

An Essay on Annotating Connectives in a Japanese Text – Lessons and Prospects

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Abstract. This paper offers an overview of an attempt to annotate a text in Japanese with the aim of pointing out all possible connections between elementary chunks of discourse, and the connective devices marking them. Being the first experience in Japanese, it asks for a certain adjustment of the annotation rules already used in the existing schools. This primarily touches upon what entities are connected and also upon the definition of a connective. Furthermore, semantic areas covered by connectives also need correction if reviewed through an in-depth analysis of the speaker's intentions. The obstacles met while carrying out the annotation focus around two linguistic factors, as do the pervasive patterns revealed. On the one hand, the structural specifics of the Japanese language cause the speaker to forego multiple transformations that warp the surface structure in order to attain linear development of his or her line of discourse. On the other hand, the genre of the linguistic material (a lecture in tourism marketing) is largely accountable for dominating Causality and Discourse Deployment areas of connectives. It is through those that a higher level of pragmatic motivation is achieved in the explicit markers of the text structure – which turns out crucial in making the speech more persuasive.

Keywords: Japanese language, discourse, connectives, field research, annotation

The study of text structure in modern linguistics is about more than expanding our knowledge about the individual, his or her inner world and natural languages as part of it. It is also about pursuing the practical goals of improving the effectiveness of teaching and translation, in particular improving the quality of machine translation. As we all know, one of the “generic” complexities of the latter (which we have all come across having used online machine translation services) is the presence of units with a complex semantic structure that establish links between elements of a speech product and/or fragments of the mental reality of the communicants, in-

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cluding the components of speech situations. For example, one zone of this rather extensive layer of language units is connectors – types of discourse markers – that express semantic relations between segments of speech products of various lengths (Golubeva, Zueva 2019) (we have touched upon this topic before, including in the form of a brief introductory review (Chironov 2019). This category, which is defined on the basis of functional grounds and is consequently morphologically homogenous, has been the focus of numerous studies that based their results on various types of data, including corpus data (Kobozeva 2016). However, in the light of the many requests from experts in various fields for the results of the study noted above, linking data that is focused on translation tasks – and which often makes up the preparatory stage of translation itself – appears particularly promising. We are talking here about the continuous annotation of texts according to various selected criteria, which allows the researcher to both test existing theoretical constructs in practice and identify new difficulties. As for the issue of connectors, work in this area is being carried out at several research centres (Prasad, Webber 2014), (Reese, Hunter 2007), and the results of their activities have already been successfully integrated into Russian scholarly discourse (In'kova 2019). But we have no information about such work in relation to the study of Japanese. This is where the present paper comes in as a pilot study, so to speak.

The subject of this paper is the text of a speech given by a Japanese scholar at an online seminar intended for Russian listeners provided to the organizers for simultaneous interpretation in late 2021. The script has been reproduced with minor variations and, as such, it represents a sample of prepared oral speech. It is a relatively short text (approximately 14,000 Japanese characters, equivalent to roughly 35,000–40,000 characters in the Russian translation) about establishing practical bilateral relations between Japan and Russia, a hot topic at the current geopolitical juncture. The speech lasted a little over an hour, including slides, and was divided into 109 paragraphs containing a total of 289 sentences. The types of semantic connections between passages are extremely diverse and cover all those identified in various methods of classification. We should note here that many situations in which connectors are used turn out to be extremely instructive and provide a wealth of information for clarifying the semantic “portraits” of certain types of connectors, although we do not touch upon this aspect of the issue in the present paper, leaving it for future research. Our goal here is to identify problematic issues that arise in the process of annotating itself, as well as to offer, if not conclusive, then at least reasonably compelling ways to solve them.

An overview of the data obtained is presented in the table below. When choosing rubricifiers, we decided to try and build on the categories traditionally used in Japanese linguistics (Ichikawa 1978), (Sakuma 1990). They also turn out to be closer to the classification used in the Penn Discourse Treebank (PDTB) annotation project (Prasad, Webber 2014), which uses a three-tiered aggregation principle that states that all types of connectives fall into one of four categories: “temporal”; “contingency” (including “causal” and “conditional”); “comparison” (“concession”, “contrast” and “juxtaposition”); and “expansion” (including “adding” and various types of discursive develop-

ment). The general structure of the classifier used for the SDRT project (Reese, Hunter 2007) is less suitable for such work, as it focuses on pointing out the oppositions of (in) factivity, coordination, and subordination. That said, we use categorization elements from both systems, accompanying them with the appropriate abbreviation in order to help us track the meaning of labels that do not always allow for an unambiguous interpretation.

Table 1. Distribution of Connectives by Type of Logical Link

Type of connective = levels:	propositional	illocutionary	meta
temporal	15		
logical contingency:			
cause	63(+29)	(+7)	
goal	25(+5)		
contingency	9	2	
aposition:			
contrast	9(+10)		
concession	35(+6)	9	
comparison	6(+2)		
addition	27(+61)	7(+11)	
accumulation	6(+1)	1	
discourse development:			
topic shift		9(+12)	
equivalence	15(+13)		11(+2)
detailing	33(+16)		1
generalization	14(+6)		
elaboration	55(+11)	1	(+2)
level-of-detail	2(+22)	(+1)	(+3)
authorization	27(+3)		
commentary	(+15)	(0)	
question and answer	3(+12)	1	

* note: the figures in parentheses denote cases where connectives were not observed

These figures are not final and are open to clarification as the relevant issues become clearer, which will be discussed later.

Determining the Boundaries of Relations

The very definition of a connective implies a relative freedom of expression for its arguments, which can be expressed both in complete sentences and in groups of sentences, as well as in clauses and even “convolutions” (to use the term coined by Vladimir Gak), most often through nominalization. What is more, the obligatory condition for the verbalization of the relation is not applied. This brings the connective closer to

the classical understanding of the discourse marker, although it turns out to be less applicable to the material at our disposal, overloading the interpreter with “clairvoyance” functions that we believe can at times be unnecessary in the array of knowledge and ideas of communicants to which it does not belong. Such cases are ignored in the present study. On the whole (with the exception of non-verbalized relatives), the text contains just such a variety of expressions for relations joined together by connectives, the smallest of which turns out to be quite close the concept of “elementary discourse units” (EDU) (Kibrik 2009). This contrasts somewhat with the practice of annotation, where, in general, it is customary to mark concordances between linearly and sequentially located clauses.

In addition to the connections between groups of EDUs, which thus become a single complex relation, we also recognize cases where the linear-sequential arrangement principle has been distorted. The latter include embedded, left-adjacent arrangements, as well as jumps in connections when non-contiguous relations are connected. The latter directly corresponds to the speaker building the logic of his or her narration, where stacks of segments with the same functionality, loops or even gaps can be provided. The PDTB uses the second case to the best effect, at least in part: without changing the nomenclature, it provides the right and left positions of the profiling argument, although not for all links, and only for the group that demonstrates logical contingency. We propose extending this scheme to include another type of connection, namely “(Discourse) Development”, which is also logically contingent, albeit from the point of view of the speaker in the construction of his or her reasoning. We will come back to the similarities between these two macrotypes of communication, but for now, in a more practical sense, we will note that, first and foremost, this allows us to remove the tension arising from the discrepancy between the text effects of “symmetrical” categories, for example, “detail on the left” and “generalization on the right”, and vice versa. For example, in Par. 54, ⑦ provides detail for ⑥, although it is located to the left, while ⑥ does not generalize ⑦:

⁶ これらは	⁶ <i>All this</i>
⁷ 私も含め、ウェブ制作チーム全員が	⁷ <i>including myself and the entire website team</i>
⁸ ボランティアで地道に行ってきたものです。	⁸ <i>on a voluntary basis gradually created</i>

The semantic relationship between the individual parts is restored when translating into Russian (which in this case is structurally identical to English, for which the annotation rules were built): ⁶ *All this was gradually created by the entire website team*, ⁷ *including myself*, ⁸ *[and moreover] on a voluntary basis*.

Par. 13 contains an example connected with the PDTB definition of “clarification” (Expansion. Level-of-detail) for which bidirectionality is assumed:

⁴ 過去最高の	⁴ <i>An all-time record</i>
⁵ 2000万人超で、	⁵ <i>of over 20 million people.</i>

Evidently, Japanese discourse does not typically allow a developmental argument to be affixed to the left of a connective belonging to the “Development” category, which would be in keeping with the definition of Commentary given in SDRT, as is the case with ⑥ in Par. 67:

⁶ これは失礼な話ですが、	⁶ <i>I am embarrassed to say this, but</i>
⁷ サハリンに新しいスキー場あるとは知らなかったのです。	⁷ <i>[people] did not even know that there are ski resorts in Sakhalin</i>

Tellingly, this problem does not arise when interpreting links between elements that are more “equal” – as in the case of “Adding”, “Comparison” or “Concession”. There are typically no surprises here in the sense that the speaker arranges the arguments in exactly the same order in which the picture of reality he paints is revealed.

Closely linked to the reverse arrangement of relations is the “embedded” arrangement of relations – when one is inside the other. The most important factors here are the position of the predicate to the right periphery of the sentence, and the strong tendency towards thematization in Japanese.

A relatively simple case is the use of a single connective (see Par. 79). In and of itself, the link between ③ and ④ is reverse, because ③ clearly develops the content of ④, and it is in fact necessary to understand it. This kind of relationship is described in the SDRT as Commentary, and here it appears at the propositional, and not the illocutionary level, as long as the speaker is also the agent ④. In this case, the temporal connective *sono mae ni* does not, strictly speaking, belong to any EDU in the excerpt, linking complex relations <①-②> (inside the “theme-rheme” connection) and <④-③> (“level-of-detail”).

¹ これからお話しするのは	¹ <i>What I would like to talk about further,</i>
² 「サハリンの新しいイメージづくりのための戦略」です。	² <i>is a strategy for creating a new image of Sakhalin.</i>
^(?) その前に、	^(?) <i>But first –</i>
³ 少しだけ戦略的に、	³ <i>a little bit on the strategic side –</i>
⁴ ウラジオストクでこれまで起きていることを参考にしましょう。	⁴ <i>let’s learn from what has taken place in Vladivostok so far.</i>

If we were to use a simpler form of annotation (like previous versions of the annotation systems), then we would concentrate on two excerpts only, where ① and ② merge together and ④ absorbs ③. In the current version, introducing a connective that is not directly related to ③ only confirms the existence of a reverse link.

The task becomes more complicated if a segment that is not a connective is embedded in from of the EDU that is ‘running ahead’. Most often, this will be a topic or a section close to it, although this is not always the case. See, for example, the discontinuity ⑧ in Par. 13:

⁷ 日本で初めてとなる	⁷ <i>The first in Japan</i>
⁸ ウラジオストクの旅行案内書	⁸ <i>travel guide to Vladivostok –</i>
⁹ 「Platウラジオストク」	⁹ <i>Plat Vladivostok</i>
を2018年4月に刊行しました。	⁽⁸⁾ <i>[we] published in April 2018.</i>

One method in such cases is to separate the topic and postulate a theme-rheme connection. On the whole, this connection is not as far-fetched for Japanese as it is in the descriptions of manuals for annotators, if you look at the difference in options. See Par. 108:

¹ 最後に、サハリンのみなさんをお願いしたいのは、	¹ <i>In conclusion, I would like to ask you all this:</i>
² 私たちのコンテンツづくりや情報発信にご協力いただきたいことです。	² <i>Let's collaborate in creating and sharing content!</i>

Here, the dualism of theme and rheme is additionally emphasized by the use of a “split” construction (*klepht*) with thematization. Without it, the sentence was one long expression of a request (the original version). The final version differs in that the speech product includes known (to the addressee) information (this is a well-known relativization effect). This obvious distortion is corrected by another even more radical technique: going further and cutting the sentence into two, where ② will detail the speech act indicated in ①.

However, the limitations of this approach to the phenomena of thematization in the text are obvious. If we take the text as an absolute, we will be forced to “split” all statements with a clearly expressed articulation. And given the acceptability of non-verbalized relation, the “chance” to pile up even more links arises. One way or another, no matter what decision is made, there will nevertheless be certain tension

In some cases, the temptation to ignore the syntactic structure is there – in order to preserve a linear sequence (Par. 3):

⁶ 私のような	
⁷ 【旅行メディアの仕事をしている】	⁷ <i>those working in tourism media</i>
人間にとって、	<i>for people + ⁶ Like me</i>

Strictly speaking, ⑦ here is a “Level-of-detail” of the top element *ningen* (“people”) on the right side of the discontinuity ⑥. However, in the case of a minimal replacement of the adjectival form of the comparative phrase in the left part ⑥ with an adverbial one, another structure arises with the unit ⑦ which, according to the informants, is “heard” in the structure that is used:

⁶ 私のように	
⁷ 【旅行メディアの仕事をしている】人間にとって	⁷ For those people working in tourism media
	⁶ Like me

Here ⑥ is no longer a “Level-of-detail”. Rather, it provides “detail” about ⑦, as can be seen from the fact that it can be replaced with the introductory (meta)adversative phrase *watashi mo soo desu ga* (“I’m like that myself”). It is unsurprising that attention is not paid to this problem in the annotation technique developed for the English language, where such structural possibilities and variations do not exist.

Embedded structures are primarily associated with connections of the mereological type – specifically expansion/narrowing or detail/generalization. This is largely because they affect a more local fragment of discourse, which with minimal transformations can be postulated as an independent EDU.

And this is an example of a cross “jump” in discursive connections that decisively “peel off” here from syntactic connections:

¹ サハリンのみなさん、	¹ Dear people of Sakhalin,
² こんにちは。	² Hello!
³ そして、ごぶさたしています。	³ And – please excuse the [long] silence –
⁴ ちょうど1年前、みなさんと オンライン上で会いました	⁴ Exactly one year ago with you we met online
⁵ です。	⁵ <insert name> [– before you].

The linear development includes an “Addition”, marked by the connector *soshite* (of the illocutionary type in this example, since two different speech acts are in contact) between ② and ③ and continues to the point between ③ and ④, where “Elaboration” is evident, supported by the word order (which serves to fit the relations together directly) (SDRT Expansion. Elaboration). In the second case, the adverb *choodo* should be recognized as the lexical implementation of the connective, as it is a characteristic way of expressing refinement with non-verbalized A1 (here, the level of connection is sub-lexical: “one year ago” clarifies the seme “a long time”, which arises at the pragmatic level in *go-bu-sata* = “no news [from you]”). However, from the point of view of developing the discourse, ⑤ is not connected with ④, which is its formal definition,

but rather with ②, since it is customary to give one's surname after a greeting. Thus, there is an "Attachment" type of connection between ② and ⑤, which differs from the similar connection between ② and ③ in that lexical marking is impossible here (for example, こんにちは。*そして中村です = *Hello {*AND - /??OR - allow me to introduce myself}*), *my name is Nakamura*), as such marking is evidently reserved for cases where an unexpected segment that would be more difficult for the addressee to interpret without an explicit connector is added. These links determine how the literary translation in Russian is restructured, where it would be difficult to place such a word between ② and ⑤, and ③ and ④ would have to be moved to the end of the paragraph:

Dear people of Sakhalin! Good afternoon! My name is Nakamura. It's been a while since we talked. The last time we saw each other was exactly a year ago, online.

The difference in the possible compositions of the paragraph here clearly arises under the influence (which can probably be explained at a higher theoretical level and in terms of the general inductive orientation of Japanese discourse) of the sequential left branching of the Japanese sentence. This condition allows for the creation of a structural cliché in the greeting formula, when the definition of the name (explicitly stated by the Japanese individual and presented in the third person): *My name's Petrov {whom you kindly sent / You kindly sent me} a letter*. This is precisely what the speaker does in the above example.

Closely related to the issue of the order in which the relations are presented is the issue of how they are formulated. How should they be subdivided in order to obtain a convincing conjugation of units?

The definitions and adverbials as described in the annotation manuals are emphasized to the extent and in the sense in which they contribute to the development of reasoning. This is most clearly manifested in the connection of the type "Reason" and "Inconsistency" (see the similarity with the principle of highlighting such phrases in Russian punctuation), see the adverb of time ③ in Par. 46:

³ コロナ禍で国を超えた人の移動が難しいま、	³ <i>Now, at a time when the pandemic prevents us from crossing borders</i>
⁴ 自分にできることは何だろうか。	⁴ <i>What can we [nevertheless] do?</i>

But it is not just adverbials that have this status, as definitions, acting as a "Clarification" (Expansion.Level-of-detail) do too. See, for example, ⑩ in Par. 27:

¹⁰ そこには、	¹⁰ <i>In this ...</i>
¹¹ アジア文化圏に囲まれた	¹¹ <i>surrounded by the Asian cultural zone</i>
極東ロシアの稀少性や優位性が浮上してくるのです。	(¹⁰) <i>... is hidden the exoticism and advantage of the Russian Far East.</i>

In the proposed interpretation, ⑩, which is wedged into the structure of ⑩, reveals the meaning of characterizing the Far East as “exotic”. A literary translation of the sentence would restore the split ⑩, thus making it easier to isolate (11).

Note that in Japanese such units typically come at the left side of the sentence, whereas in Russian and English the corresponding units appear at the right.

The example below (where the link between ① and the complex relation 2–3 can be defined as “Causal”) demonstrates correspondence at the constructive level between a preposition in the Japanese and a specific construction in Russian, saturated with the semantics of causality or opposition (Par. 80):

¹ ロシアの都市文化の魅力を持つ	¹ <i>With its wonderful Russian urbanism</i>
² ウラジオストクは	² <i>Vladivostok</i>
³ 極東ロシアの中でも	³ <i>even among other destinations in the Far East</i>
特別な存在になっています。	<i>is a truly special place.</i>

Unlike adverbial clauses, which can be assigned special markings (Chironov 2017), definitions are never explicitly highlighted.

As the material shows, subordinate clauses are not the only parts of speech that are capable of entering into relations of “Equivalence”, as simple non-restrictive definitions can do this too, provided that they perform the required function – namely, to give the addressee additional information that clarifies the code element (see ⑤ in Par. 18):

⁴ 2020年3月にはついに	⁴ <i>In March 2020, flights between JAL and ANA were finally launched</i>
⁵ 日系の	⁵ <i>Japanese carriers.</i>
JALやANAも就航を開始しました。	

If formulated with a reasonable level of subtlety, it is difficult not to recognize the role of individual semantically rich adverbs (evaluative, rather than mode of action) and separate EDUs, forming the connection “Development” – “Clarification” with the main predication (Expansion.Level-of-detail). In the previous example, this is the adverb *tsui* (“family”), which refers to an as yet indefinite circle of participants that had long been waiting for the event being described. The dilemma of transferring the annotation technique created for texts written in English to Japanese material stems from the fact that, in the English version, such adverbial groups gravitate towards a postposition in which they are safely marked without violating the linear arrangement. But the same effect can be achieved in Japanese by placing the adverbial group in postposition, which commonly happens in oral communication:

⁴ 2020年3月には	⁴ <i>In March 2020, flights between JAL and ANA were launched</i>
⁵ 日系の	⁵ <i>Japanese carriers.</i>
JALやANAも就航を開始しました。	
⁶ ついにね。	⁶ <i>Finally.</i>

It is clear that at the syntactical level, the variant with parcellation is by no means equivalent to the original. At the discursive level, however, the contrast is minimal. In this case, there is no reason to not mark the adverb of this category as a separate relation.

Requirement syntax affects more than just the order of the relatives. Occasionally, an informatively justified narrative order is sacrificed and a kind of “bulge” is formed in the surface structure, as can be seen in Par. 19:

² すべては振り出しに戻り、	² <i>[The fact that] everything has gone back to the way it was before</i>
³ 現在に至っていることは	³ <i>and remains so to this day,</i>
⁴ ご存知の通りです。	⁴ <i>you are well aware of.</i>

As we can see, this technique compensates for the unacceptability of the well-known Japanese towards “pseudo-subordinate” constructs. In such cases, in the flow of speech, the thematic group is formed at the end of the segment or utterance – retroactively, so to speak. At the same time, the division at the superficial level does not correspond in any way to the actual information structure. That is, we are dealing with the same “pseudo-theme”, a rhetorical ploy that marks the connection between “Expansion” and “Elaboration”, which also allows for the “embedded equivalent” ④. See both versions of the literary translation:

² *Everything returned to the way it was before,* ³ *where it remains to this day,* ⁴ *of which you are well aware,* cf. ² *Everything returned to the way it was before* ³ *and (as you well know)* ⁽³⁾ *it remains so to this day.*

The final example shows that, even if the elements of the sentence are arranged in a strictly regulated manner (which in the case of Japanese is the most important factor in complicating the form of the “tree” of discursive relations), there are ways to overcome these restrictions. The speaker always has considerable freedom in terms of how to traverse the path of distorting the syntactic structure, or “diving under” it, dragging discursive patterns through formal patterns that do not coincide with them. Obviously, a second – and even more important – factor in the speaker’s choice, in addition to linguistic specificity at the structural level, will be the degree of preparedness of the speech. With a high degree of certainty, we can say that many of the problems we have looked at in this section would be mitigated by labelling them spontaneous discourse, and the reasoning would be closer to the formula “one EDU per logical step”.

Choosing Connectives

The practice of annotation pushes the researcher to depart from strict formal requirements for units that claim the status of connectives (for example, by virtue of the fact that they cannot be divided into mutually independent elements (Kobozeva 2016), as well as their location directly between the connected relations). Observing these units themselves reveals that this approach produces an even greater number of segments that are not connected with each other by any apparent means (and, as the summary table shows, the numbers are high as it is, but we will get to this later) – moreover, many units that do not receive a different pragmatic explanation and for which a certain sub-class of “quasi-connectors” need to be introduced, turn out to be outside this strictly limited category. A certain variability among connectives, which, by the way, follows the rather standard “flow-through” paradigm (Chironov 2019), can appear if we treat them as implementations of certain basic constants through speech (In’kova 2019). However, even for units that fall outside this system, the existing techniques suggest – and quite rightly, in our opinion – that we single out the connective role based on the actual function of the unit in the annotated segment. Here is an example to explain.

In Par. 87, the only pragmatic meaning of the expression *sono enchoosen-joo ni* is in the designation of “Causality” between the relations ③ and <④–⑤> (there is a reverse connection between the latter two, described as both “Goal” and “Level-of-detail”, which we will discuss later. An indirect confirmation of this approach is the partial *desemantization* of this phrase, which loses its original meaning of extrapolation here (we are talking about an event that has already taken place, after all!), although it remains formally built into the structure of the Japanese sentence as an adverbial of place:

³ 日本ではここ数年キャンプブームが盛り 上がっていて、その延長線上に	¹ <i>Camping has seen a boom in recent years in Japan, which is why</i>
⁴ 自然の中で楽しむ	⁵ <i>interest in Russian saunas is growing</i>
⁵ 野外サウナへの関心が高まっているの です。	⁴ <i>where everything happens in the bosom of nature.</i>

On the whole, we acknowledge the interpretation that the surface structure of a text can be the result of multi-stage transformations, especially in prepared speeches – where formal and stylistic goals cause the propositional “framework” of the phenomena being described can be obscured. On this basis, any trace at the surface level, such as base expressions, can be considered a verbal propositional link indicator of the “Goal” type. See the link between ④ and ③ in Par. 91, for example:

³ しかし、それらは	³ <i>But they were selected</i>
⁴ 「日本人観光客の実像やニーズ」に即して	⁴ <i>in accordance with the needs of Japanese tourists</i>
選んだもので、	<i>Therefore...</i>

Synonymous relationships, including temporal parameters, are seen between such indicators, for example in Par. 101:

² アフターコロナに備えて	² <i>Targeting the post-pandemic period</i>
³ 私が始めたいこと	³ <i>I am thinking about taking action,</i>
⁴ 以下お話しします。	⁴ <i>which I will talk about later.</i>

Expanding the circle of connectives on such fundamental grounds will, in our opinion, only enrich our understanding of both the variety of semantic links between text fragments and the ways in which finely nuanced intentions of the speaker are refracted.

In this sense, the functions of a connective can also be performed by a unit that is not only built into the structure of the sentence, but is also located in a position other than at the direct junction of the relations, for example the word *saranaru* in Par. 92:

¹ もちろん、サハリンにはさらなる魅力があります。	¹ <i>Of course, there are other things about Sakhalin that make it attractive.</i>
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Strictly speaking, the adverb *mochiron* (“of course”) already performs a function that is outwardly closer to that of a connective, and it acquires a secondary meaning here of opposition (that is, it recognizes the correctness of the point of view which goes against the inference suggested by the previous passage that Sakhalin has a limited number of charms). This trick uses the somewhat playful nature of this conflict of implications to capture the reader’s attention, as well as to block the appearance in the preposition of the transform of the adverbial transform of the same expression – *sarani*, which directly functions as an explicator of “Addition”.

Naturally this does not mean the uncontrolled expansion of the range of units that can be classified as connectives. For instance, the connectives that have been “shifted to the right” do not, as a whole, demonstrate more than a single distribution in the text we are looking at, yet they still turn out to be concentrated exclusively in a few semantic zones, of which “Addition” is clearly distinguished by frequency. As far as we can tell, this is partly due to the possibilities of syntactic transformations – primarily the operation known as “lifting” – where the “Addition” indicator is attached directly to the “anchor” word of the sentence, the semantics of which explain the connection of

the propositions. This is why most examples that demonstrate a similar phenomenon use the particle *mo*, cf. *and/as well* in Russian. See the relation between ③ and ⑥ in Par. 9:

³ 1990年代半ばからほとんど増えてい ませんでした。	³ <i>In the mid-90s, the number [of tourists] hardly increased at all [... but]</i>
⁶ 復調の兆しも見られ、	⁶ <i>there were signs of recovery,</i>

This method of linkage also functions successfully between more extended relations. For example, 1 in Par. 99 correlates directly via this method (and this method only) to 1 in Par. 98, and the remainder of the paragraph “Develops” it. In the same way, the relatively more “loose” connection of the type ⑩ – ① is always verbalized and specified:

98 ¹ ロシア文化に親しむことができる場 所があります。...	¹ <i>There are places where you can learn about Russian culture in greater detail...</i>
99 ¹ 日本にゆかりのあるスポットも残って います。	¹ <i>There are also points that are historically connected with Japan.</i>

At the meta level, the connecting meaning acquires a non-trivial interpretation, meaning attachment to the positive value of the attribute and its negative value. Then we are dealing with concession, as in Par. 23, which, incidentally, does not find any other expression in the example:

つまり、	<i>That is,</i>
¹ 地域の人にとって	¹ <i>for residents of the region who represent</i>
² 誇りある観光資源も、	² <i>pride recreational resources and those</i>
³ 相手によって	³ <i>for their guests</i>
⁴ 見え方が違ってくることもあるのです。	⁴ <i>may look very different, <u>here</u>.</i>

As we can see from the last example, Japanese is not the only language where this property consisting of verbalizers of concession relations is acquired by indicators of addition.

However, this approach requires a certain debugging of the semantic analysis tools and links, as well as of the role of the connectives themselves. For example, in a number of places, the question of assigning a unit to the class of connectives turns out to be a rather subtle matter. Specifically, in Par. 14, we initially attributed *jitsuwa* to the “Development” and “Elaboration” indicators between ① and ③-④:

この本は	¹ <i>To this book</i>
² 時事通信や朝日新聞など、	<i>the media paid much attention</i>
いくつかのメディアで注目されました。	² <i>specifically Jiji and Asahi.</i>
³ 実は彼らはロシア担当の記者で	³ <i>You see, it was specialists in Russian studies,</i>
⁴ 私にこう言いました。	⁴ <i>who told me this.</i>

However, another version appears in the second passage, where the “Elaboration – Detail” connection unfolds (starting from ③, the content already expressed in ① is specifically disclosed). In this case, the word *jitsuwa* does not act as a connective (a function it is nevertheless capable of performing, albeit in other contexts), but rather “simply” as a discourse marker that is intended to draw attention to material that the addressee is not aware of [8]:

¹ *A number of media outlets paid attention to this book, ² specifically Jiji and Asahi. ³ And, you know, it was specialists in Russian studies, ⁴ and this is what they told me.*

Another similar example can be found at the junction of paragraphs 17 and 18:

¹⁰ つまり、沿海地方への日本人旅行者数が5倍になったのです。	¹⁰ <i>That is, the number of Japanese tourists in Primorsky Krai has increased fivefold.</i>
¹⁸ 1 当然、日本とウラジオストクを結ぶフライト数が急増しました。	¹ <i>Naturally, the number of flights to Vladivostok has increased significantly.</i>

Here we can see that the adverb, while not itself an independent connective in the traditional sense, is included in the connector group, modifying the null vertex in it. The fact that this is the case is confirmed by the attempt to restore the syntactic environment of the adverb when its modification of the relation gives us a different meaning:

¹ 当然な{結果／こと}ですが、日本とウラジオストクを結ぶフライト数が急増しました。= *The natural result (from ⑩) was that the number of flights to Vladivostok increased dramatically. / The fact that the number of flights to Vladivostok increased was natural [by itself].*

To conclude our analysis of this example, it is important to say that there is another lexical expression that does more than reference an external evaluation premise and reflects the rejected version of our reading of ① – that is, one that performs a connective function. This is *shizen(na koto)*, which indicates an immanent property of an object, and not a consequence of another state of affairs.

Evidently, the “creeping mutation” of indicators between certain adjacent values is not limited to the specifics of a particular speaker. In many cases, the block-relation – the second in the pair of the “Expansion. Elaboration” type – begins with *mazu* (“first of all”). This is typically used as a discourse marker that points to the first in a series of

theses. However, in this case, it is not followed by other blocks, that is, it approaches the “Detail” indicator (Expansion. Instantiation) *naniyorimo* (“above all”). We should note here that the same thing happens in Russian.

In a number of cases, it is important to mention the ongoing process of attaching the connective function to a specific combination of units that occurs in a single context. For example, the combination of a restrictive particle and an instrumental indicator functions as an indicator of conditionality (this phenomenon is very common in Russian discourse, for example, with its developed functionality of adverbial participles, both with and without limiters). See Par. 103:

⁹ この地図が1枚客室に置いてあるだけで、	⁹ <i>Placing a single leaflet with a map in the guest's room,</i>
¹⁰ 日本の宿泊客はとても喜ぶと思います。	¹⁰ <i>we bring a great deal of joy to Japanese customers.</i>

In cases where units located in different parts of the extract clearly perform duplicating functions, the question of “broken” connectives arises. And it is not that hierarchical relationships model cannot be spotted between them – for example, the well-known “anchor-modifier” model, which is widely used, particularly in expressions of modality (Chironov 2021). It is true, however, that the existing analytical apparatus needs to be built up and reconfigured somewhat in order to comprehend them. For example, the post-positional *noda* is used for several types of connection, which can perhaps be described through the semantic invariant “Substantiation” (either “Development” or “Cause” in this particular text), both paired with a prepositive connective and by itself, closing the marked relation (to some extent, this echoes the text function of “underlining” that has already been described for it (Bass 2004). *Noda* has already appeared in the example of Par. 23, sharing the function of marking the beginning and end of the “Paraphrase” with the word *tsunami*. In Par. 69, *noda* single-handedly marks the link between the complex relations ⑥–⑧ and ①–⑤. Moreover, without it, ⑥–⑧ would not be the speaker’s interpretation of ①–⑤, rather, it would be a passing remark that makes binding via *chinamini*, meaning “by the way” (“Level-of-detail”) possible:

¹ 「サハリンにコーカサス系や中央アジア系の人たちが暮らし ² レストランがある ³ ことを知らなかった」 ⁴ これは多くの日本人にとって驚きだった ようで、 ⁵ サハリンに対する関心と呼ぶテーマと なったようです。	¹ <i>“Caucasians and people from Central Asia live in Sakhalin,</i> ² <i>they have their own restaurants, ³ and we don't know.”</i> ⁴ <i>This appears to be a revelation for many Japanese people,</i> ⁵ <i>and seems to be a point of interest.</i>
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⁶ 多くの日本人が ⁷ ロシアの多民族国家としての特性に想像力を働かせることができたから ⁸ 注目したのだと思います。	⁸ <i>That is, I believe that many Japanese people are interested in what</i> ⁶ <i>creates the image of Russia in their minds</i> ⁷ <i>as a multi-ethnic nation.</i>
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It is known that broken, or frame, indicators are characteristic of a number of languages, including Chinese, for example, where they are, to varying degrees, mutually complementary and optional. For now, it is clear that the question of the role and correlation of their components (especially in terms of modifying connectives), partially developed in the conceptual apparatus (In'kova 2019; Cheremisina, Kolosova 2010; Bass 2004) requires additional analysis.

At the level of question formulation, I would like to point out a subclass of rhetorical devices that act as “virtual connectives”. First, this is a constructive parallelism for the addition and contrast types, when the attention of the addressee is fixed on the repetition of elements, as for example, in the “logical trapezoid” of “as for A, then B is C, and as for D, then B there is E”. Another “standard” means of introducing additional information (and thus a signal for the addressee of such!) is through a non-restrictive definition, which we discussed above. In terms of discursive significance, presenting additional information in this manner is intended to both develop the narrative and substantiate the communicative step. And the choice will partly depend on the context. For example, in the clichéd forms of greetings we mentioned earlier, only EDUs of the second type are allowed when the greeting itself appears in a subordinate (left) position (the illocutionary type of causality is loosely interpreted here as “I have taken the floor and wish to introduce myself to you because so-and-so has taken place between us in the past”), while transferring this part to the post-position would sound like a slight bloating of one’s own relevance. Note that this has practically the opposite effect in Russian, a fact that highlights the difference between the two languages in the “weight” of the subordinate clause: I am Petrov. *I wrote you the letter* / ?? *I am the Petrov who wrote you the letter*.

As we can see from the table, the degree of serviceability of the connective by link type is far from the same everywhere. The general pattern is rather predictable here: links that are not self-evident from the presentation of the two arguments require more explicit designation. The heightened need for a connective is produced by “Concession”, which is almost always marked (in this text) as “Authorization”. At the opposite pole we have a type of link that is generally defined in annotation manuals as “topic-rheme” and “question–answer”. Moreover, while the “question–answer” purpose is performed in Japanese by the fixed expression *ka to iu to* (“or rather”), the “topic-rheme” link is not marked in any way at the level of relatives, which are more common than parts of a single sentence. Generally speaking, existing annotation systems contain a section on links that are not expressed lexically, and their descriptions (quite cursorily) repeat certain models that are designated in the Japanese tradition of non-connective types of link. Although it is true that in the latter case, they are more

likely understood as not allowing lexical implementation (Ichikawa 1978), we are talking about those for which it is possible to choose a lexical expression. But, for whatever reason, the author does not do this.

The question of preferences in the verbalization of connectives is itself an interesting area of psycholinguistic research. It is clear from the text we are looking at that the speaker deliberately avoids overloading his speech with explicit connectives, which serves, on the one hand, to invite the listener to participate (more) actively in the development of the topic and, on the other hand, to recognize their autonomy in the speech act. In formal terms, some correlations that contain indicators of cohesion can be observed in the text. They are often used to compensate for non-connective links, as in Par. 2:

¹⁰ 私の場合、東京をほぼ離れることはありませんでした。	¹⁰ <i>I've been in Tokyo almost all this time.</i>
¹¹ こんな1年を過ごしたのは高校生以来のことかもしれません。	¹¹ <i>I haven't had the opportunity to spend a year like this since I was at school.</i>

The appearance of a cataphora essentially expresses a link of “theme-rheme” variety, which is not otherwise marked. See the end of Par. 47 (the second relation ④ and the whole of Par. 48):

⁴ 次のようなことを地道に行っていました。	⁴ <i>I did a little of the following.</i>
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This kind of cohesion as a literal repetition is needed where there is a transition to the next block of narration – as in the “Addition” link at the discursive level, cf. SDRT Narration (see Par. 104):

⁴ 「旅アト」情報としては、	⁴ <i>From the information “after the trip”</i>
⁵ SNSを活用し、	⁵ <i>I think we should use social media</i>
⁶ サハリン旅行経験者の投稿を募り、	⁶ <i>to announce that we are collecting materials from people who have been to Sakhalin</i>
⁷ 拡散したり、	⁷ <i>and maybe post them</i>
⁸ コミュニティづくりを始めたいと考えています。	⁸ <i>to [thus] start building a community.</i>

An antecedent relation appears in paragraphs 102 and 103 and the first half of paragraph 104, which refers to previous types of works (‘before’ and ‘during’). They are all initially listed in these terms in Par. 42, so that the mere mention of them automatically structures the narrative.

Other cases where the ‘overlapping’ of connectives occurs is with discourse marking devices that squeeze these typically trans-categorical indicators of linkages – typically out of positions where it is purely about clarifying the status of large sections of a text, but also relative to each other. Here, the nuanced relationship between the concepts of connective and discourse marker are clearly manifested: the first addresses the issue of explication for the addressee, how one segment is connected to another; while the second generally deals with what is happening in communication at the present moment. While we do not presume to project the tendencies we have spotted onto Japanese discourse as a whole without the relevant statistical data to hand, we can note that the text we are studying, in which the author seeks to convey complex constructions to a foreign audience with backgrounds that are very different from his own, is replete with marking devices that, for the most part, point directly to the links between various parts of speech. The connectives accompanying these devices serve secondary, illocutionary functions, which we will discuss below.

Rubrication of Links between Relations

Identifying and describing the contribution of specific connectives to the meaning of a statement on the one hand, and clarifying the types of links between units of discourse on the other, are interrelated and “looped” tasks, two sides of the same coin, if you will, and they can only be explained in relation to one another. The complexity of the second task, which we will focus on here, in terms of annotating a given text, is manifested in the appearance of competing interpretations of specific relationships, which can sometimes be expressed by different indicators at the same time. This is perhaps seen most clearly with the conjunction *ga* – an adversative that plays more or less clear functions in the Japanese sentence, connecting segments with a variety of semantic connections (we have already seen such examples, and more will come). In addition to duplication and ambiguity, syncretic units of the “broad spectrum of action”, as well as links that are not accompanied by a common connective, cause headaches for the annotator.

At the discursive level, the semantic syncretism of indicators noted in grammars is manifested in the simultaneous appearance of both meanings: for example, Par. 3 allows both “Addition” and “Causation”:

¹ コロナ禍が2年目に突入し、	¹ <i>The pandemic has entered its second year</i>
² 海外からの旅行者が消えて久しいです。	² <i>and the flow of tourists from abroad has [thus/also] long since ceased.</i>

The spread of paratactic links further exacerbates the situation. What is more, the relatively limited impact of such difficulties is undoubtedly due to the nature of the material being studied, which is a measured and well-built reproduction of a certain

business concept. The sudden increase in the vagueness of the designation of the logical and semantic links between the elements of discourse when switching to quotations from individual spontaneous statements (in this case, user comments) is quite striking. See Par. 57:

⁵ 「ロシア人の生活にダーチャの存在が大きいことがわかった。	⁵ <i>It turns out that the dacha occupies a prominent place in the lives of Russian people.</i>
⁶ 多くの人が菜園を持っていることが	⁶ <i>Many people have their own kitchen gardens, which</i>
⁷ うらやましく、	⁷ <i>both cause envy,</i>
⁸ 憧れる」	⁸ <i>and look very attractive.</i>

The of the comment is not interested here in convincing the addressee of anything, altering their views and knowledge. He or she is driven exclusively by the desire to talk about their own experiences. This is why everything is lumped together in the thought process: causality/addition in ⑥–⑦, level-of-detail /addition in ⑤–⑥, and addition (accumulation) / concession in ⑦ – ⑧.

These links can only be seen in such instances of spontaneous speech, which are (quite rightly) excluded in the PDTB from hypophoric relations, although they are not attached to any group (of the type “Do you remember John? He’s had a son”) (Par. 59). They demonstrate features of the “Development” type, as well as “Causality” in the illocutionary sense. Using such constructions in the main text of a presentation would probably be seen as excessive familiarity. The weakly concessive *ga*, which places the opposition at the level of differences in narrative plans, does not clarify this situation at all:

² 「鉄道好きの日本人は多いが、	² <i>Many Japanese people are avid trainspotters</i>
³ 日本との歴史的なつながりを強く感じさせる」	³ <i>And here you can sense the full force of the historical connection with Japan.</i>

There are many ways to solve these problems. First is the consistent application of the concept of diverse connections between EDUs at the propositional, illocutionary and discursive levels. Formulated as a way to evaluate the meaning of connectives (In’kova 2019), it is, generally speaking, already included in the formulations of links in the PTDB as markers with the extensions -speech and -belief. Applied in the current system primarily to indicators of causal dependency, these ideas could well be extended to other categories of relationships, as shown in the table.

For instance, in the example below, at the propositional level between ② and ①, the “Development” – “Clarification” link (PDTB Expansion.Level-of-detail, which is different from Expansion.Elaboration “Detail” in that the relevant relation introduces information that does not lend itself to further reasoning; the SDRT annotates this

type as Commentary) remains unmarked, while the opposition at the illocutionary level (the transition from meta-comment to the main narrative) is verbalized, because the “weakly concessive” connective conjunction *ga* connects the relations (Par. 13):

¹ 手前ミソな話をさせていただきますが、	¹ <i>Speaking of myself again,</i>
² 私は	² <i>I was counting on the introduction of e-visas,</i>
³ 2015年頃より噂されていた	³ <i>which was brought up in 2015.</i>
極東ロシアにおける電子ビザ発給を見据え	

Such examples confirm the nonlinear, “volumetric” nature of connections, even between juxtaposed EDUs.

Another criterion is the possibility of replacing or restoring the connective. The latter is especially significant given the trend towards their use as a means of disambiguation, if not in all, then in a significant part of the examples. To illustrate, the example below satisfies the understanding of “Addition” at the illocutionary level – when the connective becomes the recoverable indicator “and I also have to say A2” (Par. 7) (otherwise the speaker faces different tasks to the analyst, although this is not the case in this context):

² ロシアを訪れる日本人観光客はこの10年一進一退を繰り返しています。	² <i>In the past decade, the number of Japanese tourists in Russia has periodically risen and fallen.</i>
³ [そして]2019年は80,313人でした。	³ [<i>a</i>] <i>a total of 80,313 Japanese tourists visited Russia in 2019.</i>

Indirectly related to the difficulties of rubrication mentioned above are the numerical results shown in the table above. We are talking here about the uneven distribution of semantic categories of links between segments of the text we are looking at. Besides addition (which should perhaps be recognized as the basic formula for linking two statements – that is, in a sense, it is the indivisible remainder when any clearer pragmatic meaning cannot be singled out from their connection), two areas of meaning are obvious: causality and development. What is more, an in-depth analysis of contexts reveals that these meanings have expanded into adjacent areas. Causality thus “intrudes” into the zone of temporal indicators and “absorbs” their values (creating a difficulty that is common in rubrication). See Par. 36:

⁵ 何度も通ううちに、	⁵ <i>During your time there,</i>
⁶ その土地の文化をだんだん理解してくるようになる。	⁶ <i>you gradually start to understand the culture of the place.</i>

Generally speaking, a special indicator is used to express this syncretic meaning – *X ni tomonai*, although the author uses a more colloquial variant here, thus giving the listener the chance to restore the causal meaning more subtly and unobtrusively.

Another example where causality invades the zone of interaction between conditional and temporal relations (albeit in a secondary role) can be found in Par. 105:

⁴ あくまでコロナ明けが確認されない限り、	⁴ <i>Until it is clear that the pandemic is behind us,</i>
⁵ 動き出せません。	⁵ <i>nothing can be put in motion.</i>

Analysing the text at the level of the author’s intentions reveals that another causal meaning (“Goal”) manages to “drive out” Contingency, namely (“Goal”). See Par. 108:

⁷ 情報を送っていただければ、	⁷ <i>Send your information</i>
⁸ 記事化しますし、	⁸ <i>and I will use it in articles.</i>

We are, of course, not talking about a condition here, the fulfilment or non-fulfilment of which would lead to an unknown result for the addressee that they should be informed about. Rather it is an appeal: *send information to me so that I can write articles*, not * *if you send me information, I will write articles, and if you don’t, I won’t*.

It is only when annotating the text that this attracts attention, as it forces you to think about the motivation for introducing a given piece of information. In this sense, the rubric of causality also includes link types (and groups of indicators) that do not typically appear in this rubric, such as *toshite* (“in the capacity of”). See, for example, Par. 5:

⁵ またインバウンドツーリズム評論家として、	⁵ <i>As well as being an observer of how foreign tourists are received,</i>
⁶ 訪日外国人に関わるさまざまな問題を批評してきました。	⁶ <i>I analysed various aspects of the trips of foreign tourists to Japan.</i>

In the above example, we are dealing with propositional causation. Look at the example with *toshite* illocutionary causation in Par. 85:

¹ 私の考える	³ <i>It is easy to talk about Russian life and culture, and about a simple, measured life</i>
² サハリンの魅力としての	² <i>as factors that make Sakhalin an attractive tourist destination</i>
³ 「ロシアの生活文化」と「スローライフ」を最もわかりやすく伝える	¹ <i>As I see it,</i>

⁴ 観光素材に、	⁴ <i>this includes such travel topics</i>
⁵ ダーチャやバーニャがあると思っています。	⁵ <i>as “dacha” and “banya”</i>

② – ③ supports the meaning of “Causality” in the sense that ② indicates the reason why the speaker is talking about the content of ③.

The intrinsically linear link that “Causality” demonstrates between adjacent segments at the deep level is also capable of expressing the “bend” in the sentence structure (discussed earlier), which nevertheless “flattens out” when a “two-storey” construction is reduced to “Causality” with a propositional actant, as in the case of ⑧–⑨ (Par. 84). In the translation column, we attempted to apply the technique used by a simultaneous interpreter, who resorts to a “naked” discursive structure not out of theoretical interest, but for the sake of saving time:

⁶ 電子ビザ発給以降の	⁶ <i>After e-visas were introduced</i>
⁷ 旅行者は、団体ではなく	⁷ <i>people have started to book fewer group package tours,</i>
⁸ 個人旅行者が増えることを	⁸ <i>and are choosing to travel independently,</i>
⁹ 意識する必要があります。	⁹ <i>{and this/which} needs to be taken into account.</i>

There are also completely unexpected examples where causality is “hidden”, even in a citation construction that does not fit the definition of “Authorization” (where it could be attributed to the most superficial analysis of the text), as in Par. 16:

⁹ ...意味が大きいと	⁹ <i>This is a significant result,</i>
¹⁰ 自負しています。	⁹ <i>which was a reason for me to be proud.</i>

Using the transformational explanatory technique, we can say that the “logical form” of this statement (“I am proud because the result is significant”) is subject to a number of pragmatic restrictions (constraints), in addition to lexical selection that in Japanese excludes even intermediate options such as “The result is significant, so I am proud” (in this case, instead of the quotation indicator – which, among other things, also cancels the factivity ⑨! – there would be a converb).

The causal saturation of the text is even clearer if we take the possibility of multidimensional connections (recognized by PDTB) into account. See, for example, Par. 16:

² 現地取材を通じて	⁵ <i>It is a guidebook where</i>
³ 「日本人観光客の実像やニーズ」に即した情報を	³ <i>information that Japanese tourists actually want</i>

⁴ [しかも]コンパクトにまとめた	⁴ [is additionally] collected in a compact form, собрана компактно,
⁵ ガイド書であることです。	⁵ which is why the author himself went there.

An even more active “intruder” of related semantic categories is the group of meanings categorized under the heading “Development”, the reason for which is likely the very nature of the presentation itself. In cases where doubts arose during the annotation process about the correctness of attributing a link to a given type, the “Development” category would typically be far ahead of all the rest. See the conclusion to Par. 93 (“Generalization” leads to this conclusion through the word *tsunami*), where “Expansion. Elaboration”, rather than “Addition” appears between ⑧ and ⑨:

⁸ つまり、観光PRにはふたつの段階があり、	⁴ That is, there are two stages to tourism publicity,
⁹ そのときどきですべきことは違ってくるのです。	⁹ { and this means that } each of them has different tasks.

There is some uncertainty here in the wording of annotation systems, where a number of categories under the heading “Development” – primarily “Expansion. Level-of-detail” – actually imply that circumstances (in the broad sense) that appear to be significant for the narrative are assigned greater value. And indeed these circumstances can initially be significant from the point of view of causal dependence or the violation of such dependence. That is, “Development” competes with, or even surpasses “Causality”! In a number of examples, this seems justified from the point of view of separating “uniquely causal” and “uniquely opposing” indicators with ambiguous, virtual (constructive) or zero meanings. And in several cases, it is rather difficult to deduce whether it is an explanation or a concession in the text, and what the intention of the author was when highlighting a given detail. See, for example, Par. 94:

⁵ 廃墟美といってもいい、	⁴ The wonderful, one might say, ruins,
⁶ アニワ灯台に惹かれる日本人は多いはずです。	⁶ of the Aniva Lighthouse are likely to be of great interest to many Japanese tourists.

It would appear that “Clarification” is truly a convenient category in such cases, although, one way or another, a certain tension remains at the deep content level of analysis.

Sometimes this connection takes the form of rather cunning expressions, for example in Par. 83:

³ サハリンのスローライフという	⁴ <i>Our target audience should be Japanese people who appreciate</i>
⁴ 価値に	<i>the value</i>
敏感な日本人をターゲットに設定しましょう。	³ <i>of a quiet and slow-paced life on Sakhalin.</i>

Here, *toiu*, which often expresses “Equivalence” (PDTB Expansion. Equivalence), both at the propositional level (paraphrase) and at the meta-level (definition), is used to express the idea that a slow-paced life is a value. This corresponds to another type of connection, namely, “Level-of-detail”. As we can see, the Russian construction serves to “drag” a new and informative proposition for the addressee under the “flat” syntactic structure [THE QUIET AND SLOW-PACED LIFE ON SAKHALIN IS VALUABLE], which certainly represents a separate relation here.

True, the question of the degree to which the content of a statement that is no longer an assessment, but is rather an existential presumption (even if it is substantive for the addressee) can be considered a separate EDU likely requires a more subtle analysis – see, for example, how it is “split” from ② in Par. 89 a few paragraphs later (where this option would in any case “flatten out” the non-linear form in which the segments are presented).

As we can see, the connections “Causality” and “Development” also compete in implicaturely saturation non-restrictive definitions (more precisely, they are closely intertwined). See Par. 62:

¹ みんな海外旅行に行けないので、	¹ <i>No one is allowed to travel, and</i>
² その悔しい思いを共有した	² <i>sharing this frustration,</i>
³ 多くの人たちが参加し...	³ <i>many participants formed a group...</i>

The very content of the definition in ② allows us to interpret it as an indirect indication of the reason for this particular action – which would not be the case if the definition was not as loaded with implications (for example, it was lonely people, or people with powerful computers, living in the north of Japan who got together – although, as we can see, logical connections are involuntarily established in all variants by the fact that the people met up, and if they had not, the passage would lose its relevance). In this reading, the parallel definition in ③ encourages us to consider these segments separately. An alternative interpretation would place it as a participant in the “Development” – “Expansion. Level-of-detail” relationship: ¹ *No one is allowed to travel, and* ² *those who shared this frustration got together in a large group* ³ ...

At the same time, the approach we mentioned earlier, which allows for the distribution of different levels of connections, consistently demonstrates the transition to more discourse-oriented categories (in other words, a shift down the table), where the analysis becomes deeper, moving away from the superficially expressed categories

that occupy the rows that are higher up in the table. See the borderline case between “Comparison” and “Level-of-detail” in Par. 107 (moreover, the indicator of the former in the surface structure is again duplicated by a “fictitious” construction with a predicate actant, which meets the need for the expression to be moved to the right):

¹ ニュースサイトでは、彼らが送ってくれた 地元の話題やイベントを撮影した写真や情報を編集して	¹ <i>The news site edits the local news and videos of various events it receives</i>
² 記事として公開している	² <i>and publishes articles based on this information,</i>
³ ことは先ほど述べたとおりです。	³ <i>as I mentioned earlier.</i>

Naturally, the problem of unequivocal categorization and the competition of interpretations are also evident within the category of “Development”, that is, at the very bottom of the table. This can be illustrated using an example of “Authorization”, used here in accordance with the Attribution relationship as defined in the SDRT. All its representatives are without exception marked by verbal or reference citation constructions. The justification of this technique is evident from the polypredicative and polypositional nature of such examples. But the rather fuzzy transition between what are clearly separate quotation-like constructions (see *There is always a single truth. This is what the Pharoah said*: there are two separate discursive units, this is beyond doubt, although probably even at this stage it does not cause absolute rejection, and we can see this connection as one of “Development” – “Level-of-detail” or “Elaboration”), and, it turns out, all experiential constructions, where the observer is always “bracketed” by the perceived situation, raises questions. Closer to the opposite end of the spectrum are all constructions with predicate actants, which, as we know, are not automatically assigned the status of separate discursive units.

One way or another, “Authorization”, if introduced as a separate heading, is constantly trying to “pinch off” the borderline values from its neighbours in the “Development” category. For example, the connection between ④ and ⑤ in Par. 14 outwardly satisfies the first category, but at a higher level of generalization, it appears to be a kind of “Detailing”. This is clearly facilitated by the fact that, as a source of information, the link leads to the speaker him/herself, a fact that moves us away from the authorization prototype:

⁴ 私にこう言いました。[つまり]	⁴ <i>I told them this [specifically]</i>
⁵ 「このような極東ロシアの魅力的な観光や生活文化の明るい側面をまっすぐ紹介する旅行案内書はこれまでなかった。...	⁵ <i>that, up until now, guidebooks have not talked specifically about the culture of the Russian Far East and its attractiveness as a tourist destination...</i>

The use of a citation construction with the introduction of a distributor allows for a different interpretation, which we can subsequently attribute to the “Level-of detail” category (Par. 69):

¹⁰ 私は	¹¹ <i>The Far East</i>
¹¹ 極東ロシアはユーラシアのゲートウェイだ	<i>is the gate to Eurasia</i>
といろんな人に言っています。	¹⁰ <i>and I have said this to all kinds of people.</i>

The closer the situation is to “Development”, the blurrier the subject of speech looks in the citation construction. For example, in Par. 21, ③ and ④, in reverse order, represent an example of “Generalization”:

³ 具体的にいうと、	³ <i>To be specific,</i>
⁴ 「いま日本人はロシアのどんなところに興味・関心があるのだろうか？」	⁵ <i>this is the main question:</i>
⁵ について知ることが重要です。	⁴ <i>“What is it about Russia that is of interest to Japanese people today?”</i>

As we can conclude from these examples, “Authorization” itself is, first and foremost, clearly a subspecies of “Development” (which “prescribes” the SDRT category in the PDTB). Second, we should clarify that not all citation constructions can be placed under this heading – only those whose informational contribution consists in indicating the source of information. This excludes all citation constructions where the author is the subject of speech (Par. 30):

⁵ 同じことを極東ロシアでも採用すべきだ	² <i>This experience should be applied to the Far East.</i>
⁶ というのが、私の考えなのです。	⁶ <i>That is what I believe.</i>

Here, ⑥ serves as “Expansion.Level-of-detail” for ⑤.

In accordance with this “agency”, sases that outwardly fall under the categories of “Concession” and “Comparison” should be carried out with an illocutionary verb with the subject in the first person (Par. 43):

¹⁰ これを考えるとときに重要なのは、	¹⁰ <i>what is important in this sense?</i>
¹¹ 何度も言いますが、	¹¹ – <i>and I talk about this all the time</i> –
¹² 相手の視点で情報を選ぶ必要があるということです。	¹² <i>it is to select information that will be interesting to others.</i>

In the somewhat specific “script” genre (different from what would simply be read out), “Authorization” finds a nonconventional manifestation in the use of quotation marks, which serve a specific purpose in the sign system of the Japanese language (Zverev 2014). See Par. 36:

¹ なぜそれだけで満足なのだろうか？	¹ <i>What are they so happy about?</i>
² と思う方もいるかもしれませんが、	² <i>someone might ask</i>
³ 「近いから気軽に何度でも行ける」	³ <i>“It’s close by, you can go there again”</i>
⁴ ので大丈夫なのです。	⁴ <i>hence the guaranteed success.</i>

In fact, we can talk about the introduction of the non-verbalized relation – “Level-of-detail” to ③ [*this is what the tourists themselves think*]. Conversely, if this part is excluded, then we would think that this is what the author him(her)self believes, which contradicts the obvious interpretation. It turns out that in writing quotation marks form a kind of virtual “by the way”. In spontaneous oral speech, such ambiguity can be removed by using a specific marker of “foreign speech” – *ttende* (Maynard Senko 2005).

Using the example of the “Authorization” subcategory, we have shown the complexity, as well as the need for a finer rubrication, of those semantic zones that account for the main load of links between EDUs.

A separate topic is the distribution of connectives by the volume of linked relations. As we can see, some of them tend to use paragraphs, rather than sentences, in their arguments. This includes, in addition to *mazu* (which we have already mentioned), *jitsuwa*, which we have also discussed above. See, for example, the role the word plays in the “Digression/Excursion” from the main line throughout the whole of Par. 89, which then turns out to be an additional argument to the general conclusion presented in Par. 90 (which is in turn explicated by *desukara*):

88 ¹ 先ほど触れませんでした、 ² ハバロフスクのバーニャの記事が多く読まれています。	¹ <i>Like I said,</i> ² <i>people read a lot about Russian baths from Khabarovsk.</i>
89 実は、 ¹ ウラジオストク出身の ² 私の友人が最近、(³ バーニャジャパンという) ^{2a} 会社を設立し、 ⁴ ロシアの移動式バーニャの販売を始めています。 ⁵ 自然の中でサウナを楽しむことに多くの日本人が憧れています。	<i>In general,</i> ² <i>a friend of mine,</i> ¹ <i>who is from Vladivostok,</i> ^{2a} <i>set up a company,</i> ³ <i>Japan Banya,</i> ⁴ <i>selling mobile saunas in Japan.</i> ⁵ <i>Japanese people love the idea of bathing surrounded by nature.</i>

90¹ ですから、多くの日本人がロシアでダーチャやサウナを体験したいと思っています。² 日本から最も近いサハリンこそ、³ その受け皿となることを考えてはどうでしょう。

¹ So, I think that many people in Japan would like to try out dachas and Russian bathhouses for themselves. ² Sakhalin, as the closest Russian region to Japan, ³ could become a point of application for this interest.

Level-of-detail, separating connectives on this basis, should be included as an obligatory item of the checklist used in their study.

Sometimes, as our observations show, it is at the junctions of relatively longer excerpts that the absence of a connective forces the listener to be more involved in what is being said – like it or not, they have to deeper into the words that are spoken in order to better grasp the author’s main point. So, after offering an intermediate conclusion following Par. 93 that lasts up until Par. 100, the author lists specific cases that back up his position, but he does not accompany this with any discourse marking. Detailed markings such as *tatoeba* (“for example”), *mata* (“also”), etc., would without a doubt make it easier to understand, but, at the same time, they would reduce the impact of the tension created by their absence for the listener, making the text excessively “spoon-fed”.

The process of identifying and refining semantic categories and placing them in one structure or another, including in terms of hierarchical relations, is ongoing, and here the data from various annotated texts would definitely help clear things up. That said, based on the limited amount of material we have studied, we can nevertheless say the following. To be sure, the difficulties that arise are partly related to the lack of clarity of the description language itself. But, in many ways, they exist due to objective proximity, even diffuseness, the interpenetrating nature of phenomena, and, not least, to the fact that, in a real communication situation, the speaker does not feel the need to do away with ambiguity, to dot all the I’s, if his or her speech intention is read by the addressee and the perlocutionary effects are achieved. This means that “spikes” and “overlaps” between adjacent types of logical and semantic links.

Conclusions

The observations we have made confirm the hypothesis about the complex, multifaceted structure of connectives in discourse (Webber, Joshi 2012). But this much is also suggested by the very lexical form of verbalized connectives, at least in their “two-storey” manifestation, where a more general element, not necessarily an initial element (see the case of *noda*), serves a pragmatic invariant, and its pair a logical and semantic variation.

This can be seen everywhere: “Addition” turns into “Development”, and is often identical to it; “Development” works hand in hand with “Cause” (see the example we discussed earlier, where level-of-detail is interchangeable – where cause comes after effect). In such cases, the development of A1 proceeds by reinforcing it with back-

ground facts, which corresponds to the understanding of causality in the illocutionary sense: (A1. I can say this because A2 is correct); this is labelled Contingency. Cause+SpeechAct.Reason in the PDTB, that is, it belongs (rather arbitrarily) to the upper category of “Conditions”, rather than “Development”. It turns out that “Causality” co-opts “Contingency”, and “Motivation” connects it with “Discourse Development” – provided that everything that is worth expressing explicitly must be motivated first and foremost. Perhaps a minimalist from the school of Universal Pragmatics would postulate the semantic substratum of all connectives: “Relation 2 is motivated by Relation 1”. However, we still likely need a somewhat more “granular” description, where clarification and reclassification of the category would be associated first of all with the selection, in addition to logical links, of their discursive “projections” (just like the perlocutionary level for illocutionary categories).

Of course, analysing links is not the only solution to the question of the complex ordering of “degrees of penetration” in the speaker’s intentions. This can be illustrated using the example of Par. 104, where, within the rather protracted appearance of connective indicators of the “Addition” type, *mo* and *sarani* demonstrate a certain pragmatic logic in segment ③ (relation – antecedent ① as the entire Par. 103 and the subsequent chain):

¹ 資金的なサポートがあれば、	¹ <i>If we get financial support</i>
² サハリン観光のアプリを開発し、	² <i>[then], having developed Sakhalin’s tourist potential,</i>
³ さらに現地で役立つ情報を配信することもできると思います。	³ <i>useful local information can then be sent out.</i>

At the primary annotation level, 2 and 3 here are linked by an unlabelled “Addition” relationship, while 1 and the chain 2–3 is labelled with a conditional link. However, in the traditional sense, the conditional connection, which, as we know, is a kind of causal connection, where the propositions and relations have a non-positive value of the attribute of reality, still looks somewhat different and assumes that at least the first proposition is known to the addressee or at the very least can be deduced from the context. If we rephrase the entire paragraph so that it follows the step-by-step introduction of new information for the reader, we get:

³ *Useful local information can be sent out.* ² *In order to do this, Sakhalin’s tourist potential must be developed,* ¹ *which in turn requires financial support.*

Now, instead of indicators of addition and conditionality, we have two target relationships. The information could be presented in the same manner in Japanese, but the author decided not to do so. Why? Evidently, the point was to hide what otherwise could be considered a direct appeal for investment, which would violate the unspoken etiquette of such speeches. By moving the section that mentions money from the “Means” category to the “Condition” category, placing it at the very beginning of the

fragment, the author makes the issue “invisible”, so that the listener hears the information without yet knowing what it refers to, and when it can finally be put into context, the “ship”, as they say, had “long sailed”: money is no longer the focus of the speech act. The principle of left branching in the Japanese sentence can be considered to have nothing to do with it: after all, the same tactics can be used in Russian to achieve the same goals. It is thus all the more important to have a tool for clearly labelling deep and surface structures based on the analytical categories of links and the explicator-connectives.

On the whole, the experience of text annotation has proved to be an important way of verifying theoretical postulates, unambiguously enriching both ideas about the content-related parameters of the internal structure of the text and the language of its description. Of course, annotation does not allow you to “test” all the provisions about the functioning of connectives. Issues of the structure of individual subfields, semantic subfields, and the effects of the formal variability of connectives are beyond the scope of this paper. In this regard, a promising area for further study would be to expand this work to various types of speech products, which could lead to the creation of a more extensive database of (differently motivated!) examples. The possibilities of the methods of paraphrasing and substituting speech units that we have demonstrated testify to the relevance of such test methods, both in terms of the opinions of informants and the results of questionnaire studies.

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