

# Rhetorical imperatives: expressing anti-preferences<sup>1</sup>

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**Abstract.** Almost all studies of rhetorical speech acts have exclusively focused on questions so far (Caponigro & Sprouse 2007, Biezma & Rawlins 2017, among others). This paper provides a detailed investigation of what we call Rhetorical Imperatives (RhIs). The hallmark of RhIs is that despite their imperative form without any negation, the speaker does not demand an action but rather conveys a flavor of a prohibition. In this paper, we propose that RhIs are imperatives that signal that content of a clause is already common-grounded in parallel to rhetorical questions, and that the speaker of a RhI has an anti-preference for the uttered content over alternatives.

**Keywords:** rhetorical imperatives, speech acts, modality, dynamic semantics, Japanese.

## 1. Introduction

Although the meaning of ‘rhetorical’ has attracted attention in many fields of linguistics, almost all studies of rhetorical speech acts have exclusively focused on questions so far (e.g., Sadock, 1971; Han, 2002; Caponigro & Sprouse, 2007; Biezma & Rawlins, 2017; among others). This paper investigates what we call Rhetorical Imperatives (RhIs) in Japanese, providing a unified account of rhetorical and non-rhetorical speech acts. In line with Asano & Ihara (2019), we informally define RhIs as “utterances which have an imperative form but convey some anti-imperative properties (which will be presented in the next section).” The most striking property of RhIs is that despite their imperative form without any negation, the speaker does not demand action but rather conveys a flavor of ‘prohibition’ or ‘complaint.’ Consider the following examples:

- (1) (The addressee has just told a lie to the speaker)  
Usō tsuk-e!  
lie tell-IMP  
‘[lit.] Tell me a lie!’  
↪ ‘**You shouldn’t have told me such a lie!**’ (not performative)  
↪ ‘You should tell me a lie!’ (performative)
- (2) A: I’m in love with my bed, but my alarm clock won’t let us be together.  
B: Hozak-e. (Ima isogashii-n-da yo.)  
say.stupid.thing-IMP now busy-NMLZ-COP DP  
‘[lit.] Say a stupid thing. (I’m busy, you know.)’  
↪ ‘**You shouldn’t have said such a stupid thing.**’ (not performative)  
↪ ‘You should say a stupid thing.’ (performative)

In (1), although the literal meaning does not differ from ordinal imperatives, the actual interpretation of (1) contains a negative meaning and no performativity is observed; intuitively

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speaking, the speaker in (1) rather complains that the addressee told a lie, or prohibits the addressee from telling a lie. Similarly, (2) does not exhibit performative interpretation but instead it describes that the speaker complains about the addressee's stupid utterance and that (s)he does not want to hear it anymore. Given this property, the questions arise as to how the negative and non-performative meaning of RhIs is generated, and why Japanese imperatives allow this sort of rhetorical interpretation. Regarding these two questions, this paper proposes that RhIs are imperatives that signal the following two pieces of content: (i) a propositional content is already common-grounded (in parallel to rhetorical questions), and; (ii) the speaker has (what we call) an anti-preference.

The organization of this paper is as follows. Section 2 observes three hallmarks of RhIs, anti-preferability, anti-future-orientativity, and anti-directivity. Based on the observations in Section 2, Section 3 introduces the framework we use for the analysis of RhIs, which is known as the Table model (Farkas & Bruce 2010, Malamud & Stephenson 2015, Farkas & Roelofsen 2017), and then provides an assumption and a sub-proposal on the discourse semantics and pragmatics of imperatives in Japanese. Section 4 provides our proposal on RhIs, and illustrates how the rhetorical effects of RhIs are derived. Section 5 concludes this paper.

## 2. The hallmarks of rhetorical imperatives

As indicated in the introduction, RhIs exhibit the properties which are not obtained in ordinary imperatives (OIs). This section observes the three idiosyncratic properties of RhIs, anti-preferability, anti-future-orientativity, and anti-directivity, by making comparisons with OIs.

### 2.1. Anti-preferability

In the case of OIs, the speaker utters  $\text{IMP}(\varphi)$  to show his or her preference for  $\varphi$  over  $\neg\varphi$  (Kaufmann, 2012; Condoravdi & Lauer, 2012), while this property is absent in RhIs. The relevant examples are as follows:

- (3) a. Hayaku ne-ro! Ore-wa ne-te { hoshii / #hoshiku-nai }  
 quickly go.to.bed-IMP I-TOP go.to.bed-GER { want / #want-NEG }  
 n-da yo.  
 NMLZ-COP SFP  
 'Go to bed quickly! I { want / #don't want } you to go to bed.'
- b. Uso tsuk-e! Ore-wa uso-o tsui-te { #hoshii / hoshiku-nai } n-da yo.  
 lie tell-IMP I-TOP lie-ACC tell-GER { #want / want-NEG } NMLZ-COP SFP  
 'You shouldn't have told me such a lie! I { #want / don't want } you to tell the lie.'

Imperatives in (3a) and (3b) are an OI and a RhI, respectively. In the subsequent utterances of both imperatives, *hoshii* 'want' describes the speaker's preference for the prejacent  $\varphi$ , while the negated version *hoshiku-nai* 'do not want' conveys the opposite attitude. The same  $\varphi$  is embedded under the imperatives and the subsequent utterances in (3a) and (3b). In (3a), the subsequent utterance with *hoshii* is felicitous while the one with *hoshiku-nai* is infelicitous. Thus, the example (3a) indicates that the imperative describes the speaker's preference for  $\varphi$ . When it comes to RhIs, they show the opposite pattern to (3a) with respect to subsequent utterances. For instance, in (3b), the sentence can precede the utterance with *hoshiku-nai*, while

the subsequent utterance with *hoshii* is degraded. The contrast indicates that, unlike OIs, RhIs show a preference for  $\neg\phi$ , rather than for  $\phi$  (Asano & Ihara 2019). We refer to this property of RhIs ‘anti-preferability.’

## 2.2. Anti-future-orientativity

RhIs are also different from OIs with respect to the time an event described by an imperative occurs. In the case of OIs, the speaker presupposes that an event of an imperative must occur in the future time (Kaufmann 2012). On the other hand, RhIs require that an event of an imperative have occurred before RhIs are uttered. This contrast is observed between an OI (4a) and a RhIs in (4b).

- (4) a. Hayaku ne-ro! #Nande ne-ta no?  
 quickly go.to.bed-IMP why go.to.bed-PAST Q  
 ‘Go to bed quickly! #Why have you gone to bed?’  
 b. Uso tsuk-e! Nande sonna uso-o tsui-ta no?  
 lie tell-IMP why such lie-ACC tell-PAST Q  
 ‘You shouldn’t have told me such a lie! Why have you told me such a lie?’

In (4a), the subsequent utterance describes that an event of the imperative has already occurred. Since this utterance is infelicitous, (4a) suggests that OIs are future-oriented. Unlike (4a), this subsequent utterance is felicitous in (4b). From the data above, we can see that the RhI refers to an event which has already occurred in the past, which suggests that RhIs are ‘anti-future-oriented.’

The anti-future-orientativity of RhIs is also evident from the following examples. RhIs can never be interpreted as rhetorical utterances when they are uttered in out-of-the-blue contexts (i.e. contexts where imperative contents are possible to be fulfilled in the future). Consider the following example:

- (5) (The speaker suddenly calls to the addressee from behind and says)  
 Uso tsuk-e!  
 lie tell-IMP  
 $\rightsquigarrow$  Tell me a lie! (directive)  
 $\nrightarrow$  You shouldn’t have told me such a lie! (rhetorical)

Given the context above, the rhetorical interpretation is rejected and only the ordinary (i.e. directive) interpretation is allowed in (5). Here, the interpretation as an OI is assumed to be attributed to the out-of-the-blue context, where the event of the imperative has not been occurred yet. This example indicates that RhIs require the violation of the future-orientativity of imperatives.

## 2.3. Anti-directivity

The last striking property of RhIs is that the discourse effect of uttering an imperative with a rhetorical reading is akin to that of an assertion rather than that of a directive. We can see this by observing the response patterns and their effects: observe the following contrast between an assertion and an OI.

- (6) A: Omae-ga hannin-da.  
           you-NOM criminal-COP  
           ‘You’re the criminal!’  
       B: Sono toori-desu. // Iya, tigaimasu yo.  
           that right-COP // no wrong PRT  
           ‘That’s right.’ // ‘No, you’re wrong.’  
       B’: #Wakarimashi-ta, ryookai-desu. // #Iya, kotowarimasu.  
           all.right-PAST accept-COP // no refuse  
           ‘#I accept your order.’ // ‘#No, I refuse your order.’
- (7) A: Hashir-e.  
           run-COP  
           ‘Run!’  
       B: #Sono toori-desu. // #Iya, tigaimasu yo.  
           that right-COP // no wrong PRT  
           ‘That’s right.’ // ‘No, you’re wrong.’  
       B’: Wakatimashi-ta, ryookai-desu. // Iya, kotowarimasu.  
           all.right-PAST accept-COP // no refuse  
           ‘#I accept your order.’ // ‘#No, I refuse your order.’

The utterance of A in (6) is an assertion, while the one of A in (7) is an OI. We can see a clear contrast between them with respect to their response patterns. Following Farkas & Bruce (2010) who classify utterances of responses like *right*, *yup*, etc. as examples of assertion confirmation and *no way*, *definitely not*, etc. as examples of assertion denial, we regard *sono toori (desu)* ‘that’s right.’ in (6B) and (7B) as an assertion confirmation, while *iya, tigau* ‘no, you’re wrong.’ in (6B’) and (7B’) as an assertion denial. Since they can be used to confirm or deny assertions, they are felicitous as the responses to A’s assertion in (6), but are infelicitous as the responses to A’s directive (7). In contrast, the (in)felicity of *ryookai* ‘I accept it’ and *kotowa-ru* observed in (6) and (7) indicates that these two utterances can only be uttered as responses to directives but not as ones to assertions. Based on the observation in (6) and (7), we introduce *ryookai* ‘I accept it’ in (6B) and (7B) and *kotowa-ru* in (6B’) and (7B’) as a directive acceptance and a directive denial, respectively. Given these response patterns, let us move on to the observation of RhIs:

- (8) A: Uso tsuk-e!  
           lie tell-IMP  
           ‘[Int.] You shouldn’t have told me such a lie!’  
       B: (Bare-ta kaa.) Sono toori-desu. // Iya, tigaimasu yo.  
           find.out-PAST PRT that right-COP // no wrong PRT  
           ‘Man, you caught me! That’s right.’ // ‘No, that’s wrong.’  
       B’: #Wakarimashi-ta, ryookai-desu. // #Iya, kotowarimasu.  
           all.right-PAST accept-COP // no refuse  
           ‘#I accept your order.’ // ‘#No, I refuse your order.’

As shown above, the response pattern in (8) is parallel to that of the assertion in (6) rather than the OI in (7); while the RhI can be responded by the assertion confirmation *sono toori-desu* and the assertion denial *tigaimasu*, the acceptance *ryookai* and the denial *kotowa-ru* are judged to be infelicitous. The current observation indicates that RhIs lack directivity (in the sense that

their discourse effects do not contribute to directive force); despite their imperative form, they encode what we call the “anti-directive” property.

The unembeddability of RhIs in directive predicates provides further evidence for the anti-directivity of RhIs. Consider the following example:

- (9) Directive-taking predicate ‘*order*’:  
 Ayaka-ga Hanako-ni [<sub>S</sub> uso tsuk-e ] to **meireishi**-ta.  
 Ayaka-GEN Hanako-to lie tell-IMP C order-PAST  
 ‘Ayaka ordered Hanako *S*.’  
 ~→ *S*: Tell a lie! (directive)  
 ↗→ *S*: You shouldn’t have told me such a lie! (rhetorical)
- (10) Assertion-taking predicate ‘*decide*’:  
 Kono joohoo-ni-wa [<sub>S</sub> uso tsuk-e ] to **kimetsukeru** koe-ga  
 this information-to-TOP lie tell-IMP C decide comment-GEN  
 sattooshi-ta yooda.  
 rush-PAST seem  
 ‘The news apparently prompted a flood of people to conclude *S*.’  
 ↗→ *S*: Tell a lie! (directive)  
 ~→ *S*: You shouldn’t have told me such a lie! (rhetorical)

In (9), the verb *meireisuru* ‘order’ is a directive predicate while *kimetsukeru* ‘decide’ in (10) is an assertive predicate. As shown in the examples, the rhetorical interpretation (= ‘you shouldn’t have told me such a lie!’) is possible only in (10), which suggests that RhIs cannot be embedded or quoted under directive predicates. This contrast lends support to the view that RhIs lack the directivity, in contrast to OIs.

### 3. Ingredients: the dynamic model of discourse

This section briefly gives background on the framework of our analysis, and then extends the model to Japanese ordinary imperatives.

#### 3.1. The Table model for imperatives

We make use of the formal discourse model called the Table model developed by Farkas & Bruce (2010), which is in effect an elaboration of Stalnaker (1978). In the Table model, assertions are not considered as contributing direct updates of the Common Ground (CG), but are analyzed as contributing proposals to update this set, in which the speaker takes on a public discourse commitment and projects the future CG. Since not all of the discourse components of this model are useful for our purpose, we just introduce relevant components:

- (11) Basic components of the Table model (Farkas & Bruce 2010):
- a. COMMON GROUND (CG):  
 The set of all propositions that all discourse participants are committed to.
  - b. DISCOURSE COMMITMENTS (DC):  
 For all discourse participants *a*, there is a set  $DC_a$  of propositions that *a* has committed to.

- c. THE TABLE ( $T$ ):  
A stack of *Issues* (sets of propositions), the uppermost element of which ( $\max(T)$ ) is currently at issue.
- d. THE PROJECTED SET ( $PS$ ):  
The set of all CGs that could result by adding an element of  $\max(T)$  to the current CG (intuitively the future CG).

These components allow us to define the discourse context  $K$  as follows:

- (12) A discourse context  $K^n = \langle A^n, DC^n, T^n, CG^n, PS^n \rangle$ , where:
- a.  $A^n$  is a set of individuals  $a$ ;
  - b.  $DC^n$  is a set of sets of discourse commitments  $DC_a^n$ , one for each  $a \in A^n$ ;
  - c.  $T^n$  is a table;
  - d.  $CG^n$  and  $PS^n$  are a Common Ground and a Projected Set such that  $PS^n = \{CG^n + p : p \in \max(T)\}$ .

Formally, an assertion of a sentence denoting a proposition  $\varphi$ ,  $\text{ASSERT}(\varphi)$ , is a function from contexts ( $K$ ) to contexts ( $K'$ ) of the following form:

- (13)  $\llbracket \text{ASSERT} \rrbracket = \lambda \varphi_{\langle st \rangle} \lambda K_k. \left[ K' \left| \begin{array}{l} DC_{sp} = DC_{sp}^K + \varphi \\ T = T^K + \{\varphi\} \\ PS = \{CG^K + \varphi\} \\ K' = K \text{ in all other respects} \end{array} \right. \right]$
- a.  $DC_{sp} = DC_{sp}^K + \varphi$   
(i.e.: Adds  $\varphi$  to the speaker's DC in  $K$ .)
  - b.  $T = T^K + \{\varphi\}$   
(i.e.: Adds  $\varphi$  to  $T$  in  $K$ .)
  - c.  $PS = \{CG^K + \varphi\}$   
(i.e.: The result of the utterance is CG that contains  $\varphi$ .)
  - d. In all other respects,  $K' = K$ . (cf. Farkas & Bruce 2010:(9))

More intuitively, an assertion returns a context such that: (a) the speaker makes discourse commitment to  $\varphi$ , (b) the current issue/topic of the discourse is  $\varphi$ , and (c) the speaker expects that the addressee will also be committed to  $\varphi$ .

Crucially, in Farkas & Bruce, all components of the Table model are modally unified: they are to be interpreted epistemically or doxastically. That is, the speaker's discourse commitments are propositions that they are presenting themselves as though they believe: the propositions in the Table are those propositions currently under consideration as potential mutual epistemic/doxastic commitments, and the projected set represents what it would look like if those potential mutual doxastic commitments were made.

Before moving on to show how imperatives are analyzed in the Table model, following Rudin (2018), we further assume the extended version of the model. Rudin proposes a programmatic extension of the Table model that bifurcates it into *doxastic* (or epistemic) and *teleological* (or deontic) halves, identical to each other except in terms of the modal interpretation of their components. The doxastic half of the model is identical to the standard model introduced above; an assertion puts a proposition into the doxastic discourse commitment of the speaker. Imperatives, on the other hand, do exactly the same thing that standard assertions do, except that they

interact with the teleological half of the Table model, the *teleological discourse commitment*, not the doxastic half. Following Condoravdi & Lauer (2012), Rudin assumes that the modality relevant to the teleological commitment is effective preferences. The core idea of the effective preference is that, intuitively, imperatives encode the speaker's preference which is ordered with respect to other preferences.<sup>2</sup>

- (14) Discourse commitments (bifurcated version):
- a. For all discourse participants  $a \in A$ ,  
 $DC_a = \langle DC_{dox,a}, DC_{tel,a} \rangle$ , where:
  - b.  $DC_{dox,a}$  (doxastic discourse commitment) is a set of propositions that  $a$  is publicly committed to acting as though she believes;
  - c.  $DC_{tel,a}$  (teleological discourse commitment) is a set of propositions that  $a$  is publicly committed to acting as though she has an effective preference for.
- (Rudin 2018:(33))

By stating the condition in (15), Rudin ensures that teleological discourse commitments are required to be both consistent and realistic.

- (15) Realism condition on  $DC_{tel,a}$ :  
 For any agent  $a$ ,  $[\forall p : p \in DC_{tel,a}] p \cap \bigcap DC_{dox,a} \neq \emptyset$ . (ibid.: (34))

The common ground, the table, and the projected set can be bifurcated in the same way as the discourse commitment: the teleological common ground  $CG_{tel}$  is the set of all propositions that all interlocutors are publicly committed to having an effective preference for, the teleological Table  $T_{tel}$  hosts content under consideration for incorporation into  $CG_{tel}$ , and the teleological projected set  $PS_{tel}$  contains a set of possible future  $CG_{tel}$ , one incorporating each element of the  $max(T_{tel})$ .

- (16) Common ground (bifurcated version):  
 $CG = \langle CG_{dox}, CG_{tel} \rangle$ , where:
- a.  $CG_{dox} = \{p : \forall a, p \in DC_{dox,a}\}$
  - b.  $CG_{tel} = \{p : \forall a, p \in DC_{tel,a}\}$
- (17) The Table (bifurcated version):  
 $T = \langle T_{dox}, T_{tel} \rangle$ , where:
- a. the maximal element of  $T_{dox}$ ,  $max(T_{dox})$ , represents the propositions that are currently candidates for becoming members of  $CG_{dox}$ ;
  - b. the maximal element of  $T_{tel}$ ,  $max(T_{tel})$ , represents the propositions that are currently candidates for becoming members of  $CG_{tel}$ .
- (18) The projected set (bifurcated version):  
 $PS = \langle PS_{dox}, PS_{tel} \rangle$ , where:
- a.  $PS_{dox} = \{CG_{dox} + p : p \in max(T_{dox})\}$

<sup>2</sup>Formally, the effective preference structure is defined in (i).

(i) **Preference Structure** (Condoravdi & Lauer 2012: 45):  
 A preference structure relative to an information state  $W$  is a pair  $\langle P, \leq \rangle$  where  $P \subseteq \wp(W)$  and  $\leq$  is a partial order on  $P$ .

An alternative implementation might be possible in which the relevant modality is *priority* modality (Portner 2007).

$$b. \quad PS_{tel} = \{CG_{tel} + p : p \in \max(T_{tel})\}$$

### 3.2. Imperatives in Japanese are alternative imperatives

Given the settings in the last section, let us now derive the interpretation of ordinary imperatives. Since we are assuming that imperatives are associated with an effective preference structure, they are interpreted as the speaker's preferential attitudes as below.

$$(19) \quad \begin{aligned} & \llbracket \text{Go to bed!} \rrbracket^w \\ & \approx \llbracket \text{I want you to go to bed at } w \rrbracket \end{aligned}$$

Departing from the standard view of imperatives that they denote a single proposition (or property), we argue that an imperative sentence-radical (or an imperative morphology) in Japanese takes a non-singleton set of alternatives, basically a set containing a proposition and its negation,  $!\varphi = \{\varphi, \neg\varphi\}$ . We suggest that the ability of having both the ordinary reading and the rhetorical reading is the result of an exhaustification of possibilities of updating commitments.<sup>3</sup> Just like alternative questions in English are disjunctive questions with a final falling contour (Biezma & Rawlins 2015), imperatives in Japanese are semantically alternative imperatives, and their entire discourse effects are determined by contexts or some linguistic elements (e.g. sentence-final contours or particles). Let us illustrate how ordinary (strong) readings are derived. Assuming imperatives encode the left-peripheral IMP operator, an imperative contributes to update the context in the same way as an assertion, only with respect to the teleological half of the context. In the ordinary reading, Japanese imperatives result in the following update.

$$(20) \quad \llbracket \text{IMP}_O \rrbracket = \lambda !\varphi_{\langle st, t \rangle} . \lambda K_k . \left[ K' \left| \begin{array}{l} \text{(i) } DC_{tel, sp} = DC_{tel, sp}^K + \{\varphi, \neg\varphi\} \\ \text{(ii) } T_{tel} = T_{tel}^K + !\varphi \\ \text{(iii) } PS = \{CG_{tel}^K + \varphi, \neg CG_{tel}^K + \varphi\} \\ \text{(iv) } K' = K \text{ in all other respects} \end{array} \right. \right]$$

In (20), an imperative conveys that: (i) the speaker has a preference for  $\varphi$  (by putting  $\varphi$  to  $DC_{tel, sp}$ ), (ii) whether  $\varphi$  or not is currently at issue (by putting  $!\varphi = \{\varphi, \neg\varphi\}$  to  $T_{tel}$ ), and (iii) the result of the utterance is that both the speaker and the addressee have a preference for  $\varphi$  (by putting  $CG_{tel}^K + \varphi$  to  $PS$ ). The question here is how the exhaustifications in (i) and (iii) of (20) are derived. To implement this update, we would like to make some Gricean assumptions about the application of the maxim of QUALITY (Grice 1975) as they apply to making teleological commitments and projections in (21) and (22), both of which are proposed by Rudin:

$$(21) \quad \text{QUALITY}_{\text{commitment}} : \begin{aligned} a. & \quad \text{Do not add a proposition to } DC_{tel} \text{ if it is incompatible with the maximal elements} \\ & \quad \text{of your effective preference structure.} \\ b. & \quad \text{Do not add a proposition to } DC_{tel} \text{ if it is not a maximal element of your private} \\ & \quad \text{effective preference structure.} \end{aligned} \quad (\text{Rudin 2018: (46)})$$

$$(22) \quad \text{QUALITY}_{\text{project}} :$$

<sup>3</sup>Note that the idea here is inspired by Oikonomou's (2016) proposal that the strong reading of imperatives is due to an implicature conveyed by an exhaustification of certain focus alternatives that contain an uttered content and its negation, although the way of deriving the effects is different from her account.



- a. Do not add a hypothetical Common Ground ( $CG_{tel} + p$ ) to the projected set ( $PS$ ) if an interlocutor makes a public commitment that is incompatible with that Common Ground. (i.e.: Don't project  $CG_{tel} + p$  if there is an interlocutor  $i$  such that  $\bigcap DC_{tel,i} \cap p = \emptyset$ .)
- b. Do not add a hypothetical Common Ground to the projected set if you have reason to believe there is an interlocutor whose private effective preferences are incompatible with that Common Ground. (i.e.: Don't project  $CG_{tel} + p$  if you have reason to believe there is an interlocutor whose private effective preferences entail  $\neg p$ .) (ibid.: (48))

In short, it is not cooperative to make a teleological commitment that you do not want to do, or to project a  $CG$  that you have reason to believe could not actually come about. Given the maxim above, whether  $\varphi$  or  $\neg\varphi$  goes to  $DC_{tel}$  depends on the exhaustification by the speaker's effective preference. In (20), an imperative clause has  $!\varphi = \{\varphi, \neg\varphi\}$ , and attempts to put  $!\varphi$  on the speaker's  $DC_{tel}$  (just like an assertion does on  $DC_{dox}$ ), but there is a ban on updating  $DC_{tel}$ —the maxim of  $QUALITY_{commitment}$ . Since in ordinary imperatives, only the highlighted proposition  $\varphi$  is the maximal element of the speaker's effective preference,  $\neg\varphi$  in  $!\varphi$ , which is incompatible with  $\varphi$ , cannot be added to  $DC_{tel}$ . This exhaustifies the space of the updating, thus deriving  $!\varphi = \{\varphi\}$ . The update here automatically determines whether  $CG_{tel} + \varphi$  or  $CG_{tel} + \neg\varphi$  is projected; an imperative clause attempts to project both  $CG_{tel} + \varphi$  and  $CG_{tel} + \neg\varphi$ ,  $PS = \{CG_{tel} + \varphi, CG_{tel} + \neg\varphi\}$ , but by the maxim of  $QUALITY_{project}$ ,  $CG_{tel} + \neg\varphi$ , which is incompatible with the speaker's current commitment  $DC_{tel} + \varphi$ , cannot be added to  $PS$ , which leads to an updated  $PS = \{CG_{tel} + \varphi\}$ .

The proposal here applies to the case of rising imperatives. Rudin (2018) argues that imperatives with rising intonations (the L\*H-H% tune, '↑') are conventionally weak, lacking speaker commitment, and thereby sound much more tentative/suggesting than ordinary falling imperatives. Although Japanese imperatives accompanied by the L\*H-H% tune have not been observed in prior literature, we find they also have almost the same effect as observed in imperatives in English.

- (23) a. Hayaku ryuugaku shi-ro (yo)! (#Shite-hoshiku-nai kedo.)  
 quickly study.abroad do-IMP PRT do-want.to-NEG but  
 'Study abroad as soon as possible! (#But I don't want you to.)'
- b. Hayaku ryuugaku shi-ro (yo) ?↑ (Shite-hoshiku-nai kedo.)  
 quickly study.abroad do-IMP PRT do-want.to-NEG but  
 'You'd better to study abroad as soon as possible!! (But I don't want you to.)'

Intuitively, in (23a), the speaker seems to be instructing the addressee to study abroad, whereas the speaker in (23b) is only giving advice.<sup>4</sup> Following Truckenbrodt (2006) and Rudin (2018), the L\*H-H% tune (monotonically rising intonation) applies to a function from contexts to contexts and overrides speaker commitment, as defined in (24):

- (24) Let  $C$  be an abbreviation for type  $\langle ek, k \rangle$  (a function from contexts to contexts),

$$\llbracket L^*H-H\% \rrbracket = \lambda C_C. \lambda K_k. \left[ K' \mid \begin{array}{l} DC_{sp} = DC_{sp}^K \\ K' = C(K) \text{ in all other respects} \end{array} \right]$$

<sup>4</sup>The effect of rising imperatives in Japanese seems to be very close to the one observed in conditional imperatives. See Condoravdi & Lauer (2017) for extensive discussion.

(slightly modified from Rudin (2018))

However, (24) still fails to capture our intuition about rising imperatives in Japanese. That is, in rising imperatives, there is a nuance that they tell the addressee that the way to achieve the goal is to perform the action, while simultaneously asserting that the speaker does not want the addressee to do so. The compositional effect of (20) and (24) is insufficient to capture this, since it lacks the nuance of ‘how-to’; it just conveys that the speaker raises an issue containing the proposition of the imperative sentence radical  $\{\varphi, \neg\varphi\}$  without any commitments (i.e. that the speaker is indifferent whether  $\varphi$  or  $\neg\varphi$ ).

Our (somewhat tentative) suggestion is to introduce the conventional effect of rising intonation, following Farkas & Roelofsen (2017). They propose that both rising declaratives and tag interrogatives signal that the speaker has access to some *evidence* for the highlighted (i.e. uttered) alternative, and specify this effect as the special discourse effect. Although we will not discuss intonational effects of speech acts in details for the aim of this work, we suggest that their proposal is also applicable to rising imperatives in Japanese. The idea here is that while content counted as *evidence* in declaratives or interrogatives is *evidence* for asserting or questioning so, content in imperatives is *ground* or a *reason* for advising or endorsing so. For example in (23b), the speaker is not teleologically committed to  $\varphi$ , but (s)he at least has some good ground or reasons for the addressee’s performing  $\varphi$ , e.g. *you can find new interests when you study abroad, studying abroad grants you the opportunity to study a foreign language, you will have the chance to see a side of your major*, etc. A complete work for the formalization is left for our future task, but we believe that this line of analysis captures our intuition about rising imperatives in Japanese.

#### 4. Back to rhetorical imperatives

##### 4.1. Deriving rhetorical interpretations

This section attempts to derive the discourse effect of RhIs. The core idea of our proposal is that RhIs are imperatives that signal that content of a clause is already common-grounded in parallel to rhetorical questions, and that the speaker has an anti-preference for the uttered content over alternatives. These constraints exhaust the possibilities of the update, thus lead to a limited (i.e. rhetorical) interpretation.

Our first proposal highlights the status of the common-ground associated with a given utterance. As represented in (25), we suggest that RhIs are imperatives whose contents are known to both the speaker and the addressee; in other words, imperatives in which the content of the request is part of the common-ground.

- (25) Presupposition of  $\text{IMP}_{\text{RHET}}(\varphi)$  in  $K$ :  
 $\varphi_{w,t'} \in CG_{\text{dox}}^K$ , where  $t' \prec t_K$ .  
 ( $t_K$  is an utterance time in  $K$ , cf. Kaufmann 2012)

Crucially, a proposition  $\varphi$  of  $\text{IMP}_{\text{RHET}}(\varphi)$  must refer to a particular past time event frame  $t' \prec t_K$ ; intuitively speaking, the speaker thinks that (s)he wants the addressee to  $\varphi$  in the past. As we will argue in detail in the next section, this is why RhIs are interpreted like a past deontic modalized sentence *should.have(p)*.

In this way, we can analyze the relationship between ordinary imperatives and RhIs in a way

parallel to how we think about the relationship between ordinary questions and rhetorical questions; rhetorical questions are questions whose ‘answers’ are common-grounded (cf. Caponigro & Sprouse 2007), while RhIs are imperatives whose ‘desirable contents’ are common-grounded. That is, rhetorical interpretations of speech acts are triggered by the common-ground in general.

The sufficient condition of RhIs is not just the *CG* constraint. We moreover suggest to focus on the notion of what we call the anti-preference; as observed in section 2.1, since the speaker of a RhI ‘ $\text{IMP}_{\text{RHET}}(\varphi)$ ’ has an effective preference for  $\varphi$  over  $\neg\varphi$ , this  $\neg\varphi$ , rather than  $\varphi$ , is the content that should be added to the teleological discourse commitment. This discourse move of RhIs is formalized in (26):

- (26) Anti-preference effect of  $\text{IMP}_{\text{RHET}}(\varphi)$  in  $K$ :  
 $DC_{tel,sp}^{K'} = DC_{tel,sp}^K + \neg\varphi$   
 (i.e.: Update  $K$  by adding  $\neg\varphi$  to the speaker’s  $DC_{tel}$  in  $K$ .)

Given these settings, let us propose the discourse move of RhIs in (27):

$$(27) \quad \llbracket \text{IMP}_{\text{RHET}} \rrbracket = \lambda! \varphi_{w,t'}. \lambda K. \left[ K' \left| \begin{array}{l} \text{(i)} \quad \varphi_{w,t'} \prec_{t_K} \in CG_{dox}^K \\ \text{(ii)} \quad DC_{tel,sp} = DC_{tel,sp}^K + \{ \neg\varphi_{w,t'}, \neg\varphi_{w,t'} \} \\ \text{(iii)} \quad T_{tel} = T_{tel}^K + \{ \neg\varphi_{w,t'}, \neg\varphi_{w,t'} \} \\ \text{(iv)} \quad PS = \{ CG_{tel}^K + \varphi_{w,t'}, CG_{tel}^K + \neg\varphi_{w,t'} \} \\ \text{(v)} \quad K' = K \text{ in all other respects} \end{array} \right. \right]$$

Intuitively, (27) conveys that: (i) the content of  $\varphi$  is already common-grounded (by (25)), (ii) the speaker has an anti-preference for  $\varphi$ , (iii)  $\neg\varphi$  is currently at issue at the same time, and (iv) the projected common-ground only contains  $\neg\varphi$ . The exhaustifications in (ii) and (iv) happen in almost the same way as OIs; in (ii) given the maxim of (21), whether  $\varphi$  or  $\neg\varphi$  goes to  $DC_{tel}$  depends on the speaker’s effective preference. Unlike OIs, since  $\neg\varphi$  rather than  $\varphi$  is the maximal element of the speaker’s effective preference in RhIs,  $\varphi$ , which is incompatible with  $\neg\varphi$ , cannot be added to  $DC_{tel}$ . This automatically exhaustifies the space of updating  $PS$  in (iv). Although both  $CG_{tel} + \varphi$  and  $CG_{tel} + \neg\varphi$  are originally the possible future CGs, by the maxim in (22),  $CG_{tel} + \varphi$ , which is not compatible with  $DC_{tel} + \neg\varphi$ , cannot be added.

What we should consider now is the update in (iii): how are the contents added to the Table exhaustified, unlike the case of OIs? We argue that this is due to the presupposition of RhIs: in (iii), an imperative clause attempts to put  $!\varphi$  on  $T$ . At the same time, it is presupposed that  $\varphi_{w,t'}$  is doxastically common-grounded,  $\varphi_{w,t'} \in CG_{dox}^K$  (= (i)): this  $\varphi_{w,t'} \in CG_{dox}^K$  exhaustifies the space of possibilities of updating, hence  $!\varphi = \{ \neg\varphi_{w,t'} \}$ . This is motivated by a general fact that deontic modalized sentences conveying counterfactuality cannot update a context with their prejacent in contexts where the prejacent is doxastically common-grounded (cf. *Diversity Condition*, Condoravdi 2002)<sup>5</sup>. In other words, a proposition  $\varphi$  of a deontic modalized sentence  $\text{DEON}(\varphi)$  cannot be a possibility of an update (i.e. content added to  $T$ ) if  $\varphi$  is known by the discourse agents. Consider (28), a case where the fact ‘the addressee returned the book’ is common-grounded doxastically.

- (28) [ According to the library regulations, the addressee returned the book yesterday. ]

<sup>5</sup>See Thomas (2014) for Diversity Condition in deontic modals.

- a. #You should have returned the book yesterday.
- b. You shouldn't have returned the book yesterday.

It seems that we could generalize this as follows: a counterfactual utterance  $CF(\varphi)$  cannot update a context  $K$  with  $\varphi$  if  $K$  entails  $\varphi \in CG_{dox}$ . RhIs also trigger a counterfactuality (cf. (4a)), however, they are not infelicitous in such contexts, because an imperative clause has multiple possibilities  $\{\varphi_{w,t'}, \neg\varphi_{w,t'}\}$ . Thanks to this multiplicity, the non-common-grounded one ( $\neg\varphi_{w,t'}$  in RhIs) can stay alive, even when the common-grounded one is exhausted,  $\{\neg\varphi_{w,t'}, \neg\varphi_{w,t'}\}$ .

Why is the entire effect of RhIs interpreted like the one of assertions, though? How can we derive the anti-directivity of RhIs observed in section 2.3? We claim that this is because an issue raised by RhIs refers to a particular past time event frame  $t' \prec t_K$ . Following Kaufmann (2012), we make the assumption that directive speech acts require the temporal condition ‘that an event of an imperative is satisfied at or following utterance time’ to be satisfied. Since RhIs always violate this condition (cf. section 2.2), they are no longer interpreted as directives, but end up being assertions that lack a directive performativity. We can therefore hypothesize that if an imperative clause acceptably denotes a proposition that refers to a past event, the clause is interpreted as an assertion rather than a directive (cf. Ninan 2008, Thomas 2014). An independent motivation for this line of analysis is that Japanese imperatives can include past events in the domain of evaluation.<sup>6</sup> See (29) for the relevant example. It is worth noting that in (29), the imperative is not classified to RhIs, since it does not exhibit any anti-preference.

- (29) (One morning, after the children went to school, the mother came to the dining table and found that the children's breakfast was left uneaten. The mother sighs and says)
- Zenbu tabe-ro yo!  
 everything eat-IMP DP  
 ‘[lit.] Eat everything!’  
 $\nrightarrow$  Eat everything! (performative)  
 $\rightsquigarrow$  They should've eaten everything! (not performative)

In (29), the interpretation of the sentence is restricted to the non-performative (assertive) reading despite its imperative form. As expected, the natural answer to (29) must be either “Right” or “No, you're wrong,” rather than “I accept your order” or “No, I refuse your order,” cf. (6). The current discussion of past imperatives indicates that our hypothesis that imperatives in Japanese are assertive if they include past events in their domain of evaluation is correct, and further provides us an account for the fact that RhIs are always assertive; the anti-directive property of RhIs is derived by their lack of future-orientativity.

#### 4.2. Motivations for the disjunctive view

Before concluding this section, let us consider further motivations to adopt the idea that imperatives in Japanese are non-singleton set of alternatives. First, let us examine what would have been expected of RhIs if we had not adopted this line of approach. For instance, if we assume, following the traditional and standard view, that they have a single proposition (or property),

<sup>6</sup>Note that in Japanese, an imperative morphology (i.e. *-e/ro*) does not itself entail the directive performativity; rather, it only encodes modal meaning, and the directivity is independently conveyed by the directive presupposition (or implicature) operator (Ihara 2020).

RhIs would be analyzed as (30), maintaining the maxims and the presupposition of RhIs:

$$(30) \quad \llbracket \text{IMP}_{\text{RHET}} \rrbracket = \lambda \phi_{w,t'} . \lambda K . \left[ K' \left| \begin{array}{l} \text{(i)} \quad \phi_{w,t'} \prec_{t_K} \in CG_{\text{dox}}^K \\ \text{(ii)} \quad DC_{\text{tel},sp} = DC_{\text{tel},sp}^K + \{ \neg \phi_{w,t'} \} \\ \text{(iii)} \quad T_{\text{tel}} = T_{\text{tel}}^K + \{ \neg \phi_{w,t'} \} \\ \text{(iv)} \quad PS = \{ CG_{\text{tel}}^K + \phi_{w,t'} \} \\ \text{(v)} \quad K' = K \text{ in all other respects} \end{array} \right. \right]$$

This is not the result that we want; (ii)–(iv) in (30) indicate that RhIs add nothing to the relevant discourse components, which means they neither commit to a proposition nor raise an issue to the Table. One may think that this is where pragmatics comes in. In RhIs, the speaker dares to utter imperatives without any contribution to the discourse (with some violations of conditions of ordinary imperatives), which leads us to interpret imperatives as rhetorical utterances via inferences. However, if so, it is not clear why and how the negated meaning is derived as a consequence of this inference. For example, a rhetorical question like “After all, do phonemes have a damn thing to do with language?” has a non-singleton set of possibilities, and in the rhetorical contexts, only the negated one can stay alive as a proposition which is compatible with the context, which thereby conveys the negation interpretation. In contrast, in RhIs, the standard approach must derive the negated meaning in some other way, since (30) has no alternative proposition to be interpreted.

We finally present data that may support the empirical validity of our disjunctive approach to Japanese imperatives. Interestingly, Japanese can form conditionals with the imperative morphology *-e/ro*, as shown in (31).

- (31) a. Moshi ame-ga huru-no-de-ar-e (huranaini-no-de-ar-e),  
           if rain-NOM fall-NMLZ-COP-be-IMP (not.fall-NMLZ-COP-be-IMP),  
           geemu-wa okonawareru.  
           game-TOP held  
           ‘Whether it rains or not, the game will be held.’  
       b. Moshi ame-ga huruni-shi-ro (huranaini-shi-ro), geemu-wa okonawareru.  
           if rain-NOM fall-do-IMP (not.fall-do-IMP), game-TOP held  
           ‘Whether it rains or not, the game will be held.’

As the English translation suggests, this conditional is interpreted as having a non-singleton set of alternatives like { it rains, it doesn’t rain }. Although an analysis of this conditional is left as a topic for future research, the data above offers a possibility that the Japanese imperative morphology may not be a marker of imperatives but rather an alternative generating operator like Japanese *ka* (cf. Shimoyama, 2006; Szabolcsi, 2015; Uegaki, 2018).

## 5. Conclusion

Divorcing the discourse function from the resulting update for imperatives leads to a unified account of rhetorical and non-rhetorical speech-acts, providing further evidence for a view of discourse where rhetorical speech-acts are proposals for updating the common-ground.

There are still some remaining issues to be resolved. First, it is worth noting that not all kinds of predicates are allowed to be used as RhIs. For example, predicates like *run*, *ask*, and so on disallow rhetorical interpretation, while predicates like *lie*, *say*, and so on allow this interpreta-

tion. We therefore need to figure out what kind of predicates are available for RHIs. In addition, extending the current analysis to various languages other than Japanese (e.g. Turkish *Difficult Imperatives*, Demirok & Oikonomou 2019) will contribute to a better understanding of RHIs.

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