THE SYNTAX OF FORMALITY: UNIVERSALS AND VARIATION

Elizabeth Ritter¹ and Martina Wiltschko²

¹University of Calgary, ²ICREA & University of Pompeu Fabra

1. Introduction

In this paper we explore the formal properties of formality distinctions in pronominal systems. The World Atlas of Linguistic Structures (WALS) identifies four types of languages based on the number of distinctions of politeness (their term for formality) in second person pronouns – (i) languages with no formality distinctions; (ii) languages with a binary distinction; (iii) languages with multiple distinctions; and (iv) languages that avoid pronouns due to considerations of politeness/formality. This is illustrated in Figure 1.

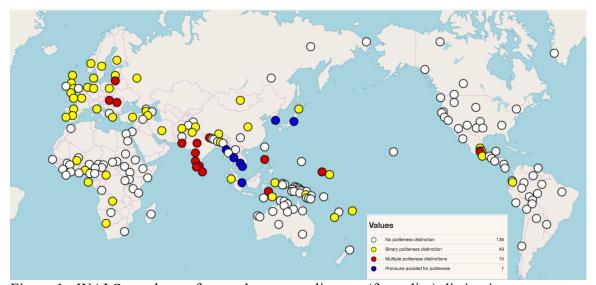


Figure 1: WALS typology of second person politeness (formality) distinctions

In this paper we develop a different typology, based on the grammatical derivation of (in)formal forms. We identify two types of systems: Type I systems are exemplified by French and German and Type II by Korean and Japanese. French and German both have the widely discussed T/V distinction between an (unmarked) informal form and a marked formal one. One of the key features of such systems is that the formal pronoun is homophonous with another pronoun in the paradigm. French uses the second person plural form *vous* as its formal pronoun, while German uses the third person plural form *sie*. Korean and Japanese, on the other hand, have an open class of forms that encode information about the social status of the addressee relative to the speaker, the age and sex of the addressee (and sometimes the speaker), etc. Consistent with the characterization of these forms as open class, we note that different sources provide slightly different lists of

options. The set in (1) is summarizes the discussion of Korean second person forms in Yeon & Brown 2011.

(1) **ne** plain

caney plain between adults/elderly male towards male **tangsin** plain between adults, disrespectful toward a stranger

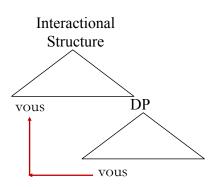
kutay poetic

caki plain and intimate between husband & wife

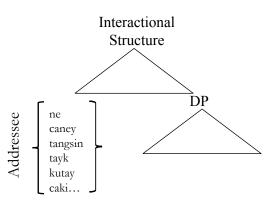
tayk towards a stranger, old-fashioned

To develop a formal analysis of formality marking, we assume that all types of nominals can be dominated by a layer of structure which is responsible for hosting units of language that serve to regulate conversational interaction, henceforth *interactional structure* and that this layer is the locus of formality (Ritter & Wiltschko 2018). We now propose that the two types of formality instantiate different strategies for associating formality distinctions with positions in this layer. Specifically, we argue that Type I systems are derived by *recycling* phi features that originate within the DP, as schematized in (2) while Type II systems are derived by associating the relevant content directly into the interactional structure, as schematized in (2).

(2) a. recycled grammatical content



b. intrinsic lexical content



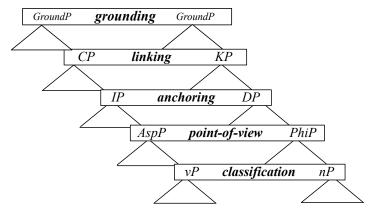
The remainder of this paper is organized as follows: In section 2 we provide background on nominal interactional structure, in section 3 we develop our analysis of Type I formality, in section 4 we develop our analysis of Type II formality, in section 5 we compare our analysis with a recent analysis for the marking of formality proposed in Portner et al. 2019, and in section 6 we conclude.

¹ The structure we have in mind here is often referred to as *speech act structure*. However, we depart from this terminology because we want to emphasize the interactional nature of the types of meaning that are associated with this layer. See Wiltschko, in preparation for discussion.

2. The interactional structure of nominals

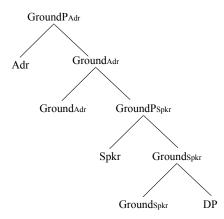
In this section we briefly review the motivation for the postulation of nominal interactional structure (see Ritter & Wiltschko 2018, 2019 for a more detailed discussion). In recent years, a number of different linguists have independently proposed that there exists a speech act structure (interactional structure) at the top of the clausal architecture, reviving ideas first put forward by Ross 1970 within the framework of Generative Semantics (e.g. Benincà 2001, Speas and Tenny 2003, Garzonio 2004, Tenny 2006, Hill 2007a,b, Haegeman and Hill 2013, Haegeman 2014, Zu 2013, 2018). We adopt the version of the syntacticization of clausal speech acts developed in Wiltschko & Heim 2016 and Wiltschko in prep (see fn. 1). Moreover, we develop our analysis within the framework of the Universal Spine Hypothesis (Wiltschko 2014). This hypothesis asserts that the functions of the nominal spine strictly parallel those of the clausal spine. Hence, if there is a layer of interactional structure at the top of the clausal spine, there must be a layer of interactional structure at the top of the nominal spine. The categories that we assume and their interpretive functions are schematized in Error! Reference source not found. below.

(3) The Functions of the Universal Spine



For the purposes of this paper, the crucial spinal function is *grounding*. Following Wiltschko (in prep.), grounding is concerned with how the content of the propositional structure is integrated into the belief systems of the interlocutors, i.e. the common ground. In particular, the grounding layer may indicate how propositions come to be known, how long they have been known, etc. Since the common ground contains not only propositions but also discourse referents, we assume that these, too, must be associated with a *grounding* structure. In particular, just as is the case for clausal grounding, nominal grounding comes in two guises: one is relative to the speaker (Ground_{Spkr}P), the other is relative to the Addressee (Ground_{Adr}P). The specifier of each GroundP hosts the role for one interlocutor (Speaker in Ground_{Spkr}P and Addressee in Ground_{Adr}P). This is schematized in (4).

(4) Nominal speech interactional structure.



The nominal grounding layer hosts units of language that express how referents are known, and how the interlocutors relate to each other and to other referents. For example, as an expression of the social relation between the current speaker and addressee, formality is hosted in this layer of structure (see Ritter & Wiltschko 2018). In the next two sections we develop our analysis of formality distinctions.

3. Analysis of Type I formality: Recycling

We begin with Type I formality, which is instantiated by the T/V alternation in Indo-European languages, such as German and French. Recall that the key feature of such systems is that the formal pronoun is homophonous with another pronoun in the paradigm. In French the source of the formal pronoun is the second person plural form *vous* while in German it is the third person plural form *sie*.²

Person	Singular	Plural	Formal
1st	ich	wir	
2nd	du	ihr	Sie ³
3rd	er/sie/es	sie	

Table 1: German nominative pronouns

Person	Singular	Plural	Formal
1st	je	nous	
2nd	tu	vous	vous
3rd	il/elle	ils/elles	

Table 2: French nominative pronouns

² Unlike their French and German counterparts, Spanish formal second person pronouns are not homophonous with other pronouns in the paradigm. We speculate that these forms can be analyzed akin to imposters (in the sense of Collins and Postal 2012).

³ There is an orthographic difference between the German third person plural pronoun (*sie*) and the second person formal pronoun (*Sie*) that has neither morpho-syntactic nor phonetic/phonological consequences.

We propose that in these languages grammatical content is re-interpreted as pragmatic content. We call this process *recycling*. In the remainder of this section, we develop a syntactic analysis of recycling.

We argue that the content that is interpreted as signalling formality originates as phifeatures within the DP. Evidence for this comes from the fact that the formal pronouns trigger the same agreement on the verb as their homophonous source pronouns, resulting in a mismatch between the grammatical person and/or number of the formal pronoun and its referent. In German, for example, *S/sie* always triggers third person plural agreement on the verb, regardless of whether its referent is the addressee or some other (third person plural) individual. Similarly, in French, *vous* always triggers second person plural agreement on the verb, regardless of whether its referent is singular or plural in number.

- (5) a. Sie haben recht.

 3PL/you.FRML have.3PL right

 'They/You (formal) are right.'
 - b *Sie hast recht.
 you.FRML have.2SG right
 Intended: 'You (formal) are right.'
- (6) a. Vous avez raison.

 2PL/you.FRML have.2PL right
 'You all/You (formal) are right.'
 - b *Vous as raison. you.FRML have.2SG right Intended: 'You (formal) are right.'

Assuming, as we do, that there is an interactional layer of structure which hosts speaker and addressee roles, makes available an additional position to host such roles. That is, the representation of these speech act roles is in addition to any grammatical person features that are present in the DP. What this means is that there are two positions within the nominal structure where person can manifest. Recycling phi features in the interactional structure also gives rise to mismatches such as those in (5)a and (6)a. On our analysis these features may be semantically interpreted either in their DP internal position or in the interactional structure. The former results in the expected interpretation, while the latter results in the phi-features signalling (in)formality.

The specific phi-features we adopt have the potential to be interpreted in either the DP layer or the interactive layer. For example, we assume that the formal feature that expresses plurality is [+augmented] and that the formal feature that expresses third person is [-local]. The feature analyses for German and French pronouns of address are given in tables 3 and 4, respectively.

Number	[-Augmented]	[+Augmented]
Person		
[+local][+addressee]	du	ihr
[-local]		sie

Table 3: Feature analysis of German nominative pronouns of address

Number	[-Augmented]	[+Augmented]
Person		
[+local][+addressee]	tu	vous

Table 4: Feature analysis of French nominative pronouns of address

When [+augmented] is interpreted in the interactional structure it has one of two effects: either it signals that the addressee is augmented, or that the common ground between the speaker and addressee is augmented. An augmented addressee has a higher social status and an augmented common ground indicates that there is greater social distance between the interlocutors. Similarly, the phi feature that expresses third person is [-local]. When [-local] is interpreted in the interactional layer, it also signals social distance between the interlocutors. Social distance occurs when the speaker and addressee belong to different social strata, regardless of which is higher. In other words, distancing occurs when the speaker is either socially superior or socially inferior to the addressee. This analysis accounts for the fact that both French *yous* and German *Sie* are used to signal that the addressee has a higher social status, or that the speaker is distancing themselves from an addressee who does not belong to the same social group (e.g. if the addressee is a clerk who is serving the speaker).⁴ In sum, our analysis of German and French assumes that augmentation and distancing are both used to signal formality, and that a language can choose to exploit one or both dimensions. This is represented graphically in Figure 2 below.

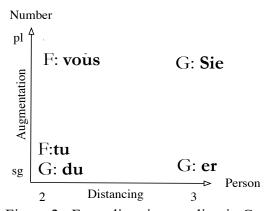


Figure 2: Formality via recycling in German and French

⁴ Thanks to Yves Roberge and Monique Dufresne for drawing our attention to the use of French *vous* for distancing as well as augmentation.

This analysis of the German and French pattern predicts that we might expect a language where augmentation and distancing are used to derive two different formal pronouns. Tagalog is such a language, as can be seen based on the paradigm in Table 5. Specifically, Tagalog has two formal pronouns, *kayo*, and *sila*. According to Schacter & Otanes (1972: 90), *kayo* is the more common formal pronoun. It is used in most situations where a respectful or polite term of address is expected. In particular it is used by children addressing adults, by employees addressing employers, by adults addressing social equals who are not close friends, and by family members addressing relatives belonging to an older generation. *Sila* is used to signal "great respect and very marked social distance. It was fomerly used, for example by subjects addressing monarchs, and might now be used, especially in writing by a humble citizen addressing an august political person" (Schacter & Otanes 1972: 91).

Person	Singular	Plural	Formal
1st	ako	tayo/kami	
2nd	ikaw	kayo	kayo, sila
3rd	siya	sila	

Table 5: Tagalog pronouns

Kayo is homophonous with the second person plural form, hence an instance of formality via augmentation; *sila* is homophonous with the third person plural form, hence an instance of formality via both augmentation and distancing. The featural specification we assume for these pronouns is given in table 6.

Number	[-Augmented]	[+Augmented]
Person		
[+local][+addressee]	ikaw	kayo
[-local]		sila

Table 6: Feature analysis of Tagalog pronouns of address

We have now seen recycling of the phi feature [+augmented] resulting in formal pronouns that are created via augmentation as well as recycling of both [+augmented] and [-local], resulting in formal pronouns that are created via distancing in conjunction with augmentation. This leaves open the question as to whether we might find recycling of only [-local], resulting in formal pronouns that are created only via distancing. We suggest that an instance of this is found in German where a singular third person pronoun can be used by a monarch when speaking to a commoner, as in (7).

- (7) Was möchte er? What wants.3sg he
 - 'What does he want?' (unmarked asking question about a 3rd person referent)
 - 'What do you want?' (monarch addressing a commoner)

This use of a third person singular pronoun to address an interlocutor of lower status contrasts with that of a third person plural pronoun, such as German *Sie* or Tagalog *sila*, discussed above. Taken together the facts indicate that distancing via the phi-feature [-local] is not restricted to addressing someone of a higher status. Rather, distancing is used with an addressee of either higher or lower status.

In sum, we have now seen examples of recycled person and number features. The precise pragmatic interpretation of the recycled features is conventionally determined, and hence, language-specific. The space of variation based on the two features that are used to create formality distinctions via recycling is filled in German, French and Tagalog as shown in Figure 3.

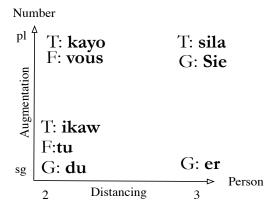


Figure 3: Formality via recycling

Note further that while recycling languages normally use this strategy for second person, there is no obvious reason why this should be the case. In fact, there are languages where first person pronouns are used to mark a formal relation between the speaker and the addressee (Macauley 2015). And even in English, we find examples of this type. That is, when a monarch refers to themselves, they may use the first person plural pronoun, as a form of augmentation signalling that they are of higher status than their addressee. This is shown by the example in (8), famously attributed to Queen Victoria.

(8) We are not amused.

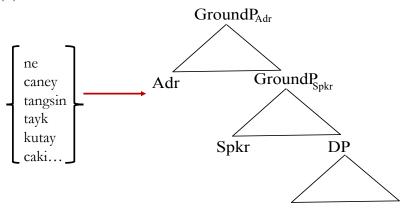
In short, interpreting phi-features in the interactional structure results in a mismatch between formal grammatical features and their interpretation. We suggest that such mismatches signal social dissonance between the speaker and addressee, including different social status and a marked context of use.

We have also seen at least three differences among languages that use recycling to indicate formality: (i) which features they recycle; (ii) how the recycled features are interpreted; and (iii) the social conventions that determine usage. What they all have in common is that they use a very restricted set of formal features to encode the relative status of the speaker and addressee. This differs from the pronouns we find in Korean and Japanese, to which we turn next.

4. Analysis of Type II formality: Introducing paranouns

Type II formality is instantiated in Korean and Japanese by units of language that are standardly called pronouns, though they differ significantly from the formal pronouns derived via the recycling of grammatical features discussed in section 3. They comprise an open class and contrast with one another along a number of different dimensions. We propose that these pronoun-like terms are directly associated with the interactional structure; they do not start out as grammatical pronouns and hence are not composed of phi-features. Rather, their lexical content is always interpreted in GroundP, as shown in (9). Hence more distinctions can be encoded than is the case with phi-features.

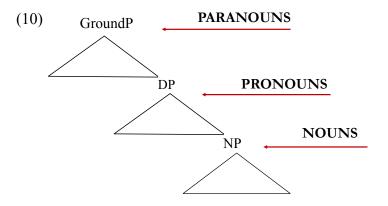
(9) Korean terms of address associated with GroundP



Assuming that these Korean pronoun-like terms (and their Japanese counterparts) are directly associated with GroundP_{Spkr} or GroundP_{Adr} accounts for the fact that they have a distribution very different from regular pronouns. In fact, in the literature on Japanese nominals there is a long-standing debate regarding the categorial identity of pronouns. For example, Hinds (1971: 154) states that Japanese "personal pronouns are distinguished from nouns both morphologically and syntactically". But at the same time "the overall distribution of Japanese personal pronouns and, say, English personal pronouns is markedly distinct."

We argue that it is the position on the spine which determines the distribution of a given unit of language and, to some extent, also its interpretation. We know this to be the case for English French and German pronouns, which have a very different distribution from regular nouns in these languages. In line with this difference it is generally assumed that pronouns are bundles of formal features associated with functional heads, e.g. D and Phi. In other words, pronouns are never nouns. And just as there are units of language that are intrinsically associated with DP and PhiP, there are also units of language that are intrinsically associated with GroundP_{Spkr} and GroundP_{Adr}. Given the difference in distribution, we propose that so-called pronouns Korean and Japanese are not in fact pronouns. Rather, they belong to a different word class, which we call *paranoun*. The

mapping between word-class categories and the nominal spine is illustrated in Error! Reference source not found..



We suggest that the Korean terms of address listed in (9)(9) are paranouns. Other types of nominals that we assume belong in this category are titles (*Mister, Professor*, etc.), and kinship terms, at least those that can also be used as a form of address (*Mom, Dad, Uncle, Auntie*, etc.). Several of the properties associated with Korean and Japanese paranouns fall out from our analysis. Perhaps most strikingly, they do not form paradigms or trigger agreement, which is very much unlike typical pronouns. Contrastive phi-features, which are the source of typical pronominal paradigms and responsible for agreement, are associated with functional categories internal to the DP, the grammatical layer of the nominal. Since paranouns are associated with categories of the interactional layer, and not with functional categories internal to the DP, they lack phi features, and fail to trigger agreement. Significantly, paranouns have substantive (not grammatical) content, and because they originate in the interactional structure, their content is intrinsically pragmatically marked.

Significantly, both Japanese and Korean belong to the type of language which WALS describes as avoiding pronouns for politeness. In these languages, names, titles and kin terms are normally used as forms of address (e.g Akiyama & Akiyama 1991, Kaiser et al. 2001 for Japanese, Chang 1996, Lee & Ramsey 2000 for Korean). This is consistent with our analysis: this type of language simply does not have overt (DP) pronouns, and hence no pronouns can be used to address the interlocutors.

Finally, the analysis we propose here predicts that there may not only be addressee-oriented paranouns (i.e., terms of address), but also speaker-oriented ones (i.e., terms of self-reference). This is because the grounding layer is articulated and consists of a speaker-and an addressee-oriented layer (Wiltschko & Heim 2016, Wiltschko 2017, Ritter & Wiltschko 2018). This prediction is borne out. Both Korean and Japanese have different forms for self-reference as shown in (11)-(12). Given that considerations of politeness of address do not play a role, we expect there to be forms to indicate the speaker's high-status as well, which is indeed the case. Both Korean and Japanese, have paranouns for self-reference that can indicate high or low status relative to the speaker. Korean *cim* was used only by kings, for example, while Japanese *watakushi* is highly formal and signals high

status. This is consistent with our assumption that the lack of high status formal terms of address is not grammatically conditioned.

(11) Korean paranouns for speakers:

na (plain)
ce (humble)
cim (only used by a king, archaic)

(12) Japanese paranouns for speakers:

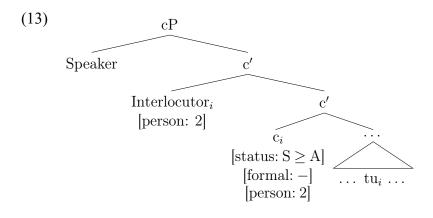
male: watakushi > kochira > watashi > boku > ore > washi female: watakushi > kochira > watashi > atashi > uchi

Kaiser et al. 2001: 371

We have now seen that there are two ways to mark formality: the T/V distinction derived by re-interpreting grammatical phi-features in the interactional structure; and the multi-faceted marking of formality found in Japanese and Korean, which is intrinsically associated with lexical content directly associated with the interactional structure. In the next section we compare our analysis of formality marking with a different analysis recently proposed in the literature.

5. A different analysis

In their recent paper, Portner et al. 2019 seek to develop a formal analysis for different markers of politeness. Specifically, they distinguish between two types of such markers: content-oriented and utterance-oriented. Content-oriented markers include elements that are found in the propositional domain of the clause and include the T/V distinction found in pronouns. Utterance-oriented markers include elements in the speech act domain (our interactional structure), such as sentence-final particles in Korean that mark speech style. Portner et al. argue that the speech-style particles are directly associated with cP, a category in the speech act domain, to encode relative status; in this layer of structure the interlocutors' roles (speaker and addressee) are represented as well. They further propose that the T/V distinction arises because of a dependency relation between the pronoun, which occupies an argument position, and c. This is illustrated in (13), where co-indexation between an element in cP and the pronoun in the propositional structure signals a binding relation.



We do not treat sentence-final particles in this paper, but see Wiltschko & Heim 2016 and Wiltschko 2017 for an analysis in terms of the clausal interactional structure. However, we argue that these two types of markers of politeness are not dependent on each other and that their analyses should reflect this. This is indeed the case in the analysis we propose here, where it is the nominal interactional layer which is responsible for encoding the formality distinction in pronouns. We offer three arguments for our view that formality in nominals is determined by nominal rather than clausal interactional structure.

First, Korean speech-style markers are not restricted to encoding familiarity or intimacy, but Korean paranouns (so-called pronouns) are restricted in this way. This suggests that the pragmatic distinctions required for paranouns (and other nominals) differ from those for sentence final particles. Second, in languages like German, pronouns of different formality status can be coordinated as shown in (14).⁵

(14) Ich werde Sie und Dich einladen
I will you_{formal} and you_{informal} invite.
'I will invite you and you.' [accompanied by pointing]

This is unexpected if the formality status of pronouns depends on the formality status of a single head in cP: More specifically, if c is specified as [+formal], then Sie should be possible, but Dich should be infelicitous, and if c is specified as [-formal], then Dich should be possible, but Sie should be infelicitous, contrary to fact. However, co-ordination of a formal and informal pronoun of address is unproblematic if each has its own interactional structure.

Finally, we note that it is not clear how Portner et al. 2019 would account for the differences between Type I and Type II formality discussed here. As we have seen, there are significant differences in the form, function, and distribution of formality and it is not clear what the range of variation might be within their analysis. We conclude that our analysis, which assumes a dedicated interactional structure in the nominal domain offers better empirical coverage of the facts considered here.

6. Conclusion

The goal of this paper was to establish the existence of two strategies for expressing formality and to develop a formal analysis for these two strategies. We have proposed that the differences between them are grammatically conditioned and essentially reduce to a categorial and derivational difference. In Indo-European languages the familiar T/V distinction is derived via a process we call pronoun recycling. This process moves phi features from inside the DP to the interactional layer, where they are re-interpreted. Specifically, we propose that recycling the plural feature [+augmented] into the interactional layer signals higher status or greater social distance, and that recycling the

⁵ Note that examples like (14) are only felicitous if the speaker looks at each interlocutor as they are addressing them in order to make clear who *Sie* and *Dich* refer to.

third person feature [-local] signals greater social distance. Because recycling repurposes phi features, it gives rise to a syncretism between formal second person pronouns on the one hand and unmarked second person plural and/or third person pronouns on the other. In contrast, in Korean and Japanese so-called pronouns lack phi-features and associate directly with categories of the interactional structure. Assuming that phi features are necessary for both paradigmatic structure and agreement, this analysis accounts for the fact that these languages lack both pronominal paradigms and morphological agreement. Assuming further that pronouns are simply bundles of phi features, it follows that the socalled pronouns of Korean and Japanese are not of the same word-class. Consequently, we introduced the term paranoun to refer to them. Paranouns include terms of address, such as titles and kinship terms, which are found in Indo-European languages as well. Thus, the typology for formality marking we have developed here is not a typology that is meant to cover entire languages, but rather individual expressions of formality. In other words, a single language can have both paranouns and pronouns. What remains to be seen is whether there are other strategies for expressing nominal formality in the languages of the world and if and how the nominal interactional structure provides the typological space needed. The present paper is a step in this direction.

References

Akiyama, Nobuo, and Carol Akiyama. 1991. Japanese grammar. Hauppage, NY: Barron's.

Benincà, Paola. 2001. The position of topic and focus in the left periphery. In *Current studies in Italian syntax: Essays offered to Lorenzo Renzi*, ed. Guglielmo Cinque and Giampaolo Salvi, 39-64. Amsterdam: North-Holland.

Chang, Suk-Jin. 1996. Korean. Amsterdam: John Benjamins.

Collins, Chris, and Paul Martin Postal. 2012. *Imposters: A study of pronominal agreement*. Cambridge, MA: MIT Press.

Garzonio, Jacopo. 2004. Interrogative types and left periphery: Some data from the Fiorentino dialect. *Quaderni di lavoro dell'ASIS* 4: 1-19.

Haegeman, Liliane. 2014. West Flemish verb-based discourse markers and the articulation of the speech act layer. *Studia Linguistica* 68(1):116-139.

Haegeman, Liliane, and Virginia Hill. 2013. The syntacticization of discourse. In *Syntax and its limits*, ed. Rafaella Folli, Robert Truswell, and C. Sevdali, 370-390. Oxford: Oxford University Press.

Haegeman, Liliane, and Virginia Hill. 2014. Vocatives and speech act projections: A case study in West Flemish. In *On peripheries*, ed. Anna Cardinaletti, Guglielmo Cinque, and Yoshio Endo, 209-236. Tokyo: Hituzi Syobo.

Helmbrecht, Johannes. 2013. Politeness Distinctions in Pronouns. In *The world atlas of language structures online*, ed. Matthew S. Dryer, and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology. (Available online at http://wals.info/chapter/45, Accessed on 2019-06-21.)

Hill, Virginia. 2007a. Romanian adverbs and the pragmatic field. The Linguistic Review 24(1): 61-86.

Hill, Virginia. 2007b. Vocatives and the pragmatics-syntax interface. Lingua 117(12): 2077-2105.

Hinds, John. 1971. Personal pronouns in Japanese. Glossa 5(2): 146-51.

Kaiser, Stefan, Yasuko Ichikawa, Noriko Kobayashi, and Hilofumi Yamamoto. 2001. *Japanese: A comprehensive grammar*. London: Routledge.

Macaulay, Benjamin Kirkland. 2015. The morphosyntax of formality: A typology and inclusion in feature geometry. *University of Pennsylvania Working Papers in Linguistics* 21(1): Article 18, 12 pp. http://repository.upenn.edu/pwpl/vol21/iss1/18

- Portner, Paul, Miok Pak, and Rafaella Zanuttini. 2019. The speaker-addressee relation at the syntax-semantics interface. *Language* 95(1): 1-36.
- Ritter, Elizabeth, and Martina Wiltschko. 2018 .Distinguishing Speech act roles from grammatical person features. *Proceedings of the 2018 annual conference of the Canadian Linguistics Association*. 15 pp. Toronto: Canadian Linguistic Association. http://cla-acl.ca/wp-content/uploads/actes-2018/Ritter-Wiltschko-2018.pdf
- Ritter, Elizabeth, and Martina Wiltschko. 2019. Nominal Speech Act Structure: Evidence from the structural deficiency of impersonal pronouns. *Canadian Journal of Linguistics*, 1-21. Doi:10.1017/cnj.2019.10
- Ross, John R. 1970. On declarative sentences. In *Readings in English transformational grammar*, ed. Roderick A. Jacobs, and Peter S. Rosenbaum, 222-272. Waltham, MA: Ginn & Co.
- Schacter, Paul, and Fe T. Otanes. 1972. *Tagalog reference grammar*. Berkeley: University of California Press.
- Speas, Margaret, and Carol Tenny. 2003. Configurational properties of point of view roles. In *Asymmetry in grammar 1*, ed. Anne-Marie Di Sciullo, 315-345. Amsterdam: John Benjamins.
- Tenny, Carol. 2006. Evidentiality, experiencers, and the syntax of sentience in Japanese. *Journal of East Asian Linguistics* 15(3): 245-288. https://doi.org/10.1007/s10831-006-0002-x
- Wiltschko, Martina, and Johannes Heim. 2016. The syntax of confirmationals: A neo-performative analysis. In *Outside the clause: Form and function of extra-clausal constituents*, ed. Gunther Kaltenböck, Evelien Keizer, and Arne Hohmann, 305-340. Amsterdam: John Benjamins.
- Wiltschko, Martina. 2014. *The universal structure of categories: Towards a formal typology*. Cambridge, UK: Cambridge University Press.
- Wiltschko, Martina. In prep. *The grammar of interactional language: Towards a formal typology.* Cambridge, UK: Cambridge University Press.
- Yeon, Jaehoon, and Lucien Brown. 2011. Korean: A comprehensive grammar. Routledge.
- Zu, Vera. 2013. Probing for conversation participants: The case of Jingpo. In *Proceedings of the forty-ninth annual regional meeting of the Chicago Linguistic Society*, ed. Helen Arapicio, 379-389. Chicago: Chicago Linguistic Society.
- Zu, Vera. 2018. Discourse participants and the structural representation of the context. Doctoral dissertation, New York University.