IT GOES WITHOUT SAYING: DENEGATED ASSERTION IN JAPANESE*

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I propose an analysis of the Japanese sentence final element *jan* as a speech-act denegation operator within the framework of commitment space semantics, thus explaining properties of *jan*-utterances that have so far eluded a unified account. The analysis shows how denegated assertions are used by example of Japanese *jan*-declaratives, providing a new perspective on expressive sentence final elements in Japanese and discourse markers in general.

The aims of this paper are: (i) finding a new, unified generalization to capture uses of *jan* not adequately accounted for by extant research, (ii) showing that Japanese *jan*-utterances are natural language instances of denegated assertion, which is a theoretical possibility in commitment space semantics, and (iii) formalizing the new generalization in an analysis of *jan* as a denegation operator, thereby explaining the conveyed meaning of *jan*-declaratives on their various uses. The paper is structured as follows. Section 1 discusses Japanese *jan*-utterances instantiating the uses that are the empirical focus of the paper and provides a new generalization to be implemented in the analysis. Section 2 introduces denegated assertion within the framework of commitment space semantics as a basis for the analysis. Section 1 and discusses how this analysis accounts for various uses of *jan*. Section 4 closes with a conclusion and outlook.

1 Japanese Jan-utterances

The empirical focus of this paper is the Japanese sentence final element *jan*, also labeled after its less reduced forms *janai*(*-ka*) and *dewanai*(*-ka*) in the literature. *Jan* does not alter the descriptive (or truth-conditional) meaning of an utterance, but adds to its expressive (or use-conditional) meaning, on my view by altering the speech act it occurs in. In this section, I provide an overview of the morphosyntactic properties of *jan*, discuss examples for three typical uses illustrating its contribution to utterance meaning, and propose a new generalization as the central desideratum for the analysis.

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1.1 The Morphosyntax of *Jan*

Morphologically, *jan* is a reduction of a string consisting of a negated copula *dewanai* and a question marker *ka*, which tends to be dropped with the most reduced copula form *jan* and is optional with less reduced forms. The process of reduction is not purely diachronic, but synchronically fully reconstructible, as evidenced by the availability of all forms shown in (1).

(1)	dewanai (-ka)>	janai (-ka)	>	jan
	COP.NEG INT	COP.NEG INT		jan

Both the forms *dewanai* and *janai* are also used as the negated copula, while *jan* is unambiguously the expressive sentence final element of interest here. While there is considerable variety in register, dialect, and sociolect as to which form is used, I limit the empirical scope to utterances with *jan* and without interrogative *ka* to disambiguate towards the sentence final element.

The strings *dewanai-ka* and *janai-ka* also occur in polar interrogatives with outer negation and final falling intonation conveying (weak) speaker assumptions. These can be distinguished from *jan* as they, just as the negated copula, require intervention of a (morphologically nominal) complementizer *no* when following a tense morpheme, while *jan* and its less reduced forms can directly follow tense. This contrast is illustrated below, where in (2) and (4), the complementizer *no* (or its reduced form *n*) is mandatory, in contrast with (3) and (5).¹

- (2)Jon-ga ku-ru *(no) dewanai-ka. (4) Jon-ga ku-ru *(n) janai. PN-NOM come-NPST COMP COP.NEG PN-NOM come-NPST COMP COP.NEG-INT "It's not John that is coming." "Maybe John is coming." (5) Jon-ga ku-ru jan(ai). Jon-ga ku-ru dewanai-ka. (3)
- PN-NOM come-NPST *jan*-INT "Isn't John coming."
- (5) Jon-ga ku-ru jan(ai). PN-NOM come-NPST *jan* "John is coming *jan*."

(2) is a polar interrogative with outer negation conveying an assumption of the speaker, while (3), where the negated copula directly follows tense, is an instance of non-reduced *jan*. The salient interpretation of (3) is a confirmation request reading on which the speaker seeks to confirm the truth of the prejacent with the addressee, similar to the English falling interrogative paraphrase. Next, negation in (4) is propositional in contrast with both (2) and (3), and typically targets a constituent within the clause headed by the scope-adjusting complementizer, like "John" in the English paraphrase.

The empirical focus this paper are utterances like (5), where *no* is not mandatory, reduction to *jan* is possible, and *ka* is dropped. As the English paraphrase suggests, *jan*-declaratives like (5) are close in communicative effect to assertion with some expressive meaning added by *jan*. I will claim that they are, in fact, denegated assertions, with uses distinct from confirmation requests with *dewanai-ka* like (3). Thus, while *jan* is (at least diachronically) related to outer negation in polar interrogatives, it is morphosyntactically and semantically distinguishable from them as well as from its less reduced forms.

¹It should be noted that *no* can also be added to (3) and (5). In such cases, *no* does not function as a sentencestructuring (or scope-adjusting) complementizer, but as a speech-act modifying particle contributing to the expressive meaning of the utterance — see Rieser (2017a) for discussion and analysis.

1.2 Uses of Jan

The function of *jan* has often been discussed along with other markers of confirmation requests such as *daroo* and the particle combination *yo-ne* in the Japanese descriptive literature without differentiating *jan* from less reduced forms like *dewanai-ka* in (3), thus effectively reducing all uses of *jan* to confirmation requests. Below, I discuss examples for three typical uses of *jan*-declaratives I take to be unambiguously distinct from confirmation requests: the noticing use, the confirming use, and the reminding use. Examples for the first two are adapted from Hasunuma (1995), who provides them as cases where out of the confirmation request markers *janai(-ka)*, *daroo*, and *yo-ne*, only *janai(-ka)* can be used.

1.2.1 The Noticing Use

The example in (6) illustrates the noticing use of *jan*-declaratives on which they convey speaker surprise over an observed fact denoted by the prejacent. They are potentially soliloquous utterances in that they do not require the presence of an addressee to be felicitously uttered.

(Scenario: S is opening a box.)

(6) S: Nan da, karappo jan. what COP empty jan "What's that, it's empty jan."

This is an exclamative utterance in the sense that what is informative about it is the speaker's attitude of surprise, whereas the fact that the box is empty can be observed in the utterance situation. This is not the case on an information-transmitting reading brought out by an alternative scenario in which the speaker opens the box and, upon noticing that it is empty, calls out to the addressee to convey this information. In such a scenario, bare assertion would be the unmarked option, and adding *jan* convey that the speaker assumes the addressee already knows that the box is empty. This notifying use of *jan*-declaratives is close to the reminding use discussed below.

What the soliloquous version of the utterance as shown in (6) thus conveys is that the speaker has noticed the state of affairs denoted by the prejacent — hence the "noticing" use — and that this observation is (somewhat) surprising. However, the noticing *jan*-declarative does not seek to update the common ground in the way that an information-transmitting assertion of the prejacent would, and does not convey that the prejacent is common knowledge of the participants like a notifying *jan*-declarative would.

1.2.2 The Confirming Use

Next, (8) shows an example of the confirming use of *jan*-declaratives. The utterance conveys agreement of the speaker in reaction to a confirmation request uttered by the addressee.

(Scenario: A is trying on a jacket.)

- (7) A: This jacket is lovely *daroo*.
- (8) S: Un, nakanaka niat-teru *jan*.
 yes pretty suit-PROG *jan*"Yeah, suits you pretty well *jan*."

In contrast with the noticing use of *jan* in (6), (8) does not convey surprise of the speaker over an observed fact, and is not a soliloquous utterance. Rather, the *jan*-declarative signals compliance with the confirmation request uttered by the addressee in (7) — hence the "confirming" use. While the utterance would be felicitous without *jan*, adding it conveys a speaker assumption that the addressee is already aware of the speaker's compliance. In this sense, confirming *jan*-declaratives do not only confirm the truth of the prejacent, but also that it is already part of the common ground.

1.2.3 The Reminding Use

An example illustrating the reminding use of *jan*-declaratives is shown in (10). In contrast with the noticing and the confirming uses, the prejacent is neither an observed fact nor a proposition set up for addition to the common ground by the addressee, but rather a previously established fact.

(Scenario: S and A are at a restaurant.)

- (9) A: "Why did this come?"
- (10) S: Kimi-ga tanon-da jan. you-NOM order-PST *jan* "You ordered it *jan*."

In reaction to (9), which suggests that A forgot about the prejacent of the *jan*-declarative, (10) is uttered to remind the addressee of it — hence the "reminding" use. While confirmation requests can be used for such reminders as well, underlining that *jan*-declaratives on their reminding use are close in function to them, S's utterance does not require a reaction from the addressee like a confirmation request would — that is, the status of the prejacent as part of the common ground is not under discussion. Rather, the prejacent is simply presented as common knowledge that the addressee appears to not be considering.

1.3 Generalizations on the Contribution of Jan

From the observations so far, I conclude that *jan* has fully developed to an expressive sentence final element the contribution of which can not be reduced to a use of *janai*(-*ka*) confirmation requests. Therefore, an independent analysis of *jan*-declaratives is warranted. As the basis for such an analysis, I suggest a new generalization after showing that extant generalizations do not adequately account for the uses of *jan* discussed above by three examples from previous research.

1.3.1 Extant Generalizations

Extant generalizations account for *dewanai*(-*ka*) / *janai*(-*ka*) utterances like (3) and connections to other markers of confirmation requests. However, they can only partially account *jan*'s uses, as the following three generalizations from the literature exemplify.²

Hasunuma (1995) claims that only *janai-ka*, but no other markers of confirmation requests can be used when the utterance is exclamative in the sense of conveying that the speaker has made a new observation in the utterance situation. This view is compatible with the noticing use of *jan*, on which I take it to convey semantic mirativity in the sense of Rett (2011). However, the confirming

²It must be stressed that the authors quoted below do not differentiate between *janai-ka* and *jan* as a sentence final expressive element, thus do not aim to reach independent generalizations on the latter.

use is not necessarily mirative, and the reminding use is neither mirative, nor does it convey that the speaker has just observed the prejacent.

Adachi (1999) proposes that *janai-ka* marks shared information, which I take to mean a shared belief of the participants. This view applies most straightforwardly to the reminding case, in which the speaker marks the proposition as common knowledge. As for the noticing use, while an observation made by all participants can be a shared belief, noticing *jan*-utterances are potentially soliloquous, which poses a problem for this generalization. Regarding confirming *jan*-utterances, while (8) does convey that the speaker deems the prejacent somehow apparent, it seems that there would essentially be no point in the exchange if the prejacent of S's utterance were already a shared belief to begin with. Also, there are cases which I will discuss after the analysis is in place (*cf.* section 3.3) which show that *jan* can be licensed by speaker commitment to a prejacent the addressee apparently deems false, suggesting that shared belief is too simple a generalization.

Miyazaki (2002), based on the assumption that *janai-ka* has developed from polar interrogatives with outer negation expressing speaker assumption like (2), proposes that these, but not *janai-ka*, convey that the speaker is unsure about the prejacent, while both introduce a proposition in contrast with the context. This suggests a possible generalization that *jan* introduces a proposition that is contrary to expectations, or potentially controversial etc. This is a good fit for the noticing use, where there is contrast between the observed state of affairs and the speaker's expectation, and could potentially be adapted to the reminding use indicating an apparent discrepancy between common knowledge and and addressee belief, but fails to account for the confirming use, where there is no sign of contrast.

The table below summarizes how generalizations from the literature on *janai-ka* fare in accounting for the uses of *jan* as a sentence final expressive element in declaratives.

	noticing	confirming	reminding
mirative / exclamative	OK	?	NO
shared belief	?	?	OK
contextual contrast	OK	NO	?

1.3.2 A New Generalization

As none of the extant generalizations can capture all three uses of *jan* discussed above, I suggest a new generalization based on the following observation. All three uses of *jan*-declaratives with a prejacent φ have in common that they do not introduce φ to the discourse — rather, the utterance situations suggest that φ has come up in the following ways.

- On the noticing use, φ is an observed fact.
- On the confirming use, φ is introduced via a confirmation request.
- On the reminding use, φ is common knowledge.

As a paraphrase for what the three uses to be accounted for have in common, I suggest "It goes without saying that φ ", reflecting the generalization that *jan* signals that the utterance is, in one way or another, redundant, or not informative in the way that assertions typically are, as the status of the prejacent is already as if it had been asserted (and accepted by all participants). Based on this new generalization, I formulate the desideratum in (11) for the formal analysis to be developed.

(11) **Desideratum**: Capture the contribution of *jan* to assertions as in the following paraphrase: the prejacent is good as asserted (and accepted), as far as the speaker is concerned.

Before introducing the formal framework and providing the analysis proper, I give a brief preview of how the analysis satisfies this desideratum.

In commitment space semantics, denegated assertions have been assumed to occur in denegation requests to account for polar questions with outer negation. If denegation requests exist, it is a straightforward assumption that denegated assertions do, too. I will claim that *jan*-utterances are denegated assertions, an analysis which I will show to satisfy the desideratum in (11) and account for the three uses of *jan* as follows.

On the noticing use, the prejacent is an observed fact, which, provided the utterance is soliloquous and hence not information-transmitting, means that the prejacent is already accepted. Therefore, asserting it would be redundant, which *jan* indicates. In the confirming case, the addressee sets up the prejacent for acceptance as a shared commitment, and the *jan*-utterance indicates that the speaker has complied. While the source of the prejacent as part of the common ground thus differs in the noticing and the confirming case, *jan* signals that it is a mutually accepted proposition. In *jan*-reminders, the speaker considers the prejacent to be common knowledge, which straightforwardly makes it an accepted proposition as marked by *jan*. However, the need to remind the addressee suggests the prejacent is potentially no longer mutually accepted. On my analysis, previous speaker commitment is sufficient to license *jan*, even when the addressee does not share this commitment, as suggested by "… as far as the speaker is concerned" in the paraphrase.

2 Commitment Space Semantics

Commitment space semantics (CSS), as put forward in Cohen and Krifka (2014), Krifka (2015), and Krifka (2017), see also references therein, is a framework modeling the effect that utterances have on admissible continuations of the discourse. The framework relies on the basic assumption, as defended by Brandom (1983) among others, that assertions commit their speaker to their prejacent, without reference to belief. For the current analysis, CSS is a suitable framework as it makes it possible to formalize the generalization proposed in (11) in terms of denegated assertion.

2.1 Commitments in CSS

In CSS, discourse is modeled as a commitment space, which is a set of commitment states, which are in turn sets of commitments. I define these notions below, before moving on to discourse moves constituted by speech acts.

2.1.1 Commitment States

The basic building blocks of the discourse model in CSS are *commitment states* (written c), which contain the commitments of the discourse participants.³ Commitment states are similar to a common ground in the sense of, for instance, Stalnaker (2002), in that they inform which propositions individual participants have accepted, and which propositions are accepted by both participants. I will use the following notations for individual and shared commitments.⁴

³For simplicity, I will assume there are two participants, S(peaker) and A(ddressee).

⁴The symbol \vdash for commitment is used following Krifka (2017).

- (12) $S \vdash \varphi \in c$: the speaker is committed to φ at *c*.
- (13) $A \vdash \varphi \in c$: the addressee is committed to φ at *c*.
- (14) $\varphi \in c$: both participants (S and A) are committed to φ at *c*.

In a possible departure from the framework as originally proposed, but crucial for the analysis of *jan*, I assume that propositions can become shared commitments not only by linguistic means, *i.e.* not only by assertion and subsequent acceptance. Thus, I write $\varphi \in c$ not only as a shorthand for both speaker and addressee commitment, but also to mean that a proposition is mutually accepted as it has been observed by all participants, or as it is general (world) knowledge etc.

2.1.2 The Commitment Space

Discourse is modeled as a *commitment space* (written *C*), a set of commitment states that can be thought of as a map of admissible continuations. *C* has a *root commitment state* (written \sqrt{C}), which is defined as the intersection of all commitment states in *C*, that is, the set of actual commitments at a given stage in the discourse, all other commitment states in *C* being possible future continuations. The commitment states representing future continuations are connected to the root commitment state by speech acts constituting admissible discourse moves. For space, I do not introduce *commitment space delevopments* here, which are a record of previous discourse moves in CSS, as they are not required to illustrate the analysis of *jan* I will propose.

2.2 Discourse Moves in CSS

Commitment spaces can be changed by speech acts like assertion adding commitments to the root commitment state. In addition to such *committing speech acts*, there are *meta speech acts*, which restrict admissible subsequent moves without altering the root commitment state. In this section, I first discuss assertion as the basic committing speech act, followed by two types of meta speech acts. The first type are *request speech acts*, by which the speaker restricts the addressee's subsequent move, the second type *denegated speech acts*, which restrict the subsequent move to *all but* the speech act denegated.

2.2.1 Committing Speech Acts

Committing speech acts change the root commitment state \sqrt{C} by adding new commitment. Update of commitment space *C* with a committing speech act \mathfrak{A} is shown in (15).

(15)
$$C + \mathfrak{A} = \{c \in C \mid [\sqrt{C} + \mathfrak{A}] \subseteq c\}$$

The basic committing speech act is assertion. When a participant asserts a proposition, an according commitment is added to the root commitment state. (16) shows update of commitment space *C* by assertion of φ by S, which adds commitment of S to φ (written as $S \vdash \varphi$) to the root commitment state \sqrt{C} .

(16) $C + \text{ASSERT}_{S}(\varphi) = \{c \in C \mid [\sqrt{C} + S \vdash \varphi] \subseteq c\}$

This states that assertion adds $S \vdash \varphi$ to \sqrt{C} , which yields a new root commitment state for *C* as all commitment states $c \in C$ must then contain $S \vdash \varphi$. Note that $\varphi \in \sqrt{C}$ does not follow automatically, but requires the addressee to agree, or at least not disagree, with addition of φ to \sqrt{C} .

As for which committing discourse moves are admissible, I follow Krifka (2015, 2017) assuming the two pragmatic constraints on assertion given below (labels and paraphrases my own).

- (17) No redundancy: do not add extant commitments, or commitments entailed by them.
- (18) **Consistency**: avoid (blatantly) contradictory updates that would lead to inconsistencies.

The redundancy constraint is particularly important for the present analysis, as I take the conventional function of *jan* to be avoiding its violation. It should be noted that redundancy not only constrains addition to the common ground, but also commitments of either participant, *i.e.* (17) militates against redundant commitment by either participant regardless of whether $\varphi \in \sqrt{C}$ holds.

2.2.2 Meta Speech Acts and Denegations

Meta speech acts are defined as those speech acts which constrain future continuations of the discourse, *i.e.* constrain which subsequent moves are felicitous, without altering the root commitment state. All interrogative speech acts are meta speech acts. For instance, neutral polar questions are request speech acts constraining the addressee's subsequent move to committing to the prejacent or committing to its negation. Biased polar questions, on the other hand, constrain the addressee's subsequent move only to committing to the prejacent, as shown below.

(19)
$$C + \operatorname{REQUEST}_{S}(\operatorname{ASSERT}_{A}(\varphi)) = \{\sqrt{C}\} \cup \{c \in C \mid [\sqrt{C} + A \vdash \varphi] \subseteq c\}$$

(19) shows how a request for assertion, originated by S and directed at A, changes the commitment space by only allowing continuations which commit the addressee to φ . As a meta speech act, the request does not commit the addressee to the prejacent by altering \sqrt{C} , so that the addressee can also reject the speaker's move and choose to not assert the prejacent.

The second kind of meta speech act relevant for the analysis are denegated speech acts. (20) shows update of a commitment space *C* with $\sim \mathfrak{A}$, the denegation of a committing speech act \mathfrak{A} .

(20)
$$C + \sim \mathfrak{A} = C - [C + \mathfrak{A}]$$

This means denegation of \mathfrak{A} in a commitment space *C* admits only continuations in which speech act \mathfrak{A} is *not* performed, but does not alter the root commitment state. Denegated assertion of φ thus means that the admissible continuations are the complement set of those resulting of assertion of φ , as shown in (22), alongside non-denegated assertion in (21) repeated from (16).

(21)
$$C + \text{ASSERT}_{S}(\varphi) = \{c \in C \mid [\sqrt{C} + S \vdash \varphi] \subseteq c\}$$

(22)
$$C + \sim \operatorname{ASSERT}_{S}(\varphi) = \{c \in C \mid [\sqrt{C} + S \vdash \varphi] \nsubseteq c\}$$

Updating a commitment space *C* with denegated assertion $\sim ASSERT_S(\varphi)$ thus yields the set of all $c \in C$ which $\sqrt{C} + S \vdash \varphi$, *i.e.* the result of update of *C* with $ASSERT_S(\varphi)$, is *not* a subset of. Thus, all continuations that involve assertion of φ are excluded. This leaves the root commitment state unchanged,⁵ hence denegated assertion is a meta speech act. In Krifka (2017), polar questions with outer negation are analyzed as *denegation requests*, which constrain the moves of the addressee to either denegating assertion of the prejacent, which according to Krifka (2015) means to either declare ignorance or assert the negated prejacent, or rejecting the request move and assert the prejacent anyway, which explains the marked bias patterns of such utterances.

⁵ $[\sqrt{C} + S \vdash \varphi] \nsubseteq \sqrt{C}$ before assertion of φ by S, thus the original $\sqrt{C} \in \{C + \sim ASSERT_S(\varphi)\}$.

I argue that if denegation of assertion can be requested, it should be possible to denegate assertion, too, and analyze *jan*-declaratives precisely in this way: as denegated assertions, albeit in a weaker version than assumed by Krifka for polar questions with outer negation.

3 Jan-assertions are Denegated Assertions

The analysis I propose for *jan* is that it is a speech act denegation operator that selects for declarative utterances, as shown in (23) and (24).

(23)
$$\llbracket jan \rrbracket = \lambda \mathfrak{A} . \sim \mathfrak{A}$$

(24) $C + jan(ASSERT_S(\varphi)) = C + \sim ASSERT_S(\varphi)$

As mentioned, I take *jan* to be a weak denegation operator that only excludes assertion of φ as the *subsequent move* only, *i.e.* denegation for the current discourse turn, which is an interpretation parallel to that in Cohen and Krifka (2014), but weaker than argued for in Krifka (2015, 2017) for denegation requests. This is necessary to account for *jan* as it neither excludes subsequent assertion of φ , nor, even more importantly, cases in which there is previous speaker commitment to the prejacent proposition, both of which stronger versions potentially exclude.

This is not to say, however, that the stronger version Krifka assumes is not the right choice for denegation requests to account for polar questions with outer negation in English — indeed, Sudo (2013) observes that polar questions with outer negation show different bias patterns in English and in Japanese. Concretely, they tolerate positive evidence in Japanese, but not in English, which is compatible with the assumption that denegation is stronger in English, effectively excluding commitment to the prejacent, whereas in Japanese, denegation primarily functions to prevent violation of pragmatic constraints on assertion where there is previous commitment to the prejacent, as I propose *jan*-declaratives do.

3.1 The Function of Denegated Assertion in Japanese

Denegated assertion is a more marked speech act than a denegation request. The speaker of a denegation request proffers the prejacent while constraining the subsequent moves of the addressee, which the addressee can either accept and not assert the prejacent, or reject and assert the prejacent anyway. The speaker of a denegated assertion, on the other hand, proffers the prejacent while restricting *her own* subsequent move, which would make asserting the prejacent contradictory, as it would mean rejecting her own initial move. At the same time, the speaker neither chooses to assert the negated prejacent, nor to ask a question to find out what the addressee knows about the prejacent. This makes denegated assertion a rather marked choice, which I suggest in the case of *jan*-declaratives serves to indicate that the speaker is *already committed* to the prejacent and can thus not felicitously assert it, but has reason to bring it up anyway.

As (weak) denegated assertions, *jan*-declaratives have such a communicative effect — they allow to bring up (or proffer) φ while avoiding violation of redundancy (and/or consistency), as this table of felicity of assertion and denegated assertion with previous speaker commitment shows:

		$C + \text{ASSERT}_{S}(\varphi)$	$C+\sim_{ m ASSERT}_{ m S}(arphi)$
No Redundancy:		#	\checkmark
Consistency:	$S \vdash \neg \varphi \in \sqrt{C}$	#	\checkmark

This is to say that the pragmatic constraints militate against asserting propositions that are settled in the sense of the speaker being previously committed to either the prejacent or its negation. This includes cases in which the prejacent is part of the mutually accepted propositions, that is $\varphi \in \sqrt{C}$ which I take to entail $S \vdash \varphi \in \sqrt{C}$. Denegated assertion, on the other hand, does not violate either constraint as the proposition is not asserted, but proffered in the sense of being brought up without commitment, *i.e.* without changing the root commitment state.

Summing up, I propose that *jan*-declaratives are denegated assertions, which are felicitous in utterance situations where plain assertions would violate either the redundancy or the consistency constraint. I further propose that whta *jan*-declaratives conventionally circumvent is the redundancy constraint, thus proffering their prejacent while conveying there is previous speaker commitment, *i.e.* that the prejacent is good as asserted, satisfying the desideratum in (11).

3.2 Explaining the Uses of Jan

Below, I show how the analysis of *jan* proposed above accounts for its uses discussed in section 1, before introducing additional data that lends it further support, in particular confirming the prediction that *jan* is licensed by speaker commitment only as well as by mutually accepted propositions that have entered the root commitment state by means other than assertion.

3.2.1 The Noticing Use and Denegated Assertion

There are two ways of viewing the role of *jan* on its noticing use with regard to the two pragmatic restrictions on assertion. First, as noticing *jan*-utterances are mirative in that they convey speaker surprise over the observed state of affairs, *jan* could be thought of as indicating that due to previous commitment contrary to observation, the consistency constraint prevents speaker commitment to the prejacent and thus felicitous assertion. However, as *jan* on its noticing use intuitively indicates that the speaker has accepted the truth of the prejacent based on the observation made, the second option is to assume that the prejacent is already accepted and that *jan* indicates the redundancy constraint prevents felicitous assertion. The relevant example (25) is repeated from (6).

(Scenario: S is opening a box.)

(25) S: Nan da, karappo jan. what COP empty jan"What's that, it's empty jan."

Recall that in a modified scenario in which the speaker opens the box, finds it empty, and then calls out to the addressee to transmit this information, which is a notifying rather than noticing utterance, plain assertion is natural. When *jan* is added to such a notifying example, it conveys that the addressee is aware that the box is empty (or, more precisely, that the speaker assumes this). This can be explained by *jan* avoiding violation of redundancy rather than consistency: the speaker has accepted the prejacent "it's empty" by observation, and assumes that the addressee is aware of this, thus assumes that $\varphi \in \sqrt{C}$ holds. In the alternative scenario, it is highly implausible to assume that *jan* avoids a violation of consistency, as this would mean that the speaker were still committed to $\neg \varphi$, which in turn would predict infelicity of plain assertion, contrary to what can be observed. Thus, assuming that *jan* avoids violation of redundancy, rather than consistency, in both the modified example and the original (25) is the more parsimonious option to account for the noticing use.

Next, recall that the unmodified utterance scenario for (25), according to which the utterance is made in reaction to observation of the prejacent, is constructed so that the utterance is either truly soliloquous as there is no addressee, or non information-transmitting as the addressee is in the same information state as the speaker. This ensures that the prejacent proposition is (mutually) accepted, further supporting the assumption that *jan* circumvents the redundancy constraint. As for the semantic mirativity of noticing *jan*-utterances, I suggest that it is the fact that the prejacent is proffered at all that makes an exclamative interpretation salient, rather than mirativity arising as *jan* circumvents the consistency constraint — if the observation were not surprising or unexpected, there would be no reason to proffer it, therefore denegated assertion is interpreted as exclamative in noticing (but not notifying) utterance situations. In conclusion, avoidance of redundancy can plausibly explain the properties of noticing *jan*, and, as it can account for the other two uses of *jan* discussed below as well, is a more parsimonious explanation than avoidance of consistency.

3.2.2 The Confirming Use and Denegated Assertion

The confirming use differs from the noticing use in that it can not possibly be accounted for by contrast with an expectation of the speaker, as no nuance of surprise is mandatorily conveyed. What the confirming and the noticing use have in common is that the speaker is signaling that the prejacent is already accepted, which in the confirming case indicates that the speaker has complied with a confirmation request. The relevant example is repeated below from (8) as (27).

(Scenario: A is trying on a jacket.)

- (26) A: This jacket is lovely *daroo*.
- (27) S: Un, nakanaka niat-teru *jan*. yes pretty suit-PROG *jan* "Yeah, suits you pretty well *jan*."

Crucially, A's utterance (26) sets up the context with a *daroo* confirmation request, conveying that A is committed to the prejacent and setting it up for mutual acceptance.⁶ The request-for-confirmation utterance situation is thus one in which $A \vdash \varphi \in \sqrt{C}$ holds, and the speaker's moves are constrained to either complying and asserting φ , or rejecting the speaker's move and thereby denying confirmation. In CSS terms, A's utterance is thus a request speech act REQUEST_S(ASSERT_A(φ)) also conveying that A is strongly biased towards φ .⁷

When the speaker accepts the addressee's move and confirms φ , addition of *jan* indicates prior speaker commitment, that is $S \vdash \varphi \in \sqrt{C}$, thus $\varphi \in \sqrt{C}$. Parallel to the noticing use, there is the possibility that speaker has accepted the prejacent based on observation. In this case, *jan* indicating redundancy could convey that the truth of the prejacent is so apparent that it has entered the root commitment state before the speaker's utterance. On the other hand, note that in (27), the affirmative answer particle *un* precedes the *jan*-utterance, which can be interpreted as a

⁶Building on the observations in Moriyama (1992) on *daroo*-confirmations and in Sudo (2013) on rising utterances with *daroo* (there discussed as polar questions with *desho*), I propose in Rieser (to appear) that *daroo*-confirmations are common-ground maximizing utterances that with final rising intonation convey speaker bias towards the addressee believing the prejacent, and with final falling intonation that the speaker is biased towards the prejacent being a shared belief (or part of the common ground).

⁷I assume φ to be "the jacket suits A" as this is effectively what A requests confirmation for (or entailed by what A's requests confirmation for), at least from S's perspective, glossing over S's apparent interpretation of A's utterance as an indirect speech act.

signal of acceptance, followed by the *jan*-utterance proffering a prejacent entailed by the accepted proposition. Be it observation in the utterance situation or compliance with A's confirmation request that is the source of φ as a shared commitment, I conclude that *jan* indicating previous (speaker) commitment by circumventing redundancy plausibly accounts for its confirming as well as its noticing use.

3.2.3 Denegation and the Reminding Use

On its reminding use, *jan* straightforwardly marks φ as common knowledge in the sense of a proposition that has previously entered the root commitment state. In the relevant example (29), repeated from (10), the speaker proffers this as the addressee has apparently forgotten about φ .

- (28) A: "Why did this come?"
- (29) S: Kimi-ga tanon-da jan. you-NOM order-PST *jan* "You ordered it *jan*."

An explanation based on avoidance of redundancy can be straightforwardly applied here — clearly, the proposition "you ordered it" should be mutually accepted, which means that both speaker and addressee are committed to the prejacent, for all the speaker knows. The prejacent has not entered the root commitment state by linguistic means — rather, the addressee's observable act of ordering has made it a mutually accepted proposition. On it's reminding use, the *jan*-utterance thus proffers the prejacent while circumventing redundancy, precisely as on the other uses.

While (28) suggests that the addressee is no longer aware of φ , it is still plausible that $\varphi \in \sqrt{C}$ holds, provided that the speaker is correctly remembering the addressee's ordering of the item in question, assuming that commitment is maintained even when it is not active due to the resourceboundedness of agents. Recall, however, that according to the proposed analysis, assertion is infelicitous due to the redundancy constraint even if only the speaker is previously committed to the prejacent. Therefore, prior speaker commitment licenses the use of a *jan*-utterance to proffer the prejacent independent of addressee commitment. To further support this aspect of the analysis, as well as commitment by non-linguistic means, the following section discusses two additional uses of *jan* — one where only the speaker is committed to the prejacent, and one where the prejacent is a shared commitment as it is considered general (world) knowledge by the speaker.

3.3 Additional Data

Both uses introduced in this section aim at (re-)establishing the prejacent as common ground in a way similar to the reminding use, but with important differences. On what I label the convincing use, the speaker attempts to convince the addressee of the prejacent, which the addressee is, however, clearly not committed to. On the background-establishing use, the utterance sets the stage for the next move of the speaker, presenting the prejacent as background information, and while the prejacent is not likely to be controversial, there is no salient linguistic or non-linguistic event by which it could have become a shared commitment.

3.3.1 The Convincing Use and Denegation

Recall that the reminding use is the most compatible with the generalization that *jan* marks shared belief. On its convincing use, however, *jan* is licensed in spite of it being clear from the utterance scenario that the addressee is not, in fact, committed to the prejacent, as illustrated in (30).

(Scenario: S disagrees with a preceding assertion by A.)

(30) S: Chigau jan. wrong *jan*"That's wrong *jan*."

In contrast with the reminding use, the prejacent "that's wrong" is clearly not mutually accepted — rather, the utterance conveys that the speaker believes that this *should be* the case. Also, while for instance a version of (30) with the sentence final particle *yo* would be natural as well, only the version with *jan* conveys exasperation, indicating that the speaker might be repeatedly attempting to make the addressee accept the prejacent. This can be explained as follows. The scenario suggests that $A \vdash \neg \varphi \in \sqrt{C}$ holds, thus $\varphi \notin \sqrt{C}$. On this premise, analyzing *jan* as denegation marker straightforwardly predicts the exasperated nuance, as the *jan*-utterance can then only indicate that the speaker is already committed to the truth of the prejacent, that is $S \vdash \varphi \in \sqrt{C}$.

I further assume that commitment of the speaker only does not necessarily always stem from previous assertion of φ , however plausible a scenario this is for (30). As the background-establishing use of *jan* discussed below shows, it is sufficient for *jan* to be licensed that the speaker to (more or less reasonably) assume that her own commitment, or shared commitment, to the prejacent is for one reason or another apparent.

3.3.2 Denegation and the Background-establishing Use

On what I label the background-establishing use, the source of the prejacent as common knowledge differs from the reminding use, as in (31) where the *jan*-declarative is used to bring up a prejacent that can be considered generally known.

(Scenario: S is back from a trip.)

(31) S: Shingapooru-wa atsui jan. Singapore-TOP be_hot jan "Singapore is hot jan."

The prejacent can be considered part of the common ground similar to the basic reminding example, as it is plausibly general (world) knowledge that Singapore's climate is hot. The function of the utterance within the discourse is rather different from that of a reminder, however, as there is no previous utterance that the *jan*-declarative is a reaction to. Rather, the prejacent is proffered here in a turn-holding move as background information for whatever (new) information the speaker is about to convey next. Functionally, this use of denegated assertion is close to confirmation requests, which are, as mentioned, a salient use of *janai*(-*ka*) and other less reduced forms of *jan*. With both the background-establishing use of *jan* and confirmation requests, the speaker ensures that the addressee is on the same page — with the difference that denegated assertion requires no reaction from the addressee.

On a final note, Wungpradit (2006) observes background-establishing cases in which the prejacent of *jan* is new information not known to the addressee.⁸ This leads her to reject the claim made by Adachi (1999) that *jan* marks the prejacent as shared information. I agree in this point, and suggest that what Wungpradit observes can be explained as a case of forced accommodation, that is the speaker is requesting the addressee to treat the prejacent *as if* it were a shared belief. This could suggest that *jan* is developing into a marker of turn taking and backgrounding, a prospect that needs to remain for further research. Either way, the use of *jan* utterances described by Wungpradit is clearly distinct from *janai*(*-ka*) confirmation requests, which can not be used to proffer a proposition only known to the speaker, underlining that an independent analysis of *jan* as a denegation operator is necessary.

4 Conclusion and Outlook

I have proposed that *jan*-declaratives are denegated assertions that are conventionally used to avoid violation on the redundancy constraint on assertion that militates against commitment to mutually accepted propositions and such that the speaker is already committed to. This accounts for the uses of *jan* in the empirical scope of this paper as follows.⁹

Noticing use:	$\varphi \in \sqrt{C}$ by observation in utterance situation
Confirming use:	$A \vdash \varphi \in \sqrt{C}$ and request for addition of $S \vdash \varphi$ from preceding utterance,
	$S \vdash \varphi \in \sqrt{C}$ (and thus $\varphi \in \sqrt{C}$) by compliance or from observation.
Reminding use:	$arphi \in \sqrt{C}$ by observation before utterance time, or
	$S \vdash \boldsymbol{\varphi} \in \sqrt{C}$ from previous assertion (convincing), or
	$\varphi \in \sqrt{C}$ by world knowledge/accommodated (background-establishing).

In all cases, *jan* is denegating assertion to circumvent the redundancy constraint while still proffering the prejacent for the respective communicative effects. Analyzing *jan*-utterances as denegated assertions not only makes a unified analysis accounting for various uses possible, but also fills an empirical gap in the application of commitment space semantics.

The most obvious next step is to expand the analysis to other discourse particles in Japanese, as well as in other languages. For instance, the German particle *doch* has uses surprisingly similar to those of *jan*. In Rieser (2017b), I propose an analysis of *doch* based on restrictions on input and output contexts in terms of public beliefs of speaker and addressee — this naturally connects to the present analysis, as public belief independent of the participants' private beliefs can be construed as commitment from assertion. Such connections suggest that reconciling belief-based approaches within dynamic semantics with commitment space semantics can potentially help form a more complete picture of what discourse markers mean and do. Furthermore, as expressions similar to *jan* are expected to exist in languages other than Japanese, the analysis potentially opens a new empirical perspective for the study of denegated assertion and, more generally, the contribution of expressive negation to utterance meaning within formal pragmatics.

⁸She claims that her example "I went on a date to Disneyland *jan*. I'm so happy!" is felicitous even when the addressee has no way of knowing that the event denoted by the *jan*-uttearnce's prejacent took place.

⁹Written in commitment space semantics notation as defined in section 2, where S is the speaker, A the addressee, φ the prejacent, \vdash commitment, \sqrt{C} the set of commitments at the current stage in the discourse, and the redundancy constraint militates against adding $S \vdash \varphi$ to \sqrt{C} when $S \vdash \varphi \in \sqrt{C}$ or $\varphi \in \sqrt{C}$, thus licensing *jan* in these cases.

References

Adachi, Taro. 1999. *Nihongo-gimonbun ni okeru handan no shosoo*. Tokyo: Kuroshio Publishers. [Aspects of judgment in Japanese questions].

Brandom, Robert. 1983. Asserting. Noûs 637-650.

- Cohen, Ariel, and Manfred Krifka. 2014. Superlative quantifiers and meta-speech acts. *Linguistics and Philosophy* 37:41.
- Hasunuma, Akiko. 1995. Taiwa-ni okeru kakunin-kooi. 'daroo' 'janaika' 'yone' no kakunin'youhou. In *Fukubun no kenkyuu*, ed. Yoshiou Nitta, 389–419. Tokyo: Kuroshio Publishers. [Confirmation acts in conversation. The confirmation uses of *daroo*, *janaika*, *yone*].
- Krifka, Manfred. 2015. Bias in commitment space semantics: Declarative questions, negated questions, and question tags. *Proceedings of Semantics and Lingustic Theory (SALT)* 328–345.
- Krifka, Manfred. 2017. Negated polarity questions as denegations of assertions. In *Contrastiveness in information structure, alternatives and scalar implicatures*, ed. Chungmin Lee, Ferenc Kiefer, and Manfred Krifka, 359–398. Springer.
- Miyazaki, Kazuhito. 2002. Kakunin'yookyuu. In *Modariti*, ed. Kazuhito Miyazaki, Taro Adachi, Harumi Noda, and Shino Takanashi, 203–228. Tokyo: Kuroshio Publishers. [Confirmation requests].
- Moriyama, Takuro. 1992. Nihongo ni okeru 'suiryoo' o megutte. *Gengo Kenkyu* 64–83. [Around 'inference' in Japanese].
- Rett, Jessica. 2011. Exclamatives, degrees and speech acts. *Linguistics and Philosophy* 34:411–442.
- Rieser, Lukas. 2017a. Belief states and evidence in speech acts: The Japanese sentence final particle *no*. Doctoral Dissertation, Kyoto University.
- Rieser, Lukas. 2017b. Discourse particles as CCP-modifiers: German *doch* and *ja* as context filters. In *New frontiers in artificial intelligence, jsai-isai 2015 workshops*, ed. M Otake, S Kurahashi, Y Ota, K Satoh, and D Bekki, Vol. 10091 of *LNAI*, 93–108. Springer.
- Rieser, Lukas. to appear. Quality of commitment: Japanese *daroo* as a speech act operator. *Investigationes Linguisticae* 37.

Stalnaker, Robert C. 2002. Common ground. Linguistics and Philosophy 25:701-721.

- Sudo, Yasutada. 2013. Biased Polar Questions in English and Japanese. In *Beyond expressives: Explorations in use-conditional meaning*, ed. Daniel Gutzmann and Hans-Martin Gärtner, 275–296. Brill.
- Wungpradit, Apasara Kiku. 2006. Danwakanri riron kara mita 'janai(ka)' no kihonteki seishitsu. *Kyoto University Linguistic Research* 25:157–286. [The fundamental properties of 'janai(ka)' from the perspective of Discourse Management Theory.].