) The L1 German speakers organize temporal shift-relations in order to link information, whereas the protagonist in topic function is often maintained across utterances. In contrast, the Japanese speakers prefer to compare series of events involving each of the main characters by organizing a shift in the entity domain. (b) The L2 strategies cannot be explained by a single feature, as various factors are seen to interact in the L2 speakers' decision making. In particular, the organization of information from the domain of time is directly related to the principles in the source language.

1. Introduction

Advanced second language learners often produce texts which do not 'sound right', although there are no apparent grammatical or lexical errors. These oddities often result from the way in which information flow is organized to solve a particular communicative task. These learners have not identified the target language-specific preferences in conceptual planning processes – the stage in language production which precedes the concrete choice of linguistic form (Levelt 1989; 1999; von Stutterheim and Carroll 2006). In this paper, I will investigate the logic of coherence which native speakers of German, native speakers of Japanese and advanced German learners of Japanese follow in conceptualization processes. This is carried out by comparing how information expressed in a given sentence is linked to the information expressed in the preceding discourse. Native speakers as well as learners were asked to retell the same short video film ("The Finite Story" by Dimroth 2006).

In this film, a small number of protagonists are engaged in a few very similar actions. Dimroth and others (2010) analysed retellings of the film by native speakers of French, Italian, Dutch and German in respect of how speakers enhance discourse cohesion when the predicate, which expresses the action, is maintained and there is change of entity and/or time. The scholars are specifically interested in which information encoded in a clause is highlighted by linguistic means: the assertive status – the polarity – of a clause or change/maintenance in the other information units. The conclusion is that there is a “Germanic” and a “Romance” way of anaphoric linking in that respect. This question is further analysed under an acquisitional perspective by Benazzo and Andorno (2010) for L2 French and L2 Italian, and by Giuliano (2012) for L2/L1 English and L2 Italian. In the present paper, I will analyse retellings of the film by L1 German and L1/L2 Japanese from a slightly different perspective. In particular, I will examine which conceptual domain – time spans or entities (persons or objects) – provides the preferred ‘basis’ for linking information by the three speaker groups.

2. Various ways of linking two comparable propositional structures

In what follows, a systematic distinction is drawn between a ‘sentence’ *xyz* and the ‘propositional conceptual structure’ which *xyz* expresses; the latter will be designated by [...]. Thus, [Mr. Red jumped this time] refers to the propositional conceptual structure expressed by the sentence “Mr. Red jumped this time.” The information included in a propositional conceptual structure stems from various conceptual domains. In this paper, the analysis looks at information from the conceptual domains ENTITY (person, object), TIME (temporal intervals), PREDICATION (actions, events etc.) and POLARITY-VALUE (positive or negative).¹ There is also information flow in other conceptual domains, such as SPACE, MODALITY etc., but these domains are not considered here (for a more detailed analysis of all of these domains, see von Steutterheim 1997). In the example above, the noun phrase “Mr. Red” expresses information from the domain of ENTITY, the adjunct phrase “this time” information from the domain of TIME, and the finite form of the predicate “jumped” encodes information from the domains of PREDICATION (i.e., the action of jumping), TIME (i.e., the past tense) and POLARITY-VALUE (i.e., the positive value).²

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1. With the term POLARITY-VALUE, I refer to the “polarity of the predication” (Dik 1997: 175), i.e., the statement of the actuality or non-actuality of the state-of-affairs described in the clause.
 2. I will illustrate the options for the speaker using English as ‘makeshift codes’ for the demonstration of conceptual structures; the English structure which is designated by [...] represents a ‘conceptual structure’ whose linguistic encoding is subject to language-specific grammat-

With *contrastive linkage* of propositional structures, I refer to a specific way in which two opposing propositional structures are linked. Suppose the speaker has expressed the following propositions (1) and (2) somewhere in earlier discourse:

- (1) [Mr. Red did not jump.]
- (2) [Mr. Green did not jump.]

Now, the speaker wants to assert (3):

- (3) [Mr. Red jumped (this time).]

Here, there is a choice in conceptualizing contrastive linkage. On the one hand the speaker can link proposition (3) with proposition (1), with the following meaning:

- (4) [On the first occasion, Mr. Red did not jump. On the second occasion, however, he jumped.]

In this way of conceptualizing, the change of the polarity-value from [not-jumping] to [jumping] is based on the shift-in-TIME from [on the first occasion] to [on the second occasion], while the topic entity [Mr. Red] is maintained. The speaker can also choose proposition (2) as the antecedence for proposition (3), meaning that:

- (5) [Mr. Green did not jump. Mr. Red, however, jumped.]

In this way of conceptualizing, the change of the polarity-value from [not-jumping] to [jumping] is based on the shift-in-ENTITY from [Mr. Green] to [Mr. Red], whereas the temporal shift, which can be assumed as being the default in a narrative discourse, remains in the background of the speaker's conceptual representation.

If one tries to rely on two shifts in two independent domains, a shift-in-TIME and a shift-in-ENTITY, as the basis for one and the same contrastive linkage, the result (see [6]) would be much less coherent than (4) or (5).

- (6) [On the first occasion, Mr. Green did not jump. On the second occasion, (however), Mr. Red jumped.]

In (6), the shift-in-TIME is marked as the basis for contrastive linkage by the two temporal adverbials in the initial position of both propositional structures

ical and lexical constraints. For this reason, the English forms designated by [...] may not always be grammatical 'sentences' in English.

and the adversative marker *however* immediately following the second temporal adverbial. This leads the listener to expect that the polarity-value in the second propositional structure will be changed, whereas the rest of the information in the first propositional structure, i.e., [Mr. Green's jumping], will be maintained in the second propositional structure. Contrary to that expectation, however, a shift in the domain of ENTITY occurs, which is the logical reason why (6) is incoherent.³

It's interesting to note that there are language-specific constraints on the possibility of integrating information from different conceptual domains into 'one' conceptual unit. In other words: Languages differ in how many constituents the topic component which functions as the basis for linkage can encompass. For example, one can say in English:

- (7) *On the first occasion, Mr. Green did not jump. On the second occasion, Mr. Red, however, jumped.*

This type of linkage is not possible in German. Word order constraints do not allow complex constituent structures in topic role to be jointly in the scope of a contrastive particle:

- (7') *Beim ersten Mal sprang Herr Grün.*
 at-the first occasion jumped Mr. Green.
 'On the first occasion, Mr. Green jumped.'
 ?*Beim zweiten Mal sprang Herr Rot aber nicht.*
 at-the second occasion jumped Mr. Red however not
 'On the second occasion, Mr. Red, however, did not jump.'

Instead of contrastive linkage, the speaker may use *additive linkage* of two propositional structures and then implement it in various ways. In (8), the positive value of jumping is maintained on the basis of the shift-in-TIME from [in-the-morning] to [in-the-afternoon].

- (8) [In the morning, Mr. Red jumped. Also in the afternoon, he jumped.]

3. If a shift occurs in a conceptual domain belonging to the topic part of the propositional structure, and the other shift in a domain not related to this part, then there seems to be no competition between the two shifts for being the basis for a contrastive linking. See (6') which is more coherent than (6).

(6') [Mr. Green did not jump in the morning. Mr. Red, however, jumped in the afternoon.]

In this regard, I propose that an element which functions as the basis for contrastive linking has to have topic status within the proposition. It would be fruitful for further investigation to relate the present discussion on contrastive linking to discussions on 'contrastive topics'. See also the discussion in Klein (2012) about the so-called 'assertion-related' particles in German (for example, *nicht* 'not', *auch* 'also', *nur* 'only').

As in the case of contrastive linkage, it is not propitious to rely on two shifts in two independent topic domains, a shift-in-TIME and a shift-in-ENTITY, as the basis for one and the same additive linkage, as in (9):

- (9) [In the morning, Mr. Green jumped. (Also) in the afternoon, Mr. Red jumped]

The illustrations in the present section could be summarized as in Table 1.

In this paper, the linking function between the topic and the comment of one and the same propositional structure is termed an *assertion*. That is, an asserted propositional structure involves information about the polarity-value – i.e., the speaker’s statement of the actuality or non-actuality of the state-of-affairs described in the comment for the topic, whereas contrastive/additive linkage concerns a change or maintenance of the polarity-value between two propositional structures. It should be emphasized that this change or maintenance of the polarity-value always co-occurs with a shift in ‘one’ conceptual (simple or complex) unit belonging to the topic part of the propositional structure.

Table 1. *The topic-comment-dichotomy in the propositional structure and contrastive/additive linking*

Topic	Comment	
ENTITY, TIME, SPACE, PREDICATION ^a	POLARITY-VALUE	
As the basis for linkage, a shift occurs in one conceptual (simple or complex) unit belonging to the topic part of the propositional structure.	– The part is maintained in principal ^b .	– is changed for a contrastive linkage. – is maintained for an additive linkage.

a. The information from these domains is divided in the topic part and the remaining part, as required in each case.

b. For the possibility of a shift in this part of the propositional structure, see Note 3.

3. Data collection

3.1. Participants

The present study is based on oral retellings (20 per speaker group) of three groups of adult speakers: (a) L1 Japanese (17 female, 3 male, 21-50 years old, average age: 29), (b) L1 German (13 female, 7 male, 19-54 years old, average

age: 28),⁴ and (c) L2 Japanese with L1 German (14 male, 6 female, 22-30 years old, average age: 26). All speakers are students or university graduates. The L2 Japanese speakers are all students of Japanese studies at the University of Heidelberg who had successfully acquired a certificate for Japanese which conforms to ca. 600 hours of learning (e.g., JLPT, level N2). Furthermore, 14 of the students spent one year of study in Japan.

3.2. *Stimulus*

The film they were asked to retell was a silent movie, “The Finite Story” (Dimroth 2006), with three main characters, Mr. Green, Mr. Blue, and Mr. Red, and a fire brigade as a collective sub-character. In the course of a fire in an apartment block, the main characters were involved in typical situations such as [jumping out of the window], which, at one time and for one character, does not happen, and at another time, or for another character, does happen. The entire film consists of 31 segments, each of which corresponds to a part of the story concerning one of the main characters. Table 2 presents an overview of the content of each segment.

3.3. *Procedure*

The L1/L2 Japanese participants were recruited at various institutes of the University of Heidelberg and were paid for their participation. Each session took place in either an office at the university or at a school in Heidelberg and lasted about 20 minutes. Retellings were elicited from each of the participants based on the method described in Dimroth et al. (2010) as follows:

The segments were shown to participants one-by-one and they were asked to retell what had happened immediately after watching each segment. Film segments 1 and 2 were used for the introduction of the protagonists, as well as the spatio-temporal anchoring of the story. The experimenter said [in the respective language]:⁵

Segment 1: Here are three people. They are called Mr. Green, Mr. Blue and Mr. Red.

Segment 2: They all live in this house. For better orientation, they painted their flats in their own colours. Mr. Blue lives in a blue flat, Mr. Green in a green

4. L1 German data were kindly provided by Christine Dimroth (Osnabrück University).

5. Complemented by the present author.

Table 2. *The content of the segments in the Finite Story*

Segment	Content		
1	Introduction protagonists		
2	Introduction house and flats		
3	Mr. Blue goes to bed.		
4	Mr. Green goes to bed.		
5	Mr. Red goes to bed.		
6	There is a fire on the roof.	Mr. Blue, Mr. Green, and Mr. Red are sleeping.	
7	There is noise at Mr. Green's place.	Mr. Green is sleeping.	
8	There is noise at Mr. Red's place.	Mr. Red is sleeping.	
9	There is noise at Mr. Blue's place.	Mr. Blue gets up.	
10	Mr. Blue thinks of calling the fire brigade.		
11	Mr. Blue calls the fire brigade.		
12	The phone is ringing at the fire brigade.		
13	The fireman is leaving the toilet.	The fireman cannot make it in time to answer the call.	
14	Mr. Blue leaves his flat, and comes down the stairs.	Mr. Blue knocks on Mr. Green's door.	Mr. Green is sleeping.
15	Mr. Green is sleeping.	Mr. Blue knocks on Mr. Red's door.	Mr. Red is sleeping.
16	Mr. Blue goes home.		
17	Mr. Blue calls the fire brigade.		
18	The fireman responds.		
19	Mr. Blue puts the phone down.	There is fire in two places.	Mr. Blue is worried.

Segment	Content		
20	Mr. Green wakes up.	Mr. Green is worried.	
21	Mr. Red wakes up.	Mr. Red is worried.	
22	The fire brigade arrives.		
23	Mr. Blue, Mr. Green, and Mr. Red are at the window.		
24	The fire brigade is under Mr. Green's window, and tells him to jump out.	Mr. Green doesn't jump.	
25	The fire brigade is under Mr. Red's window, and tells him to jump out.	Mr. Red doesn't jump.	
26	The fire brigade moves to Mr. Blue's window, and tells him to jump out.	There is fire in Mr. Blue's flat.	Mr. Blue jumps.
27	The fire brigade moves to Mr. Green's window.	There is fire in Mr. Green's flat.	Mr. Green jumps.
28	The fire brigade moves to Mr. Red's window.	There is fire in Mr. Red's flat.	Mr. Red doesn't jump.
29	Mr. Red jumps.		
30	The fire is extinguished.		
31	The happy end		

flat, and Mr. Red in a red flat. Now look what happened one night in the house. You will see one part of the story at a time. Watch it carefully and recount only what happened in that particular part. Let's see: What happened to Mr. Green, Mr. Red and Mr. Blue on that evening?

Participants then watched the remaining segments and retold the story. The experimenter was present during the entire recording. He or she had the role of a recipient but did not otherwise intervene in the retelling. (Dimroth et al. 2010: 3333)

4. L1 German and L1 Japanese

All recordings were transcribed, coded and analyzed. In this section, I present the methods and results of four units of analysis for the L1 data.

4.1. *Analysis unit 1: Shift-in-ENTITY or shift-in-TIME? – Two ways of linking information*

As was illustrated in Section 2, change or maintenance of the polarity-value co-occurs always with a shift in ‘one’ conceptual (simple or complex) unit belonging to the topic part of the propositional structure. Our aim was to examine which conceptual domain (ENTITY or TIME) provides the preferred base for an additive/contrastive linkage.

4.1.1. *Method.* The analysis rests upon the retellings of film segments 27 and 29. Both segments contain information which can be connected in three different patterns with the information stated somewhere in the previous discourse. In the following, this will be exemplified in regard to film segment 27.

The information in segment 27 [jumping of Mr. Green] can either be linked to the information in segment 26 [jumping of Mr. Blue], or the information in segment 24 [not-jumping of Mr. Green], or with both of these. Thus, there are three ways to conceptualize information linkage for segment 27:

- *Linking pattern A:* The information in segment 27 is additively linked to the information in segment 26 [jumping of Mr. Blue], relying on a shift-in-ENTITY. The compound unit of information is: [Mr. Blue jumped, and Mr. Green also jumped.]
- *Linking pattern B:* The information in segment 27 is additively linked to the information in segment 26 [jumping of Mr. Blue] on the basis of a shift-in-ENTITY. Simultaneously, it is contrastively linked to the information in segment 24 [not-jumping of Mr. Green], relying on a shift-in-TIME. The compound unit of information is: [At a particular previous point in time, Mr. Green did not jump, and at another previous point in time, Mr. Blue jumped. Now, Mr. Green also jumped/Mr. Green, too, jumped finally.]⁶
- *Linking pattern C:* The information in segment 27 is contrastively linked to the information in segment 24 [not-jumping of Mr. Green] on the basis of a

6. Because not one, but two propositional structures (segments 26 and 24) are involved in the linking pattern B as antecedents, there seems to be a competition between a shift-in-ENTITY and a shift-in-TIME for predominance in information organization for segment 27. For this reason, two variants are presented here: [Now, Mr. Green also jumped/Mr. Green, too, jumped finally.] This point will be taken up in analysis unit 2 (Section 4.2).

shift-in-TIME, maintaining the topic entity [Mr. Green]. The compound unit of information is: [At a particular previous point in time, Mr. Green did not jump. At this time, however, he jumped.]

Both languages provide grammatical and lexical means to encode these patterns of conceptualization. I differentiate such means in two groups with respect to the ‘topic (involving information about the basis for the linkage) – comment (involving information about the change/maintenance of the polarity-value)-dichotomy’ presented in Table 1 (see Section 2). In the following, the two groups of linguistic means are illustrated with examples from the L1 data.

The first group mainly covers linguistic means with scope properties; they operate on the conceptual domain which functions as the basis for contrastive/additive linkage (from now on ‘basis-related’ means). For example, additive particles (*auch* ‘also’ in German; *-mo* ‘also’ in Japanese) can be used for additive linkage based on a shift-in-ENTITY in the linking pattern A or B, as in (10):

- (10) (*als die flammen in herrn grüns zimmer sind*)⁷
springt auch herr grün und wird aufgefangen. (G 27-06)
 jumps also Mr. Green and aux. catch: past participle
 ‘(When the flames are in Mr. Green’s room,) also Mr. Green jumps and is caught.’

In (10), *auch* ‘also’ precedes *herr grün* ‘Mr. Green’ which is in the scope of the additive particle. Alternatively, the particle may be used in a position following its scope and stressed. See *herr grün springt AUCH* ‘Mr Green also jumps’ (Capitals indicate stressed variants). Sentence (11) illustrates a Japanese example for additive linkage with *-mo* ‘also’:

- (11) *midorisan-mo isoide mado-kara tobiori-mashita.* (J 27-01)
 Mr. Green-also rashly window-from jump down-PAST⁸
 ‘Mr. Green also jumped rashly out of the window.’

Furthermore, temporal adverbs such as *jetzt* ‘now’, *schließlich* ‘finally’ in German, and *yoyaku/yatto* ‘finally’ in Japanese can be used as ‘basis-related’ means for a contrastive linkage based on a shift-in-TIME (linking pattern B or C):⁹

7. The subordinate clause in the initial position of the main clause is in round brackets because its lexical content is not relevant for the linking pattern concerned here.

8. Since grammatical details are not relevant here, interlinear glosses will be omitted in the following.

9. The Japanese temporal adverb *ima* ‘now/currently/of the immediate present’ is not used in the relevant data, because of its poor compatibility with the past tense which is mainly used in the retellings.

- (12) *der herr grün ist jetzt gesprungen* (G 27-19)
‘Mr. Green jumped now.’
- (13) *... modorisan-wa yooyaku tobioriru-koto-ga deki-mashita.* (J 27-12)
‘Mr. Green could finally jump out.’

The second group includes means that are used to mark the change or maintenance of the polarity-value (in the following, ‘VALUE-related’ means). In both languages, maintenance of the polarity-value (linking pattern A or B), can be marked by expressions such as ‘just the same (as)’ (*genauso* in German (see [14]); *dooyooni* in Japanese).¹⁰

- (14) *... und der springt genauso heraus wie herr blau* (G 27-08)
‘... and he jumps out just the same as Mr. Blue.’

Furthermore, adversative markers such as *allerdings* ‘though/however’, *aber* ‘but’, both in German, and *shikashi* ‘but’ in Japanese, can be related to the change of the polarity-value in the linking pattern B or C. In following examples, contrastive linkage of the information in segment 29 [jumping of Mr. Red] with the antecedent information in segment 28 [not-jumping of Mr. Red] is marked in this way:

- (15) *nach wenigen augenblicken entscheidet sich dieser allerdings DOCH für den sprung und kommt wohlbehalten unten an.* (G 29-14)
‘After a few seconds, though, he does decide to jump and comes down safely.’
- (16) *shikashi i-o kesshi-te akasan-wa mado-kara tobiori-mashita.* (J 29-01)
‘But, having made up his mind, Mr. Red jumped out of the window.’

German can also use the stressed variant of modal particle *doch* in order to mark the change of the polarity-value (see (17), and also (15)).

- (17) *(nachdem die feuerwehr ihn überzeugt hat), springt herr rot schließlich DOCH.* (G 29-13)
‘(After the fire brigade has persuaded him), Mr. Red does jump finally’

Dimroth et al. (2010: 3330) state that the stressed variant of the particle “marks that the utterance in which it appears is in contrast to an earlier, otherwise comparable utterance, often with opposite polarity.” There is no counterpart for this particle in Japanese or in Romance languages such as French and Italian.

10. In both sets of L1 data, however, these expressions are hardly used.

In the first step of analysis unit 1, the utterances were classified according to the linking patterns in which they are integrated.¹¹ In a second step, the frequencies of diverse linguistic means in the utterances were counted separately for the three categories: 1. 'basis-related' means which mark additive linkage based on a shift-in-ENTITY (such as *auch* and *-mo*) 2. 'basis-related' means which mark contrastive linkage based on a shift-in-TIME (such as *jetzt* und *yatto*) 3. 'VALUE-related' means which mark the change of the polarity-value (such as *DOCH* and *shikashi*).¹²

4.1.2. *Results.* Table 3 shows for each segment, and per language, how many of the 20 speakers integrate the relevant utterances in the different linking patterns. As a reminder, the patterns are listed again as follows (Examples are related to segment 27):

- *Linking pattern A:* The information in segment 27 is additively linked to the information in segment 26 [jumping of Mr. Blue], relying on a shift-in-ENTITY. The compound unit of information is: [Mr. Blue jumped, and Mr. Green also jumped.]
- *Linking pattern B:* The information in segment 27 is additively linked to the information in segment 26 [jumping of Mr. Blue] on the basis of a shift-in-ENTITY. Simultaneously, it is contrastively linked to the information in segment 24 [not-jumping of Mr. Green], relying on a shift-in-TIME. The compound unit of information is: [At a particular previous point in time, Mr. Green did not jump, and at another previous point in time, Mr Blue jumped. Now, Mr. Green also jumped/Mr. Green, too, jumped finally.]
- *Linking pattern C:* The information in segment 27 is contrastively linked to the information in segment 24 [not-jumping of Mr. Green] on the basis of a shift-in-TIME, maintaining the topic entity [Mr. Green]. The compound unit of information is: [At a particular previous point in time, Mr. Green did not jump. At this time, however, he jumped.]

For segment 27, the proportional distribution of the linking patterns is much the same for both languages (Fisher exact, $p = .101$, n.s.). Both groups of speakers clearly prefer additive linkage based on a shift-in-ENTITY to contrastive linkage on the basis of a shift-in-TIME.

For segment 29, however, there is a statistically reliable difference between the two language groups (Fisher exact, $p < .05$). The majority of the German speakers only linked the respective information with the opposing information

11. The classification of the utterances was made on the basis of explicit markers of the linkage patterns.

12. As mentioned in Note 10, 'VALUE-related' means for the maintenance of the POLARITY-VALUE are rarely used in both languages; they are not employed in the L1 Japanese data, and occur only once in the L1 German data.

Table 3. Number of marked linking patterns by 20 speakers

		Linking pattern A	Linking pattern B	Linking pattern C
Segment 27	L1 German	10	8	1
	L1 Japanese	13	2	3
Segment 29	L1 German	2	4	13
	L1 Japanese	3	12	4

Table 4. Numbers for the means used in the retellings of segments 27 and 29

	'Basis-related' means (ENTITY, additive)	'Basis-related' means (TIME, contrastive)	'VALUE-related' means (change)
L1 German	23	16	18
L1 Japanese	30	19	5

as antecedence on the basis of a shift-in-TIME, while maintaining the topic entity (linking pattern C). This could be given by the fact that the opposing information is presented in the immediately preceding film segment. The majority of the Japanese speakers, in contrast, choose linking pattern B. If the occurrences of linking pattern A are taken into account, then three quarters of the Japanese speakers conceptualize a shift-in-ENTITY as the basis for additive linking information, although the antecedent situation is not asserted in the immediately preceding context. In summary, additive linkage on the basis of a shift-in-ENTITY is the usual strategy for both speaker groups. In a particular context, however, German speakers prefer to maintain the topic entity; they link opposing information to the same topic entity on the basis of a shift-in-TIME. The results for the use of the linguistic means are presented in Table 4.

The difference between the two language groups is significant (Fisher exact, $p < .05$). German speakers show extensive use of 'VALUE-related' means; in fact, in 15 of the 18 cases, the stressed variant of the particle *doch* is employed. Note that DOCH is hardly acceptable in the context where a shift-in-ENTITY occurs;¹³ the use of DOCH in the retellings is principally related to the maintenance of the topic entity. In contrast to the German speakers, 'VALUE-related' means are rarely used by the Japanese speakers.¹⁴ Instead, the additive particle *-mo*, a 'basis-related' device, is mainly used in order to

13. Consider the following sentence pair: ??*Anton hat die Hausaufgabe nicht gemacht. Kevin hat sie DOCH gemacht.* 'Anton did not do the homework. Kevin DID' (for a more detailed discussion with native speakers' judgment data, see Tomita 2012).

14. In all of the cases, the adversative marker *shikashi* 'but' is employed (see example (16)).

mark a shift-in-ENTITY. The occurrences of ‘basis-related’ means for marking a shift-in-TIME are similar in both languages.

4.2. Analysis unit 2: Shift-in-TIME as the basis for contrastive linking

The second analysis unit aims to gain more differentiated insights into the organization of a shift-in-TIME. In particular, I was interested in the role of a shift-in-TIME in the linking pattern B for which the speaker also encodes a shift-in-ENTITY.

4.2.1. *Method.* The analysis is based on the utterances according to linking patterns B or C, and furthermore, where a ‘basis-related’ device for introducing a new time span (such as *jetzt* ‘now’ and *yooyaku/yatto* ‘finally’) is used (16 utterances in L1 German and 19 utterances in L1 Japanese). In these utterances, the information from the domain of ENTITY is encoded via the grammatical subject. Thus, there are two options regarding the predominance within the topic part of the propositional structure:

A. ‘TIME > ENTITY’: by placing the temporal adverb before the subject in the clause, the speaker can give preference to a newly introduced time span over the topic entity, indicating this:¹⁵

(18) *jetzt ist auch herr grün aus dem fenster gesprungen.* (G 27-18)
‘Now, Mr. Green also jumped out of the window.’

(19) *yooyaku akasan-mo tobioriru-koto-ga deki-mashita.* (J 29-15)
‘Finally, Mr. Red also could jump down.’

B. ‘ENTITY > TIME’: alternatively, the speaker can give the domain of ENTITY preference over the domain of TIME, in which a shift occurs, by ordering the grammatical subject and the temporal adverb as in (20) and (21):

(20) *der herr grün ist jetzt gesprungen.* (G 27-19)
‘Mr. Green jumped now.’

(21) *shoobootai-no-settoku-no-ue modorisan-wa yooyaku tobioriru-koto-ga deki-mashita.*
‘After the (successful) persuasion by the fire brigade, Mr. Green could finally jump out.’ (J 27-12)

15. Both in German and in Japanese, the speaker can vary the position of arguments and adjuncts in favor of information organization, but not the position of the finite verb.

In the analysis, utterances were classified in respect of the order of information from the domains of ENTITY and TIME. Furthermore, the frequencies of each temporal adverbial were counted.

4.2.2. *Results.* Table 5 shows the numbers of the two types of information order: ‘TIME > ENTITY’ and ‘ENTITY > TIME’, separately, for the linking patterns B and C.

Table 5. *Number of the order types*

Linking pattern	Order types	L1 German (16 utterances)	L1 Japanese (19 utterances)	SUM
B	TIME > ENTITY	7	10	17
	ENTITY > TIME	3	4	7
C	TIME > ENTITY	2	1	3
	ENTITY > TIME	4	4	8

The choice of the type of information order is very similar for both speaker groups (Fisher exact, $p = .956$, n.s.). But there is a significant difference between the two linking patterns B and C; regardless of their language, speakers prefer the order ‘TIME > ENTITY’ for the linking pattern B, and the order ‘ENTITY > TIME’ for the linking pattern C (Fisher exact test for the sum of the two data sets, $p < .05$). Therefore, the illustration of the linking pattern B (see Note 6 in Section 4.1.1) should take the following more specific form [At a particular previous point in time, Mr. Green did not jump and at another previous point in time, Mr. Blue jumped. Now/Finally, Mr. Green also jumped.]

As for temporal adverbials, there is a significant difference between the two speaker groups (Fisher exact, $p < .01$). Regardless of the linking pattern, the German speakers mainly employ the adverb *jetzt* ‘now’ (12 times out of 16), whereas the Japanese speakers only use temporal adverbs *yooyaku/yatto/tsuini* which express – beside the objective meaning of ‘at last/finally’ – a subjective nuance which is related to the speaker’s expectation.^{16, 17}

The following examples demonstrate the typical form for marking the information structure for segment 29 in the two languages:

16. Recall that the temporal adverb *ima* ‘now/currently’ is not compatible with the past tense which is mainly used in the Japanese retellings.

17. In respect of ‘+/-speaker’s expectation’, one can differentiate between two types of Japanese adverbials which are regarded as counterparts to the English ‘at last/finally’. The Adverbs *yooyaku*, *yatto*, and *tsuini* express a subjective expectation besides the objective meaning of ‘at last/finally’, whereas *saigoni* is used in contexts where the speaker will only indicate the last position of a situation in a series of situations.

- (22) *herr rot springt DOCH.* (G 29-4) (C)
 ‘Mr. Red did jump.’
- (23) [= (19)]
yooyaku akasan-mo tobioriru-koto-ga deki-mashita. (J 29-15) (B)
 ‘Finally, Mr. Red also could jump down.’

In both ways of linking information, a speaker’s language-specific expectation about the event [jumping of Mr. Red] plays a significant role. In the German example, the usage of the ‘VALUE-related’ device DOCH indicates that the action [jumping] was expected for the entity [Mr. Red] at an earlier point on the time axis of the story, and this expectation is fulfilled at the present time.¹⁸ Here, information concerning another main character such as [jumping of Mr. Green] remains in the background of the speaker’s representation. In contrast, the speaker’s expectation which is marked in the Japanese way (see the temporal adverb ‘finally’ in the sentence initial position and the additive particle *-mo* ‘also’ in [23]) is as follows: Parallel to an earlier event [jumping of one main character, Mr. Green], the event [jumping of Mr. Red] was expected at an earlier point on the time axis of the story, and now, after a long and eager waiting, it occurs.

The empirical results in the present section suggest that the following ‘logic’ is at the bottom of each language-specific strategy: For German speakers, it is the maintenance of the topic entity across events that establishes coherence, whereas for the Japanese speaker, it is the comparison between some similar/dissimilar events involving one of the main characters one by one.

4.3. *Analysis unit 3: Fire brigade*

The last two units of analysis are based on the film segments 24 to 28. In these segments, the action of the fire brigade [requesting one of the main characters to jump out of the window] is depicted before the presentation of the event [jumping/not-jumping of the respective main character]. Furthermore, each of the segments 26 to 28 involves a fire in the main character’s room. When retelling film segments with these additional core events, the speaker must further choose between several options for information organization. For example, the fire in the room can be conceptualized as an event that just precedes the event of jumping, or it can be regarded as an incentive for the character to jump out. It is also possible that the speaker ignores such an additional core event when planning ‘what’ to say in his discourse. Table 6 presents the

18. Recall that DOCH is hardly acceptable for the context where a shift-in-ENTITY occurs; the employment of DOCH postulates maintenance of the topic entity.

Table 6. *Mentioning of fire brigade/fire*

	Fire brigade		Fire	
	L1 German	L1 Japanese	L1 German	L1 Japanese
Segment 24	19	19	—	—
Segment 25	13	13	—	—
Segment 26	9	7	17	16
Segment 27	10	8	16	11
Segment 28	5	2	18	11
SUM	56	49	51	38

number of 20 speakers per language who mention information concerning the fire brigade/fire. Both speaker groups behave very similarly in this regard.

In unit 3, I analyse how information about the fire brigade is added to the established discourse, in particular in respect of the organization of time (Section 4.3.1 and 4.3.2). Unit 4 deals with the way the fire is linked to the event of jumping/not-jumping of the concerned main character (Section 4.5).

4.3.1. *Method.* The analysis is based on utterances about all actions of the fire brigade. Temporal adverbials employed in these utterances were counted.

4.3.2. *Results.* Table 7 presents the number of temporal adverbials used in the relevant utterances (segments 25 to 28).¹⁹

Table 7. *Number of temporal adverbials used*

Language (no. of considered utterances)	'now'	'then'	'next' 'this time' 'finally (-exp.)'	'finally (+exp.) ^a	SUM
L1 German (37)	5	8	1	1	15
L1 Japanese (30)	0	2	19	0	21

a. For differences between 'finally' (-expectation) and 'finally' (+expectation)', see Note 17.

19. Since temporal adverbials are scarcely employed in the retellings of segment 24 (zero in the Japanese data and one time in the German data), segment 24 is not considered in Table 7.

The use of temporal adverbials is very different between the two speaker groups in respect of how often they are used overall, as well as which individual linguistic items are chosen (Fisher exact, $p < .01$).

In German, temporal adverbials appear in only 40% of the utterances on firemen's actions. The items chosen mark an anaphoric temporal shift (i.e., *dann* 'then') or introduce a new time span which is deictically specified (i.e., *jetzt* 'now'). In other words: The majority of German speakers mention the firemen's actions without specific linguistic devices to establish coherence; the temporal order of events itself, as is depicted in sequenced film segments (e.g., [moving of the fire brigade to Mr. Green] > [refusal of Mr. Green to jump] > [moving of the fire brigade to Mr. Red]) is logical and coherent for most of the German speakers. If the speaker nevertheless intends to enhance the coherence in the part of the discourse, a temporal adverbial to explicate the temporal order is used, as *dann* 'then' (24b) demonstrates (To improve clarity, the retelling which precedes [24b] is cited in [24a]):

- (24) a. *die feuerwehr stellt sich unter das fenster von herrn grün und will ihn mit som tuch auffangen. aber er will nicht springen.* (G 24-15)
 'The fire brigade comes to under the Mr. Green's window, and wants to catch him in a mat. But he does not want to jump.'
- b. *dann gehen sie zu herrn rot ...* (G 25-15)
 'Then they go to Mr. Red.'

Dann 'then' in (24b) expresses anaphoric temporal shift. The time talked about in (24b) is specified in relation to the time talked about in the last clause in (24a). Thus, the coherence in this part of the discourse is supported by temporal linkage between the two propositions [Mr. Green's not-wanting to jump] and [the fire brigade's going to Mr. Red].

Table 7 shows that temporal adverbials are more frequent (70%) in the Japanese utterances than in the corresponding German utterances. In fact, almost exclusively adverbials which indicate "the position of a situation in a series of (possible) situations" (Klein 1994: 149) are used, such as *saisho-wa* 'to begin with', *tsugi-wa* 'next', *kondo-wa* 'this time', *saigoni* 'at last/finally (without any speaker's expectation)'. Most of these adverbials involve the Japanese topic marker *-wa*. Thus, their use is appropriate in a context where different but comparable comments apply for different time spans. Furthermore, it is specific to L1 Japanese that a zero form, rather than an overt nominal phrase, is used for reference to the fire brigade (10 times in the relevant utterances). Example (25b), which expresses the same proposition [fire brigade's going to Mr. Red] as (24b), illustrates the Japanese pattern of information organization (the retellings which precedes [25b] is cited in [25a]):

- (25) a. *yonin-no-syoobootain-ga midorisan-ni tobioriru-yooni shijishi-tei-masu. Midorisan-wa kyohishi-tei-ru-yoo-desu.* (J 24-3)
 ‘Four firemen are instructing Mr. Green to jump off. Mr. Green seems to be refusing to do it.’
- b. *tsugi-wa akasan-no-tokoro-e iki-mashita. . . .* (J 25-3)
 ‘Next, (the firemen) went to Mr. Red.’

The usage of *tsugi-wa* ‘next’ in (25b) indicates that the speaker conceptualizes the firemen’s action [going to Mr. Red] in a relation to the action [instructing Mr. Green to jump off], which is expressed in (25a), but not to the immediately preceding situation [Mr. Green’s refusing to jump]. Furthermore, the zero form which is used for maintaining reference to the firemen introduced in (25a) indicates that the firemen, i.e., a collective sub-character, is encoded as the local topic in this part of the discourse.²⁰ In other words: the firemen’s routine actions which are related to each of the three main characters – whether as a part of the directive information or as the patient or as something else (e.g., [moving to Mr. Green/Mr. Red/Mr. Blue and requesting him to jump out]) – are conceptually bound together and constitute a coherent part of discourse. The concept that underlies the establishment of coherence is a comparison between routine situations which involve each of the main characters one by one.

4.4. Analysis unit 4: Fire

4.4.1. *Method.* The final unit of analysis concerns utterances that involve the fire in one of the main character’s room and examines how speakers link this event to the event of jumping (film segments 26 and 27), or not-jumping (film segment 28), by some protagonist.

For the events depicted in film segments 26 and 27, the speaker can establish a temporal coherence relation by employing temporal expressions such as *dann* ‘then’ (see (26)):²¹

- (26) *in der zwischenzeit ist der brand bei herrn blau im zimmer angekommen und der entscheidet sich dann spontan zu springen und es glückt . . .* (G 26-18)
 ‘In the meantime, the fire has reached Mr. Blue’s flat, and he decides then spontaneously to jump, and it succeeds.’

20. Researchers in Japanese discourse analysis (e.g., Clancy 1980, Hinds 1983) demonstrate that the zero form is related to the maintenance of the subject referent and indicates ‘topic continuity’ as discussed by Givón (1983).

21. Other devices which are used for a temporal coherence relation in the data are: *als* ‘when’, *nachdem* ‘after’, *jetzt* ‘now’, *erst in dem moment* ‘only just at that moment’.

Another option for the speaker is to link the events on a causal basis. In example (27), the fire is understood as an incentive for Mr. Blue to jump off:

- (27) ... *aosan-no-heya-ni-wa moo hi-ga tsui-tei-ta-node aosan-wa tobiori-mashita.* (J 26-5)
 ‘Because fire had already occurred in Mr. Blue’s room, Mr. Blue jumped off.’

The speaker can also encode both types of coherence relations simultaneously, as the following example demonstrates (see the second *deswegen* ‘therefore’ and *dann* ‘then’ in [28]):

- (28) *herr blau wohnt ja ganz oben, deswegen ist das feuer schon in seinem zimmer und deswegen spring herr blau dann DOCH.* ... (G 26-17)
 ‘Mr. Blue lives all the way upstairs; therefore the fire is already in his room and because of that Mr. Blue does then jump.’

If a film segment depicts a fire in the flat of a main character and his subsequent refusal to jump, as is the case in segment 28, there are again several options available to the speaker to establish coherence. The speaker can place the two situations [occurrence of a fire in Mr. Red’s flat] and [Mr. Red’s not-jumping] in a concessive/adversative relation. The conjunction *-nimokakawarazu* ‘even though’ in example (29) indicates that the speaker understands the occurrence of a fire as an insufficient incentive for Mr. Red to jump off:

- (29) ... *hi-ga chikazui-tei-ru-nimokakawarazu akasan-wa tobiori-yoo-to shi-masen.* (J 28-3)
 ‘Even though the fire is approaching, Mr. Red does not try to jump off.’

Alternatively, the speaker can place the event [Mr. Red’s not-jumping] in a temporal relation with a similar event which was previously claimed. This can be marked with temporal adverbials such as *immer noch* ‘still’ in German and *mada* ‘still’ in Japanese, as (30b) illustrates (The antecedent event (30a) was asserted for segment 25):

- (30) a. ... *akasan-mo iya-da-to it-tei-masu.* (J 25-16)
 ‘Mr. Red also insists on refusing (to jump).’
 b. *akasan-no-heya-ni-mo hi-ga mawat-teki-mashita. mada tobiori-masen.* (J 28-16)
 ‘The fire reached Mr. Red’s room, too. (Mr. Red) still does not jump.’

The adverb *mada* ‘still’ in (30b) marks that the same polarity-value applies to a particular predication for the same topic entity (i.e., Mr. Red), but for different

time spans (here, the time talked about in [30a] and the time talked about in the second sentence in [30b]).

Finally, the speaker can also organize the two coherence relations, concessive and temporal, simultaneously (see [31]).

- (31) *obwohl flammen schon in seinem zimmer sind, der herr rot weigert sich immer noch.* (G 28-19)
 ‘Though there are already flames in his room, Mr. Red still refuses.’

In this analysis unit, the coherence relations marked in the retellings of film segments 26/27, and 28 were counted as follows.

4.4.2. *Results.* As Table 8 shows, the preferred strategies for linking the event of fire with the event of jumping are very different for the two groups of speakers (Fisher exact, $p < .01$).

The Japanese speakers link the events exclusively on a causal basis (see (27) above), whereas the German speakers mainly link events on the basis of temporal coherence (see (26) above). Even so, causal relations occur in the German data; with double linkage such as in (28) occurring six times, there are 11/33 occurrences for causal relations in all.

Table 9 presents the number of coherence relations which are marked in the retellings of segment 28. Both groups of speakers prefer a concessive relation to a temporal relation (Fischer exact, $p = .0740544, > .05$).

For segment 28, 9 of 20 Japanese speakers do not mention the event of fire, and 6 of these 9 speakers employ the adverbial ‘still’ in order to relate the information [Mr. Red’s not-jumping] (segment 28) to the same information asserted for a previous span of time (segment 25). Therefore, it seems that the

Table 8. *Number of the marked coherence relations (segment 26 and 27)*

Language (no. of utterances)	Temporal relations only (‘then’/‘when’)	Causal relations only	Both temporal and causal relations
L1 German (33)	13	5	6
L1 Japanese (27)	0	15	0

Table 9. *Number of marked coherence relations (segment 28)*

Language (no. of utterances)	Temporal relations only (‘still’)	Concessive relations only	Both temporal and concessive relations
L1 German (18)	0	5	10
L1 Japanese (11)	1	7	3

speaker – probably regardless of his/her language – could easily recognize the ‘still’-relation between segment 25 and 28, if the interjacent event of fire is not involved in the retelling. Viewed in this light, it is remarkable that almost all the German participants mention the event of fire in the retellings and that half of them mark the ‘still’-relation between the comments on the same topic entity.

Taking the results from both tables together, we may conclude that, in contrast to Japanese speakers, German speakers frequently mark a temporal relation between events which concern one and the same main character, whether it be involved as the agent or as a part of the locative information. In other words: German speakers prefer to maintain the topic entity across utterances and to organize temporal coherence relations on this basis.

Japanese speakers prefer to encode causal/concessive relations; in fact, a sufficient/insufficient incentive (i.e., the fire in the room) for the one of the main characters is marked (see (27) and (29) above). Coherence is established by claiming a (psycho-)logical explanation for the reaction ([jumping] or [not-jumping]) of the main character. This preference in linking information is associated with a lower focus - compared to the German speakers - on temporal shift-relations between objective events in the narrative world.

4.5. *Conclusions: Language specificity in information organization*

We found clear language-specific preferences in the patterns underlying information organization. The German pattern can be characterized as a ‘shift-in-TIME’-type, and the Japanese pattern as a ‘shift-in-ENTITY’-type: The German speakers typically employ temporal-shift relations in order to link information and the topic entity is often maintained across utterances. When linking information concerning the main characters, they link opposing information concerning the same topic entity on the basis of a shift-in-TIME. The shift-in-TIME is expressed by *jetzt* ‘now’ and the change of the polarity-value by the stressed variant of *doch* (analysis units 1 and 2). The same preferences were observed when the fire is referred to in the discourse. The German speakers frequently mark temporal relations between events which concern one and the same main character, regardless whether it be involved as the agent or as a part of the locative information (analysis unit 4). Use of temporal shift relations (‘then’-relations) also enhances coherence when organizing information concerning the fire brigade, a collective sub-character (analysis unit 3).

By contrast, the Japanese pattern can be characterized as preference to compare a series of events involving the main characters by means of a shift in the ENTITY domain. Temporal shift-relations – which could be assumed to be the default in a narrative discourse – remain in the background of the speaker’s conceptual representation. In linking information concerning the main characters,

the Japanese speakers typically organize a shift-in-ENTITY with the additive particle *-mo* in order to mark that the same comment applies for different topic entities (analysis unit 1). Moreover, the comparisons invite the expectation that a parallel event to an event that already occurred in relation to one character will happen to another topic entity; its realization is then marked by the temporal adverb *yooyaku* ‘finally (+expectation)’ in sentence initial position and by the additive particle *-mo* ‘also’ (as in [23]). When actions related to the fire brigade (e.g., [requesting Mr. Green/Mr. Red/Mr. Blue to jump out]) are mentioned, they are bound together with specific temporal adverbials that can be used for listing. With this method, situations involving each of the main characters – whether as part of the directive information or as the patient or other roles – are bound together, thus constituting a coherent part of the discourse (analysis unit 3). With regard to events relating to the fire, causal or concessive relations are marked, instead of temporal shift-relations between objective events in the narrative world. This suggests that the events relating to the fire are understood by the speaker as sufficient or insufficient incentives to act for the relevant main characters (analysis unit 4).

5. L2 Japanese

In this section, we examine in what way information organization in the L2 differs from the source language German and the target language Japanese. The methods used are the same as in the preceding section.²²

5.1. Analysis unit 1: Shift-in-ENTITY or shift-in-TIME? – Two ways of linking information

Table 10 shows which linking pattern the speakers use for the following segments: [jumping of Mr. Green (segment 27); Mr. Red (segment 29)]. As a reminder, the patterns are listed again as follows (Examples are related to segment 27).

- With *linking pattern A*, a shift-in-ENTITY is used for an additive linkage. For example, the information in segment 27 can additively be linked to the information in segment 26 [jumping of Mr. Blue], relying on a shift-in-ENTITY. The compound unit of information is [Mr. Blue jumped, and Mr. Green also jumped.]

22. Analysis unit 3 was omitted because of the low number of cases in the L2 retellings (see Table 14 below).

Table 10. Number of marked linking patterns by 20 speakers

		Linking pattern A	Linking pattern B	Linking pattern C
Segment 27	L1 German	10	8	1
	L1 Japanese	13	2	3
	L2 Japanese	13	4	0
Segment 29	L1 German	2	4	13
	L1 Japanese	3	12	4
	L2 Japanese	2	8	8

- In *linking pattern C*, a shift-in-TIME is used for a contrastive linkage. For example, the information in segment 27 can also contrastively be linked to the information in segment 24 [not-jumping of Mr. Green] on the basis of a shift-in-TIME, maintaining the topic entity [Mr. Green]. The compound unit of information is as follows: [At a particular previous point in time, Mr. Green did not jump. At this time, however, he jumped.]
- *Linking pattern B* combines both shifts, one for an additive linking and one for a contrastive linking. The compound unit of information for segment 27 is: [At a particular previous point in time, Mr. Green did not jump, and at another previous point in time, Mr Blue jumped. Now, Mr. Green also jumped/Mr. Green, too, jumped finally.] (for more details, see Section 4.1.1).

The figures for the German learners of Japanese are between those for the speakers of German/Japanese; differences are not statistically significant.²³ As to the linguistic means used to indicate the linking pattern (see Table 11), a Fisher exact test reveals a statistical difference by trend which is nearly significant, only for L2 Japanese and L1 German ($p = .0543596$), whereas there are no significant differences between L1 Japanese and L2 Japanese ($p = .919$, n.s.). It is remarkable that the L2 speakers employ the additive particle *-mo* (i.e., a ‘basis-related’ additive device) almost as often as the L1 Japanese speakers. Moreover, L2 as well as L1 speakers of Japanese only scarcely use ‘VALUE-related’ means that are related to the change of the polarity-value.²⁴ This could be attributed to the fact that there is no counterpart for the German DOCH in Japanese.

23. *P*-values (Fischer exact) are as follows: between L2 Japanese and L1 German, $p = .224$ for segment 27 and $p = .365$ for segment 29; between L2 Japanese and L1 Japanese, $p = .283$ for segment 27 and $p = .356$ for segment 29.

24. In all of the cases, the adversative marker *shikashi/demo* ‘but’ is employed.

Table 11. Numbers for the means used in the retellings of segments 27 and 29

	'Basis-related' means (ENTITY, additive)	'Basis-related' means (TIME, contrastive)	'VALUE-related' ^a means (change)
L1 German	23	16	18
L1 Japanese	30	19	5
L2 Japanese	27	17	6

a. 'VALUE-related' means, which indicate maintenance of the polarity-value, are rarely employed in all data sets: only once in the L1 German data and the L2 Japanese data, and none at all in the L1 Japanese data.

5.2. Analysis unit 2: Shift-in-TIME as the basis for contrastive linkage

Here, we examine utterances in which information for the domain of ENTITY is encoded via the grammatical subject, and a shift-in-TIME is marked by a temporal adverbial (16 L1 German utterances, 19 L1 Japanese utterances, and 17 L2 Japanese utterances). Thus, there are two options regarding the predominance within the topic part of the propositional structure: 'TIME > ENTITY' whereby the domain of TIME is given preference over the domain of ENTITY, and 'ENTITY > TIME' in which the information is organized in the opposite way (see Section 4.2.1). The results are presented in Table 12.

The distribution of order types is similar across the three speaker groups. The L2 speakers thus conform to the following principles which were attested for both L1 speaker groups: For linking pattern B, the domain of TIME obtains the predominance within the topic part, whereas for linking pattern C, the temporal

Table 12. Number of the order types

Linking pattern	Order types	L1 German (16 utterances)	L1 Japanese (19 utterances)	L2 Japanese (17 utterances)	Sum
B	TIME > ENTITY	7/16	10/19	11/17	28
	ENTITY > TIME	3/16	4/19	1/17	8
C	TIME > ENTITY	2/16	1/19	1/17	4
	ENTITY > TIME	4/16	4/19	4/17^a	12

a. Numbers include cases in which a zero form instead of an overt nominal phrase is used to refer to the entity in subject position. The zero form indicates that the entity precedes. So, the information order 'ENTITY (zero form) > TIME' was assumed for those cases. See, *yatto janpu-o shi-masu* 'Mr. Red finally jumps' (DJ 29-15). Note that the L1 speakers do not employ a zero form in this context in order to avoid referential ambiguity.

Table 13. Number of temporal adverbials used

	'now'	'finally'
L1 German	12	4
L1 Japanese	0	19
L2 Japanese	7	10

shift, which the contrastive linking is based on, occurs under maintenance of the topic entity. These principles are not language-specific.

Table 13 presents the frequency with which temporal adverbials are used in the relevant utterances. Fisher exact tests show a significant difference between both L1 speakers ($p < .01$) as well as between the L2 Japanese speakers and L1 Japanese speakers ($p < .05$), but not between the L2 Japanese speakers and the L1 German speakers ($p = .080$, n.s.). While the L1 Japanese speakers unfailingly use the temporal adverbs *yooyakuyatto/tsuini* 'finally', the L2 Japanese speakers also use the adverb *ima* 'now', similar to the L1 German speakers who use *jetzt* 'now' (see Section 4.5).

A closer examination of the data shows that the adverbs that are used by the L1 Japanese speakers are restricted to the 'finally'-adverbials which contain a subjective nuance ('after a long and eager waiting'). Use of this type of 'finally'-adverbials is related to the L1 Japanese-specific way of organizing information in this context (for more detail, see Section 4.2.2 and 4.5). By contrast, the L2 speakers employ both types of 'finally'-adverbials: forms which contain a subjective nuance as well as those which do not. This suggests that the language-specific pattern in information organization, as found for L1 Japanese, is recognized to a lower degree by the L2 speakers than Tables 10 and 11 would seem to indicate. In particular, the organization of information from the domain of TIME seems to be strongly influenced by the learner's L1.

5.3. Analysis unit 4: Fire

Table 14 shows how often speakers encode information on the fire brigade/fire in the retellings of film segments 24 to 28. The L2 speakers encode information concerning the fire brigade, or fire-related events, less than half as often as the L1 speakers in both groups. This suggests that the L2 speakers make use of a simplification strategy to reduce cognitive load when retelling in L2. The omission of information concerning the fire brigade/fire provides the L2 speaker with a basis for focusing on information on the three main characters. This could ease the comparison of a series of events involving each of the main

Table 14. *Mentioning of fire brigade/fire*

	Fire brigade			Fire		
	L1 German	L1 Jap.	L2 Jap.	L1 German	L1 Jap.	L2 Jap.
Segment 24	19	19	12	—	—	—
Segment 25	13	13	5	—	—	—
Segment 26	9	7	2	17	16	11
Segment 27	10	8	3	16	11	3
Segment 28	5	2	0	18	11	7
SUM	56	49	22	51	38	21

Table 15. *Number of marked causal/concessive relations (segment 26/27, and 28)*

Causal (no. of considered utterances)	Concessive (no. of considered utterances)
13 (14)	7 (7)

characters, so that the shift-in-ENTITY is often marked by the L2 speakers with the additive marker *-mo* (see Table 11).

As was shown in Section 4.4.1, each of the film segments 26 and 27 depicts an event relating to the fire, followed by the event of jumping of the concerned main character. Here, the speaker can optionally mark a causal relation between the two events. Film segment 28, by contrast, depicts an event relating to the fire and then shows that the concerned character does not jump. Thus, a concessive relation between the two situations can be marked. Table 15 presents the number of marked causal/concessive relations in the relevant L2 utterances. The L2 Japanese speakers almost unfailingly mark the causal/concessive relation between the events relating to the fire and the action of the concerned character [jumping/not-jumping]. As was observed in Section 4.4.2 (see Tables 8 and 9), the L1 Japanese speakers also show a preference to mark the causal/concessive relation. This preference is higher for the L2 speakers.

I also counted marked temporal relations in the utterances which express jumping/not-jumping of the main character in the retellings of segment 26/27, and 28. Here, the utterances of all speakers (20 for each speaker groups) are included, since, as shown in Table 14, the extent of the utterances involving the fire would be too small to provide an appropriate data basis for this additional analysis. The results are presented in Table 16. The L1 German speakers frequently employ the shift adverb *dann* 'then'. This corresponds to the German pattern in information organization, i.e., the shift-in-TIME-type. The five uses of *soshite* 'then' in the L2 Japanese data could possibly be related to the L1 German strategy.

Table 16. *Number of the temporal relations marked (segment 26/27, and 28)*

Language	'then'-relation (segment 26/27)	'still'-relation ^a (segment 28)
L1 German	11	10
L1 Japanese	2	10
L2 Japanese	5	10

a. This 'still'-relation is related to the context that the same polarity-value applies to a particular predication for the same topic entity (i.e., Mr. Red), but for different time spans (see Section 4.4.1).

5.4. *Conclusions: Multifactoriality of information organization in the L2*

Information organization in the L2 cannot be characterised by a single feature as it evidences features of the source as well as the target language, as well as those which are specific to the learner language. Various factors seem to interact in the L2 speakers' strategies:

1. The findings suggest that the learners may make use of a simplification strategy to reduce cognitive load when retelling in L2. The L2 speakers mention information relating to the fire brigade/fire less than half as often as both L1 speaker groups (see Table 14). The omission of this information not only reduces the cognitive demands in conceptualizing 'what to say', but also narrows options for the speaker as to 'how' information can be linked.
2. The use of linguistic means to mark the linking pattern is very similar in L1 Japanese and L2 Japanese. In particular, the L2 speakers use the additive particle *-mo* almost as frequently as the L1 speakers. However, the frequencies do not necessarily mean that the learners have fully identified the language-specific pattern in information organization in the target language, because, with the omission of information relating to the fire brigade/fire (see point 1), the L2 speakers focus more intensely on information relating to the three main characters than the L1 speakers, leading to comparisons between a series of events involving each of the main characters. Thus, a shift-in-ENTITY is frequently marked by the L2 speakers.
3. The choice of the temporal adverbials 'now', 'finally (without speaker's expectation)' and 'then' by the L2 speakers (see Tables 13 and 16) does not conform to principles found for the target language, but mirrors source-language principles. This suggests that the organization of information from the domain of TIME is directly related to the principles for temporal organization in sequencing events in the source language.

4. Causal/concessive relations are almost unfailingly marked by the L2 speakers, when mentioning the events relating to the fire (see Table 15). These relations may be easier to conceptualize than temporal relations for the L2 speakers – probably because the notions of causality and concession are subject to less language-specific lexicalization than temporal notions (e.g., the meaning of *dann* ‘then’) with regard to constraints on use, and are equally accessible for L1 and L2 speakers.

6. Discussion

The two L1 speaker groups clearly differ in their strategies for organizing information. The strategy of the German speakers can be characterized as a ‘shift-in-TIME’-type; the underlying logic is that the maintenance of the topic entity across events as well as the organization of temporal shift relations ensures discourse coherence. In this case, speakers establish temporal shift-relations between objective events in the narrative world. The Japanese speakers, in contrast, link events on the basis of a shift in the conceptual domain of ENTITY. The underlying logic is that a comparison between a series of situations involving the main characters ensures discourse coherence. In this case, speakers preferably focus on the inner world of the main characters, so as to mark the relation between an incentive (e.g., a raging fire) and the reaction of the character.

Each of the two speaker groups follows its own logic of coherence when solving the same communicative task. Two possible reasons for this come to mind: cultural differences and/or the different structures of the speakers’ native language. In line with earlier cross-linguistic studies (Slobin 1996a; Slobin 1996b; Carroll and von Stutterheim 2003; von Stutterheim and Carroll 2007; Carroll et al. 2008; von Stutterheim et al. 2012a; 2012b), I presume that the structures of the speakers’ native language will to some extent influence the strategy for information organization in discourse. In particular, available linguistic means that convey specific perspectives seem to be relevant with regard to ‘what’ information is selected for mention and ‘how’ this information is organized. Slobin (1996b) claims in his *thinking-for-speaking* hypothesis that:

They [= grammaticized categories – added by the present author] **cannot be experienced directly in our perceptual, sensorimotor, and practical dealings with the world.** [...] Distinctions of aspect, definiteness, voice, and the like, are, *par excellence*, distinctions that can only be learned through language, and have no other use except to be expressed in language. They are not categories of thought in general, but categories of thinking for speaking. It seems that once our minds have been trained in taking particular points of view for the purposes of speaking, it is exceptionally difficult for us to be retrained. (Slobin 1996b: 91)

The authors investigating within the framework of the *thinking-for-speaking* hypothesis – with possible modifications – focus on the role of “grammatical categories” (von Stutterheim et al. 2012a: 366) in information organization because they are “not only obligatory but highly abstract (i.e., applicable to word class paradigms, independent of the items’ specific meaning) and are fully automatized in use. They provide a conceptual grid or frame for mental processing and decision making — at least whenever language is involved.” (von Stutterheim et al. 2012a: 366)

In my view, lexical items can similarly influence patterns in information organization. This can be the case if a grammatical or lexical item conveys a particular perspective in the broadest sense, i.e., a conceptual category which can serve as a schematic framework for the speaker when conceiving things and understanding situations in the real or narrative world. Such conceptual categories can predetermine which pattern in information organization the speakers of the respective language understand as intelligible. For example, the strategy of information organization found for the L1 Japanese speakers could be related to the availability of the particles of information structure (*-mo/-wa*) in the language as follows: These particles are ‘basis-related means’ which mark complementary perspectives. The additive particle *-mo* ‘also’, on the one hand, can be used in contexts where the same comment applies for different referents (see [32b] below which follows its antecedent [32a]), and the so-called topic particle *-wa*, on the other hand, for the context where different comments apply for different referents (see [32c] which follows its antecedent [32b]):

- (32) a. *Midorisan-wa ki-ga tsuki-masen.* (J 7-20)
 ‘Mr. Green (=TOP) does not become aware (of it).’
 b. *Akasan-mo ki-ga tsuki-masen.* (J 8-20)
 ‘Mr. Red also does not become aware.’
 c. *Aosan-wa kaji-ni ki-ga tsuki-mashita.* (J 9-20)
 ‘Mr. Blue (=TOP) became aware of the fire.’

The complementary perspectives encoded in the particles *-wa/-mo* provide the speaker with a grid for a comparison between a series of situations – i.e., the preferred pattern in information organization by L1 Japanese speakers.²⁵

25. In examples (32a–c), the particles are used for the grammatical subjects. However, this does not mean that, for an additive linkage as well as a contrastive linkage by means of the particles, the conceptual domain in which a shift occurs (i.e., the domain belonging to the topic part of the propositional structure) must be the domain of ENTITY. The referents for the domains of SPACE, TIME and PREDICATION are also proper candidates for the topic (see Section 4.3.2, temporal adverbials for listing a series of situations). This point is not often respected in previous theoretical and empirical studies on Japanese linguistics. Instead, the particle *-wa* was mainly analyzed in comparison to the nominative marker *-ga* (e.g., Kuno

In line with earlier studies (e.g., von Stutterheim and Carroll 2006; Tomita 2010), the present analysis of L2 Japanese shows that adult L2 speakers have difficulties in identifying the way information is organized in the target language. This seems rather natural in view of the fact that the linguistic knowledge of the L1 speakers – at least in this domain - is tacit and used automatically when speaking. Even for linguists it is not easy to describe the semantics and implications of, for example, the Japanese topic particle *-wa* or the German marker of the change of the polarity-value DOCH. The results for information organization for the L2 show how speakers establish coherence by using knowledge that exploits the logic of coherence of their L1 and their L2 grammar and lexicon.

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1973; Chafe 1976; Hinds 1983; Lambrecht 1994). One of the exceptions is the study by Kobayashi (2009) who approaches the complementary functions of the two particles *-wa* and *-mo* in a generative-oriented framework. For readers who are interested in the function of the so-called topic particle *-wa*, I would recommend the study by Onoe (1981) in which the topic particle *-wa* is described with a concept which by and large conforms to ‘contrastive linkage’, as defined in the present study.

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