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Syntax in the Treetops

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Preface

To say something to a person means that we give utterance to some purpose we have in mind. We want the person to do something for us, or we want the person to believe something that we believe to be true, and so forth. To say something in this way is to perform a speech act, and yet how does the person on the other end know what speech act we are performing? Often the shape of the utterance reveals it. By saying *Pass the salt*, we want the person addressed to fulfill a directive, as indicated by the imperative form of the utterance. But we can just as well fulfill this desire to have the salt by asking *Can you pass the salt?* Here the utterance itself is a question, which, in its form, does not indicate that the speaker is conveying a directive. Yet, in conventional settings the intent of the speaker comes through unmistakably.

Additionally, when we say something, we produce a physical utterance that carries meaning. By saying *Mary is at the party*, we utter a proposition that contains meaning that is anchored in the real world spatially and temporally. The addressee can comprehend the meaning of the utterance in its proper setting and, if necessary, evaluate the truthfulness of the utterance relative to the actual situation at hand.

When we compare language with other systems used for communication, we see similarities and differences. Birds sing, and the song can be quite complex, as in the case of the nightingale, which can sing up to two hundred different versions of its song. Yet the song itself does not carry meaning. Instead, birds sing to perform the act of conveying an intention, typically the desire to mate (Berwick et al. 2011; Bowling

and Fitch 2015; Marler 2000). So, a male common nightingale — generally only male birds are thought to sing for this purpose although this has recently been questioned — does not select a particular version of its song in order to convey some specific meaning having to do with seeking a mate. Rather, the nightingale goes through a variety of its song with the singular intent to convey its wish. A bird sings solely to perform an act for conveying intent.

The alarm calls of monkeys and apes exhibit a fundamentally different property from birdsong. The Kenyan Vervet monkeys have alarm calls for snake, eagle, and leopard (Seyfarth et al. 1980). Each call is distinct from the others so that when a Vervet monkey calls out the alarm for *leopard*, the others in the vicinity immediately climb up a tree to escape danger from the prowling prey. When the call for *eagle* is made, the Vervet monkeys in the trees quickly climb down to the ground. By uttering a call, the monkey performs the act of conveying an alarm. Because each alarm has a different acoustic shape, the alarm call also conveys meaning in some sense, to the extent that each call has some connection to the actual world — the presence of a leopard, for example. But in sharp contrast to human language, in the Vervet system, the performance of an alarm and the "meaning" it conveys are one and the same: one cannot separate a particular alarm from its "meaning."

In human language, the speech act that is performed by virtue of making an utterance and the meaning that is conveyed by the utterance are not directly connected as in the case of the Vervet system. Because of this, we see a variety of utterance forms that can perform the same act as we saw above with *Pass the salt* and *Can you pass the salt?* Because of this separation between the performance of a speech act and the meaning that is conveyed, the two must be mediated in order to connect these two components of an utterance in a way that is suitable to the conversational context.

This mediation is unique to human language because the monkey and ape system of alarm calls has a one-to-one, inseparable correspondence between the act and meaning, so no mediation is necessary.[1] And, of course, birdsong only has one component, that of performing an act to convey an intention. Birdsong is non-propositional.

In this monograph, I will study one aspect of the issues involved in how we connect performance of a speech act and conveyance of meaning. In particular, I will look at what syntax contributes to make the connection between these two components possible. My main point is the following: syntax provides the basic framework that makes the performance of a speech act and the conveyance of meaning possible. In the overall scheme of things, the role that syntax plays for speech acts is modest, but, as I hope to show, critical. Syntax is a part of the larger system that we call language. In fact, the role of syntax in the overall scheme of language has in many ways become progressively smaller in the development of the theory of generative grammar, as its mechanism has become increasingly abstract and minimal in the assumptions that drive it. This is a natural evolution in the development of scientific ideas — as we gain understanding, we shed the theory of unnecessary assumptions, thereby opening the way to deeper insights. Something else that often happens is that as we deepen our understanding in one domain, some other problem that appeared at first to be irrelevant, or whose solution seemed out of reach, becomes directly relevant and its solution tangibly within sight.

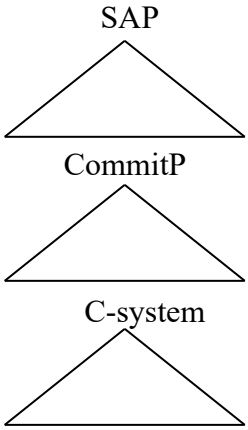
In recent theories of syntax, issues related to speech acts have essentially been left to the study of semantics and pragmatics. However, a combination of the discovery of some unusual data from languages as far flung as Basque, Bulgarian, German, Icelandic, Japanese, Magahi, Newari, Romanian, Turkish, West Flemish,

and so forth, along with incorporation of certain philosophical studies of language, has brought forth a study of what has come to be called "syntacticization of discourse." In order to perform a speech act, we typically need a speaker and an addressee. In the syntacticization of discourse, we find that there is a representation of the speaker and the addressee in syntax, located structurally above the actual utterance (Miyagawa 2012a, 2017; Portner et al. 2019; Sigurðsson 2004, 2011, 2015, 2019a; Speas and Tenny 2003; Wiltschko 2014, 2017), an assumption that dates back to the performative analysis of Ross (1970). Furthermore, in the most recent versions of this approach, there is a structural layer that mediates the act that the speaker engages in and the meaning of the utterance. In the theory I will pursue, this syntactic layer represents the commitment that the speaker makes to the addressee in performing a speech act (e.g., Krifka 2014, 2015, 2020). For example, in uttering *Mary is at the party*, the speaker is committing to the addressee of the truthfulness of the proposition. In this way, the syntactic tree consists of the speaker-addressee layer at the top, the Commitment Phrase below that, and the proposition contained in the CP layer below the Commitment Phrase. As we will see, the speaker-addressee layer and the Commitment Phrase occur together in the syntactic treetops.

Through each succeeding chapter of the monograph, we will look at the workings of each of these layers and how the layers interact with each other. As I will argue, two classic works, Emonds's (1970) *Root and Structure-preserving Transformations* and Ross's (1970) "On declarative sentences," form in many ways the foundation for much of the recent work in this area of syntax and speech acts, and this foundation fits naturally into modern works of speech act and syntax by Krifka (2020) and others. Using the approach by Krifka as a starting point, I will propose that the top layer — the highest point in the treetops — is what I will call the Speaker-

Addressee Phrase (SAP), taking over where Speas and Tenny (2003) left off in their important work on this topic with their proposal for a Speech Act Phrase (saP). This is equivalent to what Krifka calls the ActP, the locus of illocutionary force. I simply add the representation of the speaker and the addressee on the assumption that to perform an illocutionary act typically requires the speaker and the addressee. Below the Speaker-Addressee Phrase (SAP) is a structural layer that I adopt fully from Krifka, which he calls the Commitment Phrase. The Commitment Phrase (CommitP) is responsible for the uniquely human-language function to mediate the performance of an act via an utterance with the meaning of the utterance. Directly below the Commitment Phrase is the extended CP, which contains the proposition — the meaning — of the utterance.

(1)



I will give empirical evidence for the SAP and the Commitment Phrase, which are part of the Expressive component that constitutes the syntactic basis for the performance of speech acts. It is this component that occurs in the treetops of syntactic structure. The extended CP system below this component contains only items that contribute to the truth-value of the proposition, as befits a component that carries the meaning of the utterance. As we will see, there are instances in which a

linguistic element originates in the CP system for a given reason, but it does not contribute to the truth-value of the proposition. We will see that such elements necessarily vacate the CP and move into the Expressive component. We will see examples of this escapement from CP when we look at sentential particles in Japanese and Romanian.

My intent in proposing the syntacticization of discourse is to keep the structure as simple as possible. While I adopt much of the recent work by Krifka, one element that I will refrain from adopting is Judgment Phrase, which he proposes to occur between the Commitment Phrase and the proposition. As we will see, items that would belong to a Judgment Phrase sometimes contribute to the truth-value of the proposition, and sometimes they do not. What I suggest is that the overall syntactic structure is partitioned into the Expressive component, which is for the performance of speech acts and does not contribute to the truth-value of the utterance, and the Propositional component, which is strictly reserved for elements that form the proposition and which do contribute to its truth-value. A Judgment Phrase does not have a place in such a design. What I will show is that the elements that are identified to be in the Judgment Phrase are part of an extended C-system, along the lines suggested by Rizzi (1997), and the effects identified with the Judgment Phrase find other explanations.

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It is also customary to thank the anonymous reviewers, although the expression of appreciation is often given in a perfunctory manner. In the case of the present monograph, the three reviewers played a major role in shaping the monograph literally from cover to cover. Each gave extensive critical commentary on the first version, which, looking back on it, I am embarassed that I even submitted in the shape that I did. Guided by their pointed and detailed suggestions, I rewrote much of the manuscript, including incorporating recent studies such as those by Krifka, Frey and Meinunger, Giorgi, and Alok and Baker, which had the effect of making the study directly relevant to the most recent issues discussed in the literature related to the topics I take up.

One of the first courses I took as a graduate student at the University of Arizona was Mike Harnish's class on speech acts. It was a remarkable class that complemented the study of syntax I was doing with Adrian Akmajian, Chisato Kitagawa, and Sue Steele. With this monograph I have come back full circle to issues Mike challenged us with in that class — forty-five years later, and perhaps with a bit more maturity.

I wrote much of this monograph during the pandemic of 2020 while sheltering at home and listening daily to reports of infection, hospitalization, and death. The work seemed trivial compared to the terrible suffering the virus had unleashed on people everywhere. As I bring this project to a close I remain deeply distressed, but at the same time hopeful we will emerge from this shared experience with a more keen awareness of how interconnected we are—across countries, cultures, and languages.

Abbreviations

A	Adjective
ABS	Absolutive
ACC	Accusative
ActP	Act Phrase
addr/ADDR	Addressee feature
AddrCommit	Addressee Commitment
AddrP	Addressee Phrase
ADVP	Adverbial Phrase
ALOC	Allocutive marker
AP	Adjectival Phrase
ARB	Arbitrary
ASP	Aspect
AUX	Auxiliary
COL	Colloquial
C	Complementizer
Cl	Clitic
CL	Classifier
commit/Commit	Commitment
CommitP	Commitment Phrase
CONJ	Conjunction
CONTR	Contrastive
COP	Copula

CP	Complementizer Phrase
DAR	Double Access Reading
DAT	Dative
DECL	Declarative
DISJ	Disjunction
DP	Determiner Phrase
EPP	Extended Projection Phrase
ERG	Ergative
F	Formal
FIN	Finite
FM	Feminine
Foc	Focus
ForceP	Force Phrase
FP/FocP	Focus Phrase
FUT	Future
GEN	Genitive
GHT	German Hanging Topic
H	Honorific
HAI	Sentential particle/Romanian
HH	High honorific
HHA	High honorific addressee
HHS	High honorific subject
HON_A	Addressee honorific
HP	Honorific Phrase
Hr	Hearer Operator

IND	Indicative
INF	Infinitive
INS	Instrumental case
IntP	Interrogative Phrase
IP	Inflection Phrase
JudgP	Judgment Phrase
LF	Logical Form
MAS	Politeness marker/Japanese
MCP	Main Clause Phenomena
MASC	Masculine
MOD	Modal
ModP	Modal Phrase
MP	Modal particle
NCP	Negative Constituent Preposing
NE	Sentential particle/Japanese
NEG	Negation
NH	Non-honorific
NHA	Non-honorific addressee
NHS	Non-honorific subject
NOM	Nominative
NP	Noun Phrase
NPI	Negative Polarity Item
OP	Operator
P	Person
PL	Plural

POLITE	Politeness marker
PP	Prepositional Phrase
PRF	Perfective
PROG	Progressive
PRT	Particle
PRS	Present
PST	Past
PTCL	Particle
Q	Question marker
QUD	Question Under Discussion
REFL	Reflexive
ResP	Resumptive pronoun
RIDE	Root-like indirect discourse embeddings
RM	Relativized Minimality
RT	Root transformations
SG	Singular
S	Sentence phrasal marker
sa	Speech Act feature
saP	Speech Act Phrase
SAP	Speaker-Addressee Phrase
SFP	Sentence Final Particle
SH	Subject honorification
Sp	Speaker operator
SpkCommit	Speaker Commitment
spk	Speaker feature

SpkP	Speaker Phrase
SUB	Subject
SUBJ	Subjunctive
TOP	Topic
TopP	Topic Phrase
TP	Tense Phrase
V	Verb
VAI	Pragmatic marker/Romanian
VOC	Vocative
VP	Verb Phrase
WhP	Wh Phrase
YO	Sentential particle/Japanese

Chapter 1

Setting the stage

1. Introduction

In this monograph, I will explore a variety of issues — morphological, syntactic, semantic, and pragmatic — that arise when we look at phenomena associated with the highest points in the structure of utterances. Many of these "treetop" phenomena are well known, such as topicalization and auxiliary inversion in English, and V2 in Germanic, and are typically classified as main clause phenomena. The same phenomena are sometimes called "root phenomena," which today seems incongruous since they occur at the top of the tree structure, not at the bottom in the roots. However one chooses to refer to them, there is general agreement that something special happens up there. Many have observed that these main clause phenomena have a function to pragmatically connect the expression to the conversational context. For example, we see this with topicalization, as in *As for this book, I will read it for sure*, in which *this book* is singled out as referring to something that has been mentioned in some prominent way in the conversation, and topicalization both recognizes and sustains this prominence of the topic. Others see in these main clause phenomena grammatical constructions that are not observed in subordinate clauses, such as Aux inversion in interrogatives in American English and the politeness marking *-des-/-mas-* in Japanese. Unless there is a reason to employ another term, I will use "main clause phenomena" or its singular version to refer to

the constructions I will be looking at, following recent practice in Aelbrecht, Haegeman, and Nye (2012).

My purpose in looking at these main clause phenomena is to show that there is not just one category into which all main clause phenomena fall. Rather, we will see that some constructions may occur strictly at the highest point in the tree structure, while others may occur at varying degrees of distance from the very top of the structure, a point noted by others including Frey and Meinunger (2019). I will, in fact, deal with three classes of phenomena: (i) those that fit into the environments that Emonds (1970) called "root," approximately equal to what Frey and Meinunger (2019) call "strongly root sensitive"; (ii) those that occur in more positions than Emonds's root and which Hooper and Thompson (1973), in response to Emonds, identified as constructions that allow the meaning of assertion, approximately what Frey and Meinunger (2019) call "weakly root sensitive"; and finally, (iii) a very different set of phenomena associated with the labeling of structures (e.g., TP, CP, etc.), which can only occur at the highest point in the tree structure (Miyagawa, Wu, and Koizumi 2019). I will spend much of the monograph on the first two, and will consider the third briefly in Chapter 5. Two classic works, Ross (1970) and Emonds (1970), form the foundation for many of the issues I will explore here, and I begin with a discussion of these. While I begin with these classic works, I will end with a discussion of recent research, especially by Krifka (2014, 2015, 2017, 2019a, 2019b, 2020), who addresses some of the problems that I note with Emonds (1970) and Ross (1970), and whose proposal I will pursue with some revisions to accommodate the data I consider.

The idea that there is more than one class of main clause phenomena has already been noted in the literature. In Miyagawa (2012a), I observed that certain

phenomena are strictly limited to the main (or "root") clause, while other phenomena are more loosely associated with higher parts of the tree structure. Frey and Meinunger (2019) notice a similar point in looking at topicalization and related constructions in German. Using the notion of root sensitivity, they observe that some constructions are strongly root sensitive, while others are weakly root sensitive, a bifurcation that is similar to the earlier observations in Miyagawa (2012a). The strongly root-sensitive constructions are restricted to clauses with an independent illocutionary force, while the weakly root sensitive constructions may occur in a restricted set of embedded clauses.[1] The idea of associating illocutionary force to the root clauses is found in earlier works by Krifka (2014) and others.

Below, I will go over Ross (1970) and Emonds (1970) in some detail in order to lay the foundation for the modern approach to speech act and syntax.

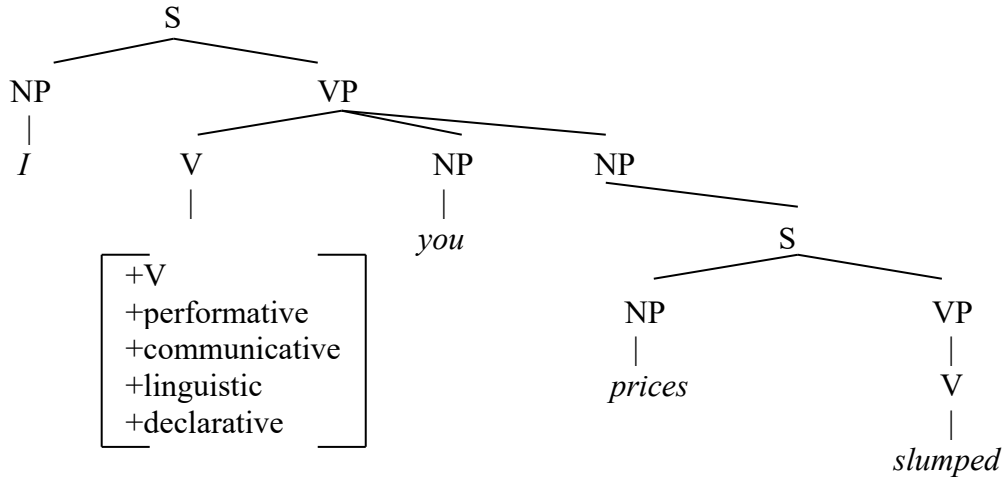
2. Ross (1970) and Emonds (1970)

In his "On declarative sentences," Ross (1970) presents what has come to be known as the "performative analysis," in which he postulates a universal superordinate structure at the top of an expression that includes (i) the representation of the speaker and the addressee, and (ii) a predicate that represents what the speaker is attempting to do by uttering the expression. Although Ross makes no reference to the notion of main clause phenomena and related ideas, both the theoretical underpinning and the empirical analysis contained in his work point to issues associated with the main clause. Even though the ideas in his work, and the problems associated with it, are well known, I will go over them in some detail in order to set up the modern approach that I will adopt by Speas and Tenny (2003) and Krifka

(2017, 2019b), with reference also to Wiltschko (2017) (see also Wiltschko and Heim 2016).

Ross begins his article with reference to J. L. Austin's (1962) ideas about speech acts, one of which is declaration — thus the title of the article. Other speech acts include assertions, requests, promises, invitations, apologies, and predictions, all performed with the utterance of an expression or some other form of communication (see also Lakoff 1975, Sadock 1974). Ross's proposal is called "performative analysis" because a performative sentence describes a speaker performing a speech act, as in *I declare that prices slumped* or *I promise you that I will finish the project this week* (e.g., Bach 1975, Searle 1969). What is notable about Ross's proposal is that the superordinate structure he proposes is unpronounced, with the idea that this covert structure is present universally across languages. For the declarative sentence, *prices slumped*, he postulates the following structure.

(1)



The superordinate structure that contains the speaker, the addressee, and the predicate are unpronounced, yet the idea is that this kind of structure is always present. This captures both the fact that the utterance is directed by the speaker to the addressee, and that the speaker is performing a speech act as defined by the verb. This particular

structure captures the act of performing a declaration, but other speech acts are possible given the appropriate context.

Although Ross does not mention that his theory is about the main clause, the theoretical underpinning, which is to capture the performative nature of speech acts, and the empirical evidence he provides, both point directly to the main clause. First, Austin's theory of speech acts is about the illocutionary force embodied in the main clause; subordinate clauses are a part of the overall proposition and do not contribute in any direct way to the speech act of the expression. The sentence, *I believe that I promised Mary to bring salad to her party*, when uttered, performs the speech act of declaration, not the one of promise that is in the subordinate clause.

The kind of evidence Ross gives for the performative analysis also points to the main clause. To support the idea for the existence of the speaker in the representation ("I"), Ross first observes that the reflexive in a conjunction phrase such as the following can refer to the subject in the higher clause.

(2) Tom believed that the paper had been written by Ann and himself/*herself/*myself/*yourself.

He then notes that the following with *myself* is acceptable.

(3) The paper was written by myself/*himself/*herself/*yourself.

This suggests the existence of a first person entity in a higher clause corresponding to the speaker in the covert superordinate structure. As evidence for the addressee, Ross

first notes that the idiomatic phrase *hold one's breath* may contain a possessive pronoun that is anaphoric with the higher indirect object.

(4) a. I want you$_i$ to hold your$_i$ breath for 2 minutes.

b. I want Tom$_i$ to hold his$_i$ breath for 2 minutes.

He then notes that the following is grammatical with *your*, indicating the existence of a second person entity corresponding to the addressee in the superordinate structure.

(5) a. I want your breath (to be) held for 2 minutes.

b. *I want Tom's breath (to be) held for 2 minutes.

In both of the cases Ross discusses, he first notes a relationship between something in the subordinate clause (reflexive, possessive pronoun) and its anaphoric relation to either the subject or the indirect object in the main clause. Then he notes that the same element may occur in the main clause, but typically only if it is first person (*myself*) or second person (*your*(*self*)). Although these uses of anaphoric elements may be instances of what we today would call logophors, as we will see below, we can acknowledge that the evidence Ross gives is intended to show that the superordinate structure is associated with the main clause.

About the time that Ross was writing his article, Joe Emonds was finishing up his doctoral dissertation, *Root and structure-preserving transformations* (1969). As the title indicates, Emonds was directly concerned with main clause phenomena, for which he used the term "root." The impact that Ross's work had on Emonds's was not the paper we discussed above, but rather Ross's 1967 MIT dissertation, in which he

showed that transformations have properties independent of the specific construction within which they apply, in particular various restrictions on movement, most notably, syntactic islands. Where Emonds's work connects directly to Ross's 1967 work is in focusing on the restrictions placed on the application of transformations. But instead of looking at constraints on movement, Emonds looks at the nature of input and output to transformations. He makes the important observation that the structural description — the description of the input — must be independently producible by phrase structure rules. This makes sense since any transformation should be able to apply directly to the output of the phrase-structure component. It would then follow that if the output of a transformation likewise mirrors the output of phrase structure rules, this output could in turn be the input to another transformational rule. Emonds used the term "structure preserving" to describe such transformations, since they preserve the phrase-structural profile and allow for further derivation by way of additional application of transformations.

Of particular interest for us is what he called "non-structure preserving transformations." These are transformations that, while having an input structure that mirrors the phrase structural profile, the output does not; so that once a non-structure preserving transformation applies, derivation comes to a halt, thus completing the building of the structure. The non-structure preserving transformations create the main clause, or the root clause, by virtue of completing the top layer of the structure. Emonds was interested precisely in which syntactic environments these transformations applied. He gave these environments as part of the definition of the root.

(6) *Root*

A root will mean either the highest S in a tree, an S immediately dominated by the highest S, or the reported S in direct discourse. (Emonds 1970: 6)

I will demonstrate the root with the transformation of Negative Constituent Preposing (NCP), which Emonds identified as a non-structure preserving, or root, transformation. The reason for the NCP being a root transformation is that it fronts a negative element to the head of the sentence, a position that the phrase structure rules do not make possible for negative elements.

(7) a. Never had I had to borrow money.

b. Because never had I had to borrow money, I have a lot saved.[2]

c. John said that never had he had to borrow money.

d. *The fact that never had he had to borrow money is well-known.

(7a), which is "highest S," shows that the NCP moved the negative element *never* to the head of the sentence, and this was accompanied by Aux inversion of *had*. In phrase structure rules, there is no rule that posits a negative element high in the structure, above S, thus this shows that the NCP is a root transformation. In (7b), the NCP applies in the *because* adverbial clause, which we can surmise as being directly dominated by the highest S. And in (7c) the same rule applies to the reported S under the verb *say*. In (7d), which is judged as ungrammatical, the NCP has applied within a complex NP, which is not a root environment. Following are other examples of root transformations along with the example before the application of the rule (quoted from Hooper and Thompson 1973).

VP Preposing

(8) Mary plans for John to marry her, and marry her he will.

Mary plans for John to marry her, and he will marry her.

Directional Adverb Preposing

(9) Up the street trotted the dog.

The dog trotted up the street.

Preposing around be

(10) More significant would be the development of a semantic theory.

The development of a semantic theory would be more significant.

Participle Preposing

(11) Standing next to me was the president of the company.

The president of the company was standing next to me.

Prepositional Phrase Substitution

(12) On the wall hangs a portrait of Mao.

A portrait of Mao hangs on the wall.

Subject Replacement

(13) That Henry forgot the key irritated Carmen.

It irritated Carmen that Henry forgot the key.

(14) To read so many magazines is a waste of time.

It's a waste of time to read so many magazines.

Direct Quote Preposing

(15) "I won first prize," Bill exclaimed.

Bill exclaimed, "I won first prize."

Complement Preposing

(16) Syntax and semantics are related, I think.

I think that syntax and semantics are related.

Adverb Dislocation

(17) The thief sneaked away in time, evidently.

(18) Mary was singing, strangely.

Topicalization

(19) This book you should read.

You should read this book.

(20) Each part Steve examined carefully.

Steve examined each part carefully.

Left Dislocation

(21) This book, it has the recipe in it.

This book has the recipe in it.

Right Dislocation

(22) You should go to see it, that movie.

You should go to see that movie.

Tag Question Formation

(23) The square root of nine is three, isn't it?

Subject Auxiliary Inversion

Questions:

(24) Will James ever finish reading that book?

Exclamations:

(25) Isn't that a beautiful baby!

(26) Am I glad to see you!

Tags:

(27) Fred didn't go to the rock concert, and neither did Will.

2.1. Combining Ross (1970) and Emonds (1970)

Although they come from different perspectives, both Ross (1970) and Emonds (1970) address issues that pertain to the main clause. The question naturally arises, are there meaningful points of overlap between these two studies? On the surface the answer appears to be no, since Ross is concerned with a covert superordinate structure that occurs above the highest projection of the overt portion of an utterance, while Emonds observes constructions that occur in the highest points in the overt utterance. Despite this seemingly fundamental difference, I argued in Miyagawa (2012a), with

further evidence in Miyagawa (2017), that the two approaches not only overlap, but they are, essentially, looking at the same phenomena from different perspectives.

To see how we can unify these two approaches, let us first begin with problems noted for each approach.

2.2. Problems associated with the performative analysis

As mentioned at the outset, the purpose of Ross (1970) in proposing the performative analysis is to capture in syntax the notion of speech acts as presented by Austin (1962). Prior to this well-known work, Austin presented a study in which he distinguished what he called "constatives" from performative utterances, a distinction which, although he abandoned it in his later study, is instructive for thinking about the controversy that arose after the publication of his 1962 work. In Austin (1961), he draws a distinction between "constative" utterances, which may be assigned a value of true or false, and performative utterances, which are not either true or false, but instead are "happy" or "unhappy" in the sense of properly or defectively performed.

(28) The cat is on the mat.

(29) There is at least one marble in this box.

(30) I christen this ship the *Alexius Meinong*.

(31) I pronounce you man and wife.

(28) and (29) are typical of constative utterances, while (30) and (31) exemplify performative utterances. When a speaker utters an expression such as (30)-(31), he/she is not describing himself/herself performing a certain verbal utterance, but instead, the speaker is simply performing it. To see whether the utterance itself is

performative, Austin suggests the *hereby* test, in which the ability to modify the verb with *hereby* reveals a performative utterance, as in *I hereby pronounce you man and wife*, but not **The cat hereby is on the roof*. In his famous 1962 work published a year later, *How to do things with words*, Austin abandons this distinction between constative and performative utterances on the grounds that there are examples that are both.

(32) I state that I have never been a rock climber.

This sentence readily accommodates *hereby* (*I hereby state that...*), so it is perfomative, but at the same time, the speaker spoke of something that can be judged as true or false, that of never having been a rock climber; hence this utterance appears also to qualify as a constative.

Lakoff (1975) addresses the seeming double identity of examples such as (32) by pointing out that the truth-value of the utterance is in the complement (*I have never been a rock climber*). Thus, "in sentences where there is an overt performative verb of saying or stating or asserting, the propositional content, which is true or false, is not given by the sentence as a whole, but rather by the object of that performative verb" (pp. 560-61). This way of coping with utterances that contain a performative verb works for the most part with the examples Lakoff gave, but as Boër and Lycan (1980) note, if one pushes this view further, the approach begins to look doubtful.

(33) I promise to return your copy of *Syntactic Structures*.

The complement of the performative verb is *...return your copy of Syntactic Structures* and, on Lakoff's suggestion, the utterance's truth-value would be evaluated on whether the speaker returns the copy of *Syntactic Structures*. However, this utterance's truthfulness must also encompass the matrix clause *I promise*, hence it is not so easy to say that we can judge the truth value of a sentence containing a performative verb simply by looking at the complement of that verb.[3]

As is well known, the issue raised by linguists and philosophers that performative utterances on the whole do not appear to carry truth-value applies directly to Ross's performative analysis.

(34) It is raining.

(35) I declare to you, it is raining.

According to Ross, the declarative utterance in (34) has the underlying syntactic representation in (35) in which there is a covert superordinate structure that contains a performative verb along with the representation of the speaker and the addressee, *I declare to you*. The claim here is that the meaning of (34) is actually (35). But as we have already seen, that cannot be the case, since (34), as a straightforward constative utterance, carries truth-value that we can easily see how to evaluate — true if it's raining, false if not. (35) is not amenable to such truth-value evaluation, because the utterance is no longer a constative, but a performative expression, and its evaluation has to be on some other scale, such as properly or defectively performed ("happy" and "unhappy" in the sense of Austin 1961).

Does this mean that we abandon the performative analysis all together? Before deciding on the next step, it would be instructive to visit a debate that occurred soon

after Ross's article, and in the midst of the kind of debate we saw above among scholars such as Lakoff, Searle, and Sadock. Sadock (1974) not only adopts Ross's performative analysis, but he takes it even further by suggesting that the example below is associated with the performative predicate of requesting.

(36) Can you pass the salt?

(37) I request to you...

The utterance in (36) is interrogative in form, yet it transparently has the meaning of a request, and Sadock's idea is to associate its underlying structure with a superordinate structure that contains a predicate representing the performative of direction. He further notes that a similar interrogative does not carry the same meaning.

(38) Do you have the ability to pass the salt?

As one piece of evidence, Sadock points out that *please*, which occurs with requests, may occur with (36), but is highly awkward with (38).

(39) Can you pass the salt, please?

(40) #Do you have the ability to pass the salt, please?

Searle (1975) challenges Sadock by noting that *Can you pass the salt?* has a function as an interrogative even when it is used to convey a request. If one is to make a request with a simple imperative, *Pass the salt*, the speaker of this request does not leave the addressee any room to say 'no', but rather expects the addressee to obey the

request. But with the interrogative-request the speaker is not issuing a direct request, but an indirect one, which has the effect of *politely* conveying the request, in two respects. First, by using the interrogative, the speaker "does not presume to know about [the addressee's] abilities, as he would if he issued an imperative sentence." Second, "the form gives — or at least appears to give — [the addressee] the option of refusing, since a yes-no question allows *no* as a possible answer [...] compliance can be made to appear a free act rather than obeying a command" (Searle 1975: 74-75). The sense of the request emerges in context through a series of inferences couched in Grice's (1975) Cooperative Principle. In a nutshell, the addressee, upon hearing the question, understands that just answering it with 'yes' is not being cooperative, unless the questioner is in fact interested in the addressee's physical ability with his/her arm. For Searle, it is crucial that *Can you pass the salt?* is an interrogative both in form and meaning, in order to capture the politeness effect it has over a straightforward imperative form. It is polite because the request that is associated with it is an *indirect* request, not a direct one; this notion of request arises with inferences and the Cooperative Principle of conversation. Also, the interrogative has a function in other contexts of a simple question without conveying an indirect request, which is easily captured if we assume that an interrogative is always an interrogative in meaning regardless of the speech act that it may be associated with.[4]

Let us suppose that the conclusion that Searle drew on the basis of interrogative-requests applies across the board to all utterances, in that the performative meaning of a sentence is read off the utterance in the context in which the expression is uttered. This seems plausible on the ground that a variety of performatives could be operative in uttering a sentence.

(41) It's cold in here!

(42) I will return the money next week.

One could utter (41) and perform a declaration, or with some imagination, a request. (42) could also be a declaration, or it could easily be an utterance to perform a commissive.

Does this mean that we completely abandon the performative analysis? Not necessarily. If we reflect on Ross's study, he gives evidence for the superordinate structure that contains the performative meaning not in terms of the existence of a performative verb such as *declare*, but strictly in terms of the existence of the representation of the speaker and the addressee. Thus, the fact that *myself* or *yourself*, but not *himself/herself/themselves*, can occur in certain matrix-clause phrases indicates that in a structure higher than the matrix clause, there is a representation of the speaker that functions as the antecedent of *myself* and that of the addressee for the antecedent of *yourself*. Although the use of these reflexives as evidence for the speaker and addressee representations becomes questionable in the light of recent studies on logophors, as we will see below, there are other pieces of evidence that we will look at that are more convincing for the existence of the speaker and the addressee representations in syntax.

Let us see where we are now. We observed that associating a performative structure to a declarative sentence raises issues about the truth-value of the expression. If one associates the performative structure *I declare to you* to a simple declarative sentence such as *It's raining*, we can no longer associate truth-value that would apply to the declarative sentence only. Furthermore, the earlier Sadock-Searle debate suggests that the meaning of perfomativity does not arise directly from the

meaning of a sentence associated with some performative predicate, but instead it emerges from the use of the utterance in a particular conversational context. So, the most straightforward conclusion to draw from this is that there are no performative predicates lurking covertly in some superordinate structure attached to utterances of a language. At the same time, there is evidence, as we will see, that such a superordinate structure exists, but only to host the representation of the speaker and the addressee.

3. Evidence for the representation of the speaker and the addressee

We questioned Ross's proposal to postulate speech-act type predicates in the superordinate structure, leaving the representation of the speaker and the addressee intact as part of his proposal. But is the evidence he gives for the speaker and the addressee representations valid?

3.1. Logophors

In fact, we now know that the occurrence of anaphors such as *myself* and *yourself* (and *himself/herself*) in apparent violation of locality may very well have a different explanation — these are instances of what has come to be called "logophors." In many languages, anaphoric or pronominal elements have a function distinct from the familiar roles they play. Clements (1975), in one of the first studies of logophors in the literature, reports that in Ewe, a Niger–Congo language spoken in Togo and southeastern Ghana, logophoric pronouns are "used exclusively to designate the individual (other than the speaker) whose speech, thoughts, feelings, or general state of consciousness are reported or reflected in the linguistic context in which the pronoun occurs" (p. 141). In a similar vein, Hagège (1974) observes that there are

pronoun forms in West-African languages that often occur in indirect discourse contexts and refer to the author of the discourse, or the perspective center. See similar observations in other African languages: Ewe (Pearson 2013, as well as Clements 1975), Yoruba (Pulleybank 1986), Mundang (Hagège 1974), Gokana (Hyman and Comrie 1981), Aba (Koopman and Sportiche 1989). Also see Speas (2014) for comments on logophors in a variety of languages including native American languages, and a proposal to tie logophoric usage to Cinque's (1999) cartographic study of adverbs. Additionally, for an extensive reference on this topic, see Charnavel (2019). What is striking about these studies is that the logophors are not only first and second person, but third person elements are common, as in the case of third person singular logophoric pronoun in Aba studied by Koopman and Sportiche (1989). This is contrary to Ross's original observation that, typically *myself* and *yourself*, but not *himself/herself/themselves*, occur in these special contexts. Pollard and Sag (1992) suggest that these special uses of *-self* items, which they call "exempt reflexives," are licensed in a fundamentally different way than the typical reflexives, which observe strict locality.

What licenses these logophors? Koopman and Sportiche (1989) present an analysis in which logophors are variables that must be bound at LF by some antecedent operator that occurs in an A' position above the clause in which the logophor occurs. Sells (1987) argues for three types of antecedents that occur in language for logophors: source (the one who makes the report); self (the one whose "mind" is being reported); and pivot (the one from whose physical point of view the report is made). We can see that these points about logophors can accommodate Ross's original observations. Thus, *Physicists like myself/yourself/*himself/*herself...* reflects the use of *myself* as a logophor bound by the source of the report, while

yourself here is bound by a pivot (the viewpoint of the addressee is being reported). Thus, contrary to Ross, the use of these "exempt reflexives" and other anaphors does not provide compelling evidence for the existence of the speaker and addressee representations in the superordinate structure.

3.2. Modern evidence for the speaker and addressee representations in syntax

Although the original evidence Ross gave for the speaker and the addressee representations in syntax do not hold up, as we just saw, more recent works provide what I believe are cogent arguments for postulating the interlocutor representations. Below, I will give evidence from Basque to give support for the addressee representation, which I reported on in Miyagawa (2017; see also 2012a for the Basque data). I will then consider evidence for the speaker representation from Romanian (Hill 2007). I will only give the key data, with more extensive discussion in Chapter 3, which will also include evidence for the speaker representation from Japanese. Later in this chapter, I will turn to another kind of speaker representation presented by Giorgi (2010). This latter speaker representation has a fundamentally different distribution from the allocutive agreement in Basque and the speaker representation in Romanian, which becomes important when we look at the politeness marker in Japanese in Chapter 2. As we will see, the speaker representation that Giorgi proposes parallels the distribution we find in Magahi (Alok, to appear; Alok and Baker 2018), and it will inform the analysis of one type of politeness marking in Japanese.

3.2.1. Allocutive agreement and the addressee representation

One of the strongest pieces of evidence that an addressee representation exists as part of syntax comes from allocutive agreement in Basque. Souletin, an eastern

dialect of Basque, has the so-called allocutive agreement along with the familiar subject/object/indirect object agreement. A simple demonstration of the allocutive agreement is found in the following paradigm (de Rijk 2008: 811).

(43) *joan* 'to go'

I am going	*noa*	*noa**k***	*noa**n***
he is going	*doa*	*zoa**k***	*zoa**n***
we are going	*goaz*	*goaza**k***	*goaza**n***
they are going	*doaz*	*zoaza**k***	*zoaza**n***

The agreement -*k* is second person masculine (colloquial) and -*n* is second person feminine (colloquial). These agreements are used for the appropriate addressee: thus, if the speaker wants to say 'I am going' to a male friend, he/she would use the form *noak*, while if the speaker wants to say the same to a female friend, the form used is *noan*. These agreements are second person in form, despite the fact that there is no overt second person in the utterance.

The following, taken from Oyharçabal (1993), all mean 'Peter worked'.

(44) Four ways to say *Peter worked* in Souletin, an eastern dialect of Basque, depending on **who you're talking to** (Oyharçabal 1993)

subj. agr. allocutive agr.

a. *To a male friend*

Pettek lan egin di**k**.

Peter.ERG work do.PRF AUX-3.S.ERG-2.S.COL.MASC.ALOC

'Peter worked.'

b. *To a female friend*

Pettek lan egin di**n**.

Peter.ERG work do.PRF AUX-3.S.ERG-2.S.COL.FM.ALOC

c. *To someone higher in status (formal)*

Pettek lan egin di**zü**.

Peter.ERG work do.PRF AUX-3.S.ERG-2.S.F.ALOC

d. *Plural addressee*

Pettek lan egin du.

Peter.ERG work do.PRF AUX-3.S.ERG

All four sentences have the same subject-verb agreement, 3rd person, singular, ergative, as expected. The other agreement, the so-called allocutive agreement, varies from sentence to sentence, and this form of agreement marks levels of politeness, very much like the politeness marker *-mas-* in Japanese.[5] In (44a), the allocutive agreement is 2nd person, singular, colloquial, masculine, and the sentence with this agreement would be uttered to a male friend; in (44b) it is 2nd person, singular, colloquial, feminine, and this sentence would be intended for a female friend; (44c) is for

someone higher in status than the speaker, and the allocutive agreement indicates this — 2nd person, singular, formal; (44d) shows that there is no plural allocutive agreement. The allocutive agreement clearly agrees with the type of addressee to whom the sentence is uttered — male/female friend, male/female superior. As we will see in Chapter 2, the allocutive agreement is a true agreement on a par with regular agreement that occurs with the arguments within the clause. This means that there must be a second-person representation in syntax to license the allocutive second-person agreement, and this second person representation occurs essentially in the position originally suggested by Ross.

Sigurðsson (2004, 2011) also suggests that discourse participants are represented in the superordinate structure of the clause, and can be determined through a link with the morphosyntactic expression of person features. See also Sigurðsson (2015, 2019a). While the proposal in this monograph has many points of commonality with his thesis, there are some important differences. While he points to regular intra-sentential agreement (person), I argue that there is a unique agreement system for identifying the participants that is part of the overall agreement system, but distinct from the intra-sentential agreement. Furthermore, special agreement features that identify the discourse participants are pronounceable, unlike Sigurðsson's (2004, 2011) speech features, which are fundamentally silent.

3.2.2. Evidence for the speaker representation: Romanian

Romanian has sentential particles that occur either sentence-initially or finally. These particles, which have as their basic form *hai*, occur only in the main clause and appear very high in the structure, above the CP (Hill 2007, 2013; Haegeman and Hill 2014).

(45) Hai cã iar am greşit/s-a greşit! (Hill 2007, 26a)

HAI that again have-I erred/ARB-se has.erred.

'Damn, I messed it up again. /Right, it has been messed up again.'

In this example, the sentential particle *hai* occurs sentence initially and expresses the speaker's attitude towards the proposition. As we can see, it is quite high in the structure, occurring above the CP headed by 'that'. Hill (2007, 2013) and Haegeman and Hill (2014) argue that the *hai* form occurs in the vicinity of what Ross postulated as the speaker/addressee representation. The evidence that this *hai* form provides support for the speaker representation (and in fact also the addressee representation) comes from the fact that it inflects for person and number agreement.

Table 1. The forms and interpretation of *hai*(*de*) (Hill 2007).

Form	Speech act		Person			Number	
	Injunctive	E	1	2	any/generic	sg	pl
Hai	+	+	+	+	+	+	+
Haide	+	–	–	+	+	+	–
Haidem	+	–	+	–	–	–	+
Haideţi	+	+	+	+	–	+	+

As shown, all the inflected *hai* forms except for *haide* inflects for 1st person. In the case of *haidem*, its inflection is solely 1st person. In Hill (2007, 2013) and Haegeman and Hill (2014), this is evidence that *haidem* (and others) agrees with the speaker representation in the superordinate structure. The following is an example with *haidem* used with an injunctive sense (see Chapter 3 for further explanation).

(46) Haidem să începem lucrul! (Hill 2007, 25d)

HAI-1PL SUB start work

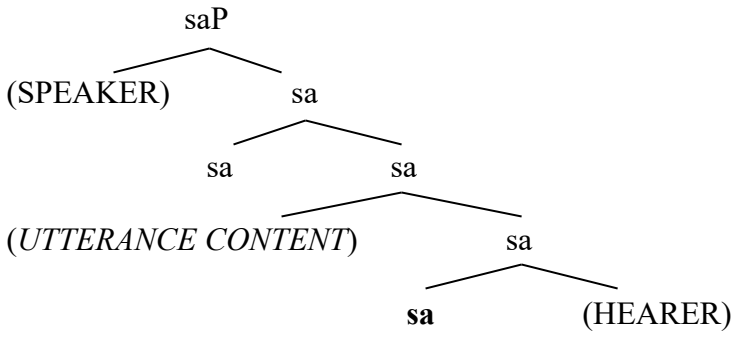
'Let's start the work!'

We also see that, for example, *haideţi* inflects for 2nd person, which indicates that it enters into agreement with the addressee representation, just as we saw for the allocutive agreement in Basque. I will return to the sentential particles in Romanian in Chapter 3 when we look at sentential particles in Japanese.

3.3. Speech Act Phrase

Speas and Tenny (2003) propose an idea that captures what we want for the superordinate structure. They propose that there is a superordinate structure, which they call "Speech Act" — structure headed by the head "sa" (speech act) — that furnishes information about the speaker, the hearer, and their relationship. Their proposal is the modern version of Ross's performative analysis.

(47)



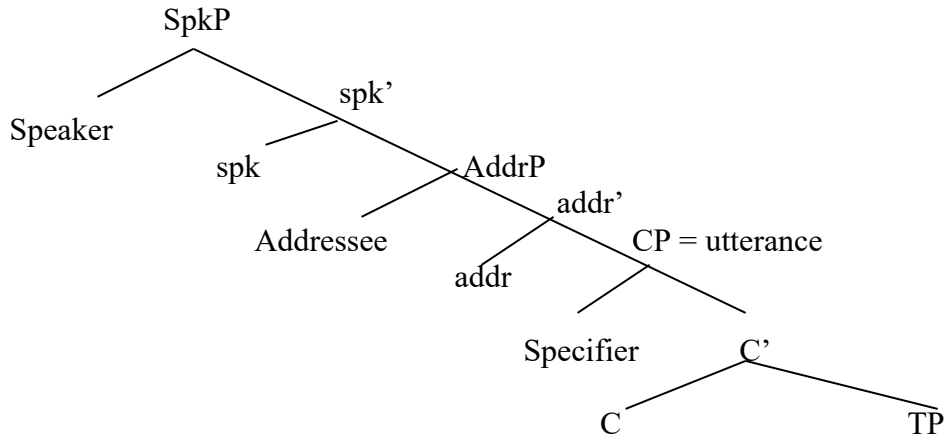
This is a declarative sentence, and the asymmetrical relations holding among the various elements, such as the speaker and the hearer, are a function of the particular syntactic relation that each holds within the structure. The head of the structure is "sa"

(speech act), which begins in the lower position, and moves to the head position of the shell (saP). Furthermore, they suggest that the hearer is raised in the case of questions, something that I will consider briefly in Chapters 3 and 4. As we can see, this structure has the speaker and the addressee representations without any performative content. They call the head that projects this structure "speech act," but as far as I can see, it has no content other than to project the structure. As we will see in later chapters, a more accurate structure appears to be that there is a head associated with the addressee projection, and a different head associated with the speaker projection, but we will deal with that in due time. What is important for now is that there is a proposal that captures what we want without the extra baggage of any performative predicate that would muddy the waters. Speas and Tenny's proposal has triggered a body of work related to the mapping of conversational interlocutors (speaker, addressee) in syntax, such as Hill (2013), Haegeman and Hill (2014), Wiltschko (2014, 2017), Miyagawa (2012a, 2017), and Corr (2016), among many others.

Although I adopt the core proposal of Speas and Tenny, as we saw in the saP structure in (47) above, there are two modifications I will make. First, as we have discussed, there is evidence for the speaker representation and the addressee representation. I will assume that these representations come with their own heads, "spk" and "addr," instead of the "sa" head projecting the addressee layer and then moving up into the shell in order to project the speaker layer. What we have seen, and what we will see more of in this monograph, is that the speaker and the addressee representations each hosts its own unique head. Second, I will adopt a slightly revised structure to the saP proposed by Haegeman and Hill (2011). This structure puts both the speaker and the addressee representations above the CP (the utterance), which, as we will see, is the right structure based on a variety of evidence we will look at. The

following is the structure they propose, with the change I am making to the heads and the projections of the addressee and speaker representations.

(48)



I will continue to refer to this superordinate structure as SAP, but now, this stands for "Speaker-Addressee Phrase." I presume that it is the same structure as the one proposed originally by Speas and Tenny, and refined by Haegeman and Hill.

A question about the Speaker-Addressee Phrase is: In what syntactic environments does it occur? If its distribution is similar to what we assumed for Ross's performative analysis, it would occur in the main clause. But what, precisely, is the main clause? We turn to Emonds's study of roots for the answer.

4. Problems associated with Emonds's conception of the root

As already mentioned, Emonds (1970), in his attempt to identify where root transformations can apply, proposed the definition of root in (6), repeated in (49).

(49) *Root*

A root will mean either the highest S in a tree, an S immediately dominated by the highest S, or the reported S in direct discourse. (Emonds 1970: 6)

Root transformations (RTs) such as NCP and topicalization apply in these three places in the sentential structure, and once such a transformation applies, derivation stops by definition, because the output of RTs cannot in turn function as the input to other transformations, RT or non-RT.

Hooper and Thompson (H&T, 1973) take Emonds to task on empirical grounds, concluding that there is no basis for the root as he defined it. For example, they point out that the so-called RTs, NCP, Preposition Phrase (PP) Substitution, and topicalization, may occur in complement clauses that are outside the definition of Emonds's root.

Negative Constituent Preposing

(50) I found out that never before had he had to borrow money. (H&T (119))

PP Substitution

(51) It seems that on the opposite corner stood a large Victorian mansion.

(H&T (89))

Topicalization

(52) It appears that this book he read thoroughly. (H&T (92))

Complements of *find out*, *seem,* and *appear* do not fit any of the structures for Emonds's root. Does this mean that RTs apply freely in any environment? H&T note that there are cases in which RTs cannot apply.

(53) *He was surprised that never in my life have I seen a hippopotamus. (H&T (103))

(54) *The guide was surprised that beyond the next hill stood a large fortress.

(H&T (107))

(55) *It's strange that this book, it has all the recipes in it. (H&T (110))

H&T argue that what is really going on with the so-called RTs has to do with the meaning of the clause in which they can or cannot occur. They observe that the RTs tend to move a phrase, usually to the left edge of the clause, and this has the function of placing emphasis on the moved phrase. We can see this with NCP, in which there is emphasis placed on the negative word that is moved to the left edge; the same goes for PP Substitution and topicalization. Armed with this observation, H&T argue that the clauses that allow the RTs are those that have the meaning of assertion, since emphasis, which the RTs create with movement, naturally occurs in clauses that are asserted, not those that are presupposed. While complements of predicates such as *find out, seem*, and *appear* may be asserted, the complements of predicates such as *surprise* and *strange* do not. To present a systematic analysis of which predicates allow their complements to have the meaning of assertion and which predicates do not, H&T present a classification of predicates in which five classes of predicates, A-E, are proposed, and only the predicates in A, B, and E allow the meaning of assertion in their complements. Following is a sample of this classification.

(56) H&T's classification (1973: 473–474)

Non-factive			Factive	
A	B	C	D	E
say	suppose	be (un)likely	resent	realize
report	believe	be (im)possible	regret	learn
exclaim	think	deny	be surprised	know
etc.	etc.	etc.	etc.	etc.

According to H&T, the complement of a class A verb may comprise the main assertion of the sentence. For class B, the main verb does not always carry the meaning of assertion, which opens the way for the complement to express the main assertion. Class C verbs have the meaning of assertion, and their complement is neither asserted nor presupposed. Class D verbs likewise express assertion, and their complement is presupposed. Finally, class E verbs are called "semi-factive" and their complement is not always presupposed. How do RTs, including topicalization, pattern with respect to this classification? They are possible in the complement clause of the predicates whose complement can express assertion, namely, classes A, B, and E. We will look at this categorization when we explore topicalization in Chapter 4.

H&T showed convincingly that Emonds's empirical evidence for his proposed root face difficulty as there are too many counterexamples, and that the counterexamples have a pattern to them that leads us to move away from the notion of root, as Emonds originally defined it. Do we then abandon Emonds's original conception of the root?[6] In Miyagawa (2012a), I argued that Emonds's definition of the root was conceptually correct, but ironically, not for any of the reasons he presented. I looked at the distribution of the politeness marker *-des-/-mas-* (*-des-* for

nominals, -*mas*- for verbs) in Japanese, and with the important work of Harada (1976) as a starting point, I argued that the occurrence of this politeness marker matches Emonds's root (see also Miyagawa 2017).

The verb in Japanese may occur in either colloquial form or polite form.

Colloquial

(57) Hanako-wa kur-u.

Hanako-TOP come-PRS

'Hanako will come.'

Formal

(58) Hanako-wa ki-*mas*-u.

Hanako-TOP come-MAS-PRS

'Hanako will come.'

The colloquial form is used when speaking with a friend, a family member, or someone younger, while the formal form is used when speaking with someone socially superior to the speaker, a stranger, or someone older. As shown below, the politeness marker occurs in the three environments Emonds identified as root.

Highest S

(59) Hanako-wa ki-*mas*-u.

Hanako-TOP come-MAS-PRS

'Hanako will come.'

S dominated by highest S

(60) Hanako-ga ki-*mas*-u kara, ie-ni ite-kudasai.

Hanako-NOM come-MAS-PRS because home-at be-please

'Because Hanako will come, please be at home.'

Reported S in direct discourse

(61) Taroo-wa Hanako-ga ki-*mas*-u to itta.

Taro-TOP Hanako-NOM come-MAS-PRS C said

'Taro said that Hanako will come.'

While these are fine, the politeness form does not occur, for example, in the complement of the verb 'believe.'

(62) Taroo-wa [Hanako-ga kuru/*ki-*mas*-u to] sinzitei-ru.

Taro- TOP [Hanako-NOM come/come-PRS C believe-PRS

'Taro believes that Hanako will come.'

Why should the politeness marker fit Emonds's root definition? The first thing to consider is the function of this form. The politeness marker is used when talking to someone who is socially superior to the speaker, a senior, or a stranger. In other words, the politeness marker is sensitive to the speaker's relationship to the addressee. As we will see in Chapter 2, in Basque the politeness marker is inflected as 2nd person, indicating "agreement" with the addressee, even though there is no 2nd person element in the sentence. The 2nd person agreement would require a second person goal, and as I have argued (Miyagawa 2012a, 2017), this second person agreement is

agreeing with the addressee representation in the Speaker-Addressee Phrase (SAP) above the CP. Thus, the performative analysis makes its re-entry, devoid of any performative verb, but with the representation of the speaker and the addressee intact.

Now we can answer the question we posed above: Why should the politeness marker fit Emonds's root definition? The reason is that Emonds's original conception of the root was not about RTs, but instead, it defined the distribution of SAPs. Of course, Emonds was not aware of the existence of the politeness marker to help with his theory, and efforts he made to try to salvage the original idea with other data was an improvement to his earlier work, but still left issues unresolved (Emonds 2004, 2012). But the politeness marker, which requires the SAP, shows that his original insight was correct, not in terms of the nature of transformations, but in terms of the distribution of the SAP.

We will adopt the SAP, and also, a significant extension of the idea of syntacticization of speech act by Krifka (2017, 2019b, 2020) and others. Before turning to these modern studies, I will discuss another proposal for speaker representation, this one by Giorgi (2010). The important point about her study is that the speaker representation that she argues for is fundamentally different from the speaker (and the addressee) representations associated with the SAP. It is a representation that occurs lower in the structure, in an extended C-system (Rizzi 1997). This point becomes important when we look at one type of politeness marking in Japanese that appears to have the same distribution, and as will see, it also parallels the distribution of allocutive agreement in Magahi, which we will look at in Chapter 2.

5. Speaker and temporal coordinates (Giorgi 2010)

Giorgi (2010) argues that there must be a representation of the speaker in syntax to account for the interpretation of tense.[7] Given that temporal relations are represented in the syntax (e.g., Zagona 1988, Stowell 1996, Giorgi and Pianesi 1997), and tense is typically associated with the C-system (e.g., Enç 1986, 1987), Giorgi observes that this speaker representation is in the C-system, reflecting Rizzi's (1997) seminal work on split-Comp. Thus, the speaker representation that Giorgi argues for occurs lower in the structure than the speaker/addressee representations in the SAP, which is what we saw for Basque, Japanese, and Romanian. As we will see in Chapter 2, there turns out to be speaker/addressee representation that parallels what Giorgi has found with tense even in Japanese.

Giorgi's argument is based on examples such as the following, which has an unusual reading, called the Double Access Reading (see Abusch 1997 and references therein).

(63) John said that Mary is pregnant.

The classic problem with sentences of this sort in English, and also in Italian, is that the time of Mary's pregnancy is indexed twice, once as overlapping with the time of John saying it, and the other with the time of the utterance. This means that Mary was pregnant at the time of John saying it, and also at the time of the utterance of this sentence by the speaker. This double access reading (DAR) is obligatory in these languages; there is no option of interpreting this sentence as Mary having been pregnant at the time of John saying it, but not by the time the sentence was uttered. The first reading, in which Mary was pregnant at the time that John said it, is one in

which the lower tense is dependent on the matrix tense. The second reading is dependent on the time at which the speaker uttered the sentence, and it is this reading that Giorgi argues reflects the representation of the speaker in the syntax of the expression. Crucially, this speaker representation occurs in the C-system.

(64) …… [$_{CP}$ SPK …

That the speaker representation resides in the C-system receives support from Italian in the form of complementizer deletion and temporal interpretation. First, note that DAR is available for the complements in the indicative mood.

(65) Gianni ha detto che Maria è incinta.
John said that Maria is pregnant

For subjunctive complements, the temporal relation of the embedded and the main-clause event is simultaneous.

(66) Gianni crede che Maria sia felice.
Gianni believes that Maria is(SUBJ PRS) happy

(67) Gianni credeva che Maria fosse felice.
Gianni believed that Maria was(SUBJ PST) happy

In (66) both the complement and the matrix tenses are in the present, while in (67), both are in the past. Depending on the matrix verb, the complement may be in the

indicative or the subjunctive mood. As shown below, the complementizer of an indicative clause cannot delete, while it may optionally delete for a subjunctive clause.

(68) Mario ha detto *(che) ha telefonato Gianni.
Mario said that has(IND) called Gianni
'Mario said that Gianni called.'

(69) Mario credeva (che) avesse telefonato Gianni.
Mario believed (that) had(SUBJ) called Gianni
'Mario believed that Gianni called.'

Giorgi suggests that the reason why the complementizer for the indicative clause cannot delete is that it contains the speaker representation, thus it must always occur. But the complementizer for the subjunctive clause does not contain the speaker representation, hence it can be deleted.

As further evidence, Giorgi looks at the complement of the verb 'hypothesize'. This verb takes a subjunctive complement, but unlike other verbs, the complement may have the DAR. When it does, the complementizer cannot delete, just as in the case of the indicative complement.

(70) Gianni ha ipotizzato (che) fosse incinta.
Gianni hypothesized (that) (she) was(PST SUBJ) pregnant

(71) Gianni ha ipotizzato *(che) sia incinta.

Gianni hypothesized (that) she is(PRS SUBJ) pregnant

(70) has the expected reading for a subjunctive clause in which the embedded tense only indexes the matrix tense. But in (71), which has a present subjunctive clause, the reading is obligatorily DAR, so that 'she' was pregnant at the time that Gianni said it, and also 'she' is pregnant at the time of the utterance of this sentence. The latter requires the speaker representation, and the fact that the complementizer cannot delete, despite the fact that the embedded clause is subjunctive, is evidence that the speaker representation is in the C-system of the embedded clause. See Giorgi (2010) for additional evidence for the presence of the speaker representation in this position. I will return to speaker/addressee representation in the C-system in Chapter 2.

An important point that comes out of this study of the DAR is that there is a speaker representation, and it occurs in the C-system, not in the SAP. As a result, this speaker representation for the DAR is not restricted to the root environment, and is free to occur widely: in indicative complements of all kinds of predicates as well as the subjunctive of 'hypothesize'. This shows that participant representation may occur in different positions in the structure and, depending on where it occurs, it is either highly restricted in distribution (root) or not. In Chapter 2, we will look at Magahi, where the participant representations occur in the C-system. These representations license allocutive agreement, very much like Basque and Japanese, but because the participant representations are in the C-system, the allocutive agreement has a wide distribution paralleling the speaker representation for the DAR in Italian.

6. SAP, Act Phrase, and Illocutionary Force

We have seen that postulating a performative predicate in the superordinate structure, as Ross proposed, is problematic. At the same time, we have seen that there is evidence for the representation of the speaker and the addressee in the superordinate structure. Speas and Tenny's Speech Act Phrase (saP), revised as the Speaker-Addressee Phrase (SAP), captures these points by simply postulating a speaker and an addressee representation in the SAP without including a performative predicate. I will therefore adopt the SAP, as I have in earlier works (Miyagawa 2012a, 2017). However, the SAP leaves a gap in the theory of speech acts, something I failed to note earlier: How are the speaker and the addressee in the SAP related to the proposition of the utterance? Ross's answer to this question was to postulate a performative predicate that relates the speaker and the addressee to the proposition by expressing, for example, some attitude that the speaker has toward the proposition. But without such a performative verb, the two interlocutors are left dangling semantically relative to the proposition.

To address this problem, I will turn to recent works by Krifka (2014, 2015, 2017, 2019a, 2020) and others that propose a way to connect the speech act portion (what I am calling the SAP) with the proposition. In a recent study in the tradition of what Aelbrecht, Haegeman, and Nye (2012a) and Frey and Meinunger (2019) call "syntacticization of discourse," Krifka (2017, 2019b, 2020) proposes a superordinate structure above the TP that encodes ideas in Frege (1918) as well as Peirce (see Tuzet 2006). There are several components from Krifka's system that are directly relevant to our study and I will adopt them as part of our analysis. One important feature of Krifka's proposal is that the superordinate structure is multi-layered. These layers

correspond to the notions in Frege's work in which the following aspects are distinguished relative to assertions.

(72) a. das Fassen eines Gedankens – das Denken ('the grasping/conception of a thought – the thinking')

b. die Anerkennung der Wahrheit eines Gedankens – das Urteilen ('the appreciation of the truth of a thought – the judging')

c. die Kundgebung des Urteils – das Behaupten ('the manifestation of the judgement – the asserting')

These aspects translate into three distinct semantic operations (see also Peirce; the following is taken from Frey and Meinunger 2019: 121; see also Krifka 2020).

(73) a. A thought/proposition φ which has truth conditions;

b. A judgment of a person *x* concerning a proposition φ, a private act;

c. An assertion of a person *x* of a proposition φ, a public act.

The lowest layer, which is (73a) above, is the traditional TP in which the proposition is expressed with its concomitant truth conditions. The layer above that encodes the judgment by the speaker of his/her attitude towards the proposition; simple examples of items that occur in this layer include a subjunctive epistemic such as *probably* and the German modal verb *sollen* 'ought' (Krifka 2017, 2020). This layer is named the Judgment Phrase. The latter is marked as "private" since it is the inner attitude of the speaker that is verbalized. The top layer, which is labeled as the ActP, is related to the speaker's performance of a speech act. As Krifka (2014, 2020) and Frey and

Meinunger (2019) note, this top layer is the locus of the illocutionary force of the expression, a point that becomes important in a variety of constructions we will look at in this monograph.

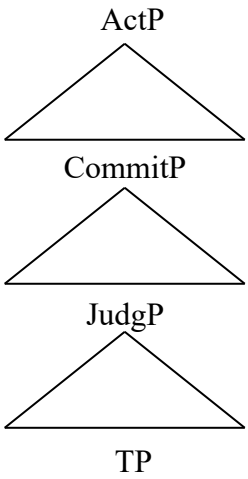
Along with these three layers of structure, Krifka argues that there is a fourth layer, between the ActP and the Judgment Phrase (JudgP) called the Commitment Phrase (CommitP). This projection encodes the notion that speech acts should be understood as an expression of public commitments, not the mentalist approach of intentions or beliefs as we find in Gricean pragmatics (Bach and Harnish 1979, Truckenbrodt 2006, Green 2007, Brabanter and Dendale 2008, MacFarlane 2011, Geurts 2019, Krifka 2019a, 2020). In my view, it is this commitment layer that relates the speaker and the addressee to the proposition. The commitment layer expresses the idea that "in an illocutionary act the speaker takes on certain commitments; for example, in an assertion, the speaker takes on the liability that the asserted proposition is true [...]" (Krifka 2014: 65). For related work, see, for example, Peirce (1934: 384), Searle (1969: 29, 1979: 12), Brandom (1983, 1994: ch. 3), Wright (1992), Alston (2000), MacFarlane (2003, 2005), and Krifka (2015, 2020). Portner et al. (2019) propose a structure they call "cP" around the same position as CommitP, but the function of cP is fundamentally different: it contains "meanings involving the relation between the speaker and interlocutor-addressee" (p. 12), such as politeness.

The idea that commitment links the SAP with the proposition is directly expressed by Geurts (2019: 3), who states, "commitment is a three-place relation between two individuals, [the speaker] and [the addressee], and a propositional content, p: [the speaker] is committed to [the addressee] to act on p [...]." The "act" could be the speaker committing to the truthfulness of p, which is the case with assertions, or to commit to making p true, in the case of commissives (see Bach and

Harnish 1979). A directive commits the speaker to the goal of the addressee making p come true (Geurts 2019: 10) (see Green (2007: 76) for an opposing view). Questions can fall under directives on the assumption that they are requests for information (e.g., Frege 1918), a point we will consider in full in Chapter 5.

With the Commitment Phrase in place, Krifka (2017, 2019b, 2020) proposes the following complete structure.

(74)



This structure, which has no representation of the participants, is what Krifka (2020) proposes. In Chapter 5, where we look at questions within this approach to pragmatics, I will suggest that the CommitP is associated with the speaker, which we see in Krifka (2019b). I will also suggest that in questions, there is a second CommitP that is associated with the addressee, a point I adopt from Geurts (2019).

As I will show, this proposal by Krifka receives support from the constructions we will look at from Japanese and a variety of other languages. In order to accommodate the data, I will take some liberty with the structure above, hopefully without changing the fundamental import of the proposal. The revised picture in many ways reflects a related proposal by Wiltschko (2017) (see also Wiltschko and Heim 2016). First, I will replace “ActP” with the Speaker-Addressee Phrase, essentially as

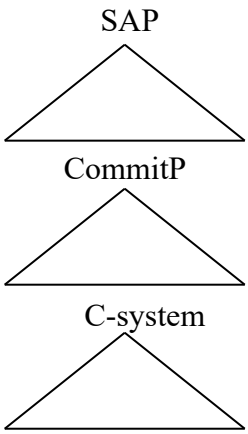
proposed by Speas and Tenny. The reason for this is that, as we have seen, there is evidence that representations of the speaker and the addressee exist at the highest point in the utterance. I will adopt from Krifka (2014, 2020) and Frey and Meinunger (2019) the idea that the top layer is the locus of the illocutionary force of the expression (see also Rizzi 1997, Ambar 1999, 2003, and Cinque 1999, for the idea that syntax contains a projection for illocutionary force). Second, I will assimilate the Judgment Phrase with the CP, but with certain extensions beyond the traditional CP in the fashion of Rizzi's (1997) articulated C-system, as I will show in the chapters on sentence final particles and topicalization. Frey and Meinunger (2019) show that certain topics in German, such as the aboutness topic, which are what they call "weakly root-sensitive," occur in the Judgment Phrase. As I will argue in Chapter 4, the same topicalization in Japanese and English occurs in the TopicP, which is an extension of the CP projection, as originally argued by Chomsky (1977). Thus, we have a reason to integrate JudgP into an articulated CP system, reflecting the work of Rizzi (1997).

Integrating the Judgment Phrase into the CP makes sense from a semantic point of view as well. While CommitP and SAP are part of the expressive component encompassing the illocutionary force of the utterance, JudgP may contain elements such as *probably* that relate to the truth-value of the expression, which should be part of the proposition, thus, extended CP. Although what occurs in the extended CP corresponding to JudgP may not always impact the truthfulness of the proposition, it always selects the CP, thus it makes sense to view it as part of the C-system. We will see such selection with sentence particles in Japanese and Romanian in Chapter 3, and with topicalization in Chapter 4. Specifically, sentential particles that begin in the extended C-system for semantic and selectional reasons, but are associated with a

participant, move from the C-system into the SAP. This suggests that the C-system is solely reserved for items associated with the proposition, contributing to its truth-value in some fashion.

This leaves the two layers, SAP (Krifka's ActP) and CommitP, as the superordinate structure. These two layers match in content and spirit Wiltschko's (2017) proposal for a two-layer analysis (also Wiltschko and Heim 2016). The top layer in her proposal is what she calls the "response system," which encodes such information as what the speaker wants the addressee to do, that is, the action that the speaker performs with the utterance. This is equivalent to the notion that this top layer is the locus of the illocutionary force of the expression. The second layer is what she calls the "grounding phrase," where the speaker's or the addressee's commitment towards the proposition of the utterance is encoded. I interpret this second layer as equivalent to Krifka's CommitP. Below that is S(entence), which I interpret to mean the actual overt utterance, the CP. The structure that I will use is, thus, the following.

(75)



Earlier, I argued that the SAP has a distribution that matches Emonds's root definition. Why is that? The key here is that we equated the SAP with Krifka's ActP, which is related to the performance of the speech act, thus, as Krifka (2014, 2020) and

Frey and Meinunger (2019) argue, the locus of the illocutionary force. To perform an illocutionary act, typically both the speaker and the addressee must be present, so it is natural to associate these two participants with the highest point in the tree where the locus of illocutionary force resides.

The main clause naturally would be associated with illocutionary force, as well as the reported speech under verbs of communication such as *say*. What about adjunct clauses such as *because*, *although*, and *while*? Frey and Meinunger (2019) give evidence that this type of adjunct clause is merged high in the structure, higher than the main clause, and as a result, it has its own illocutionary force. One piece of evidence they give has to do with binding. Note the contrast below (pp. 113-114).

(76) a. Keiner$_1$ hat protestiert, als er$_1$ unterbrochen wurde.
no.one has protested when he interrupted was
'No one protested when he was interrupted.'

b. *Jede Kollegin$_1$ ist letzten Sonntag am Institut
every colleague has last Sunday at.the institute
gewesen, während sie$_1$ doch sonst bei schönem Wetter
been while she MP otherwise in beautiful weather
einen Ausflug macht.
an excursion makes
'Every colleague was at the institute last Sunday, while she takes a trip when the weather is nice.

c. *Jede$_1$ hat die Prüfung bestanden, worüber sie$_1$ sich
every has the exam passed about.what she REFL
gefreut hat.
been.glad has
'Everyone passed the exam, which she was happy about.'

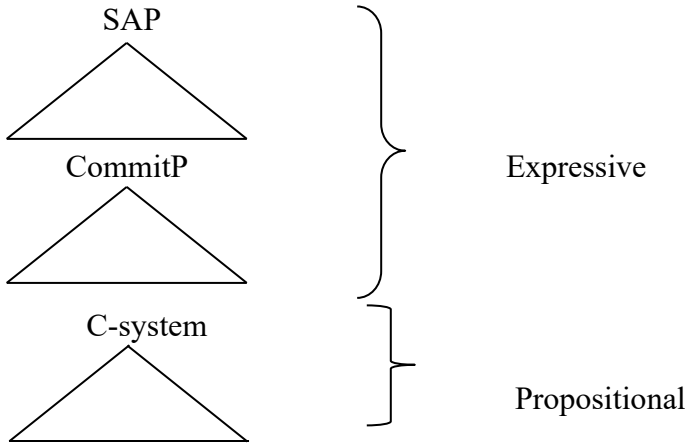
The *when* clause in (76a) is an integral part of the entire expression that delimits the time when 'he' potentially could be upset, hence *when* is inside the main clause and does not have its own illocutionary force. This is why the quantifier 'no one,' in the matrix subject position, is able to bind the pronoun inside the *when* clause. In contrast, both the *while* clause in (76b) and the *which* clause in (76c) are not an integral part of the main sentence — they are, in Haegeman's (2010, 2012) terminology, peripheral adverbial clauses. Not being a part of the main clause, these adverbial clauses are merged higher, with their own illocutionary force; hence 'no one' cannot bind into them. As Haegeman (2010, 2012) has shown, topicalization is not possible in the *when* clause of the type we see in (76a), which she calls a "central adverbial clause," while it is possible in the peripheral adverbial clauses in (76b-c).

To recap, the reason why the SAP occurs in Emonds's root environments is that the SAP is associated with the illocutionary force of the expression, and the three environments that Emonds defined turn out to be where the illocutionary force of expressions may appear.[8]

There are two additional points to be made about the structure given in (75) above. First, the three layers, SAP, CommitP, and CP, constitute different functions of the expression. As we will see, the first two, SAP and CommitP, comprise what I will term the expressive component using the terminology of Potts (2007), because it has

to do broadly with the illocutionary force associated with the utterance. The C-system comprises the propositional component, as is typically assumed, and it is this component that holds the truth-value of the utterance in the case of an assertion.

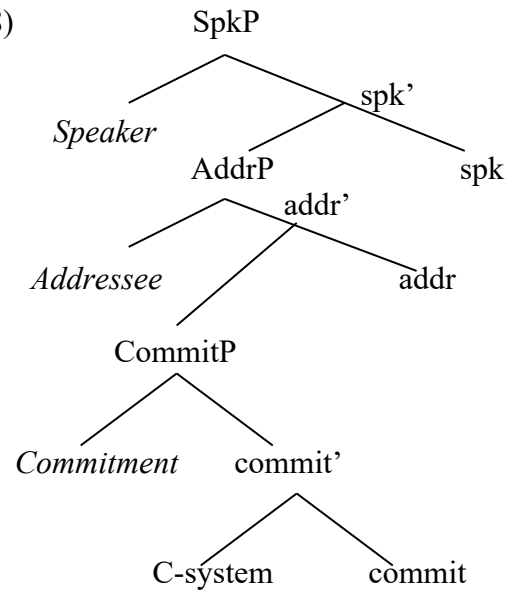
(77)



The expressive component is related to the illocutionary force of the utterance and the propositional component to the proposition. In this way, we address the problem originally noted for Ross's performative analysis: the superordinate structure, in the form of the expressive component, is independent of the proposition that holds the truth-value of the utterance. It is only in the C-system that the truth-value holds. From this perspective, that an utterance is composed of a component that relates to the illocutionary form and another component that relates to the proposition, it makes sense to exclude the Judgment Phrase from the structure. As Frey and Meinunger (2019) note, the Judgment Phrase is not part of the illocutionary force component of the utterance. If it is not a part of the illocutionary force component, it should be part of the propositional component, that is, the C-system.

The following provides a more detailed description of the expressive structure given for a head-final language.

(78)



7. Previewing the remaining chapters

Below, I will briefly summarize each of the remaining chapters.

*Chapter 2, "*The SAP and the politeness ϕ-feature"

In Chapter 2, I will focus on the top layer of the superordinate structure, what Krifka calls the AspP, and what I call the SAP, modeled on Speas and Tenny's proposal. I will look in detail at the politeness marking in Japanese, by extending the earlier studies substantially, drawing on Uchibori (2006, 2007, 2008) and Yamada (2019a). I will give a detailed analysis showing that the SAP contains the addressee representation, which, along with the speaker representation, makes it possible for this layer to be the locus of the illocutionary force of the expression. I will give further support to the idea that the politeness marking in Japanese is a form of ϕ-feature agreement. We see this transparently in the Basque data, in which the politeness marker inflects for 2nd person. However, in Japanese it is not as clear since Japanese traditionally is thought to be an agreementless language. In the previous studies

(Miyagawa 2012a, 2017), there were two major problems that were left unsolved in justifying the analysis of the politeness marking as ϕ-feature agreement. First, the politeness marker occurs low in the structure, below tense, and even below negation. Given that the function of the politeness marker is to mark the entire utterance as being in the formal register of speech, this location does not make sense. Using data presented by Yamada (2019a) as a starting point, I will show that ϕ-feature agreement begins in the politeness marker low in the structure, and raises head-to-head all the way into the SAP, where it appropriately marks the entire utterance. Second, while the politeness marking occurs in Emonds's root environments, hence it is a main clause phenomenon, there are instances in which the politeness marking occurs more freely under circumstances that are fundamentally different from the regular politeness marker. Using data from Uchibori (2006, 2007, 2008) and Yamada (2019a), and being informed by the analysis of allocutive agreement in Magahi (Alok and Baker 2018, Alok, to appear), I will present a new analysis of the ϕ-feature agreement that makes it possible for the politeness marking to function in conjunction with the SAP.

Chapter 3, "The SAP, CommitP, and Sentence Final Particles"

In Chapter 3, we will look at another phenomenon, sentential particles in Japanese and Romanian. In so doing, we will see the effect of all three layers that Krifka proposed, AspP (which we call SAP), CommitP, and JudgP (which I will show is an extension of the CP). As I will show, the distribution of these particles in Japanese and Romanian also reflects Emonds's conception of the root. I will demonstrate that the reason for this is that many of these particles are addressee- or speaker-oriented, thus requiring the SAP. One sentential particle we will look at is *ne*

in Japanese; it has a variety of uses, but the one we will look at is *ne* that seeks confirmation by the addressee of the truthfulness of the proposition.

(79) Hanako-wa kur-u ne?
Hanako-TOP come-PRS NE
'Hanako will come, right?'

We will see that this *ne* is associated with the head that projects the addressee projection of the SAP.

The idea that a sentential final particle is associated with an SAP head receives clear evidence in Romanian, which has similar sentence particles as Japanese and they often inflect for 2nd person. The Romanian particle may occur sentence finally or sentence initially, as in the *haideţi* example below.

Haideţi

(80) Haideţi c-ati întârziat, ce mai! (Haegeman & Hill 2014, 26b)
HAI-2PL that have-2PL been-late what else
'Obviously you are late!'

The sentence particle *haideţi* here conveys to the addressee what the speaker thinks about the proposition ('obviously').

Also in this chapter, we will look at studies of autistic children in regards to sentence final particles. As we will see, there is an asymmetry between *ne*, which is addressee-oriented, and another common sentence-final particle in Japanese, *yo*,

which is used to strengthen the speaker's commitment to the truthfulness of the proposition.

(81) Hanako-wa kur-u yo.
Hanako-TOP come-PRS YO
'Hanako will come for sure.'

While *ne* is virtually absent in the language of autistic children, even with training, *yo* is acquired and retained more readily. As I will show, the absence of *ne* reflects the difficulty autistic subjects have interacting with the addressee, and it shows up as a deficiency in the addressee representation of the SAP. On the other hand, *yo* is not associated directly with the SAP, but with the CommitP, thus autistic children learn to use it and retain it beyond the training period.

Chapter 4, "Is the Judgment Phrase needed? A view from topicalization"

As mentioned above, in Chapters 2 and 3, we will see evidence for the SAP and the CommitP, with also some reference to the JudgP. In this chapter, we will consider JudgP in full, by looking closely at topicalization in German, Japanese, English, and Spanish. Frey and Meinunger (2019), whose analysis of topicalization in German will form much of the basis for our analysis, argue that two kinds of topicalization, which they call the aboutness topic with the particle *jedenfalls* and German left-dislocation, occur in environments that they call "weakly root-sensitive." Their contention is that this weakly root-sensitive property identifies the Judgement Phrase, and only the complement clause of certain verbs, such as the doxactic verb 'think', the verb of saying, and verbs of perception, have the JudgP above the TP, making it possible for

these two types of topicalizations to occur. In contrast, the complement of inherently negative verbs such as 'deny', for example, does not contain JudgP, thus the two types of topicalizations are blocked. I illustrate this for the aboutness topic examples drawn from Frey and Meinunger (2019).

(82) Maria denkt, dass [Fritz jedenfalls] kommen wird.
Maria thinks that Fritz for.one come will
'Maria thinks that Fritz for one will come.'

(83) *Maria leugnete, dass [Fritz jedenfalls] kommen wird.
Maria denied that Fritz for.one come will

One point that Frey and Meinunger note is that JudgP is fundamentally different from ActP (SAP) and CommitP in that it is not a part of the illocutionary force component of the expression. This is why they call these two topicalizations "weakly root-sensitive," because they can occur in the non-illocutionary, thus non-root, environment of the JudgP, as well as in complements that contain illocutionary force. The point I will make in this chapter is that there is no need to incorporate JudgP into the structure with regard to topicalization. What we see in "JudgP" are items that relate to the proposition, thus the CP. Therefore, those items that are categorized as being in JudgP are best viewed as being a part of the extended C-system in the spirit of Rizzi (1997). Thus, there are just two regions in an utterance: the expressive component, which relates to illocutionary force, and the propositional component. There is nothing in between.

I will propose an analysis of topicalization, including the aboutness topic, based on the idea, originally due to Chomsky (1977), that the topic phrase occurs immediately above the CP, with the topic head selecting the CP, thus extending the C-system. I will agree with Frey and Meinunger that it is the nature of the clausal structure that allows, or disallows, this kind of topicalization. Unlike their approach, I will base my analysis on an insight in Meinunger (2004) that the complements that do not allow this type of topicalization, when one looks at them in Romance, are associated with the subjunctive mood. Those that allow this type of topicalization are associated with the indicative mood. I will assume that this bifurcation holds even in languages that do not formally distinguish these two moods in form. I will adopt Haegeman's (e.g., 2012) "competition" approach to topicalization, and by extending it using Villalta's (2008) analysis of the subjunctive in Spanish, I will show that we can derive the weakly root-sensitive property noted by Frey and Meinunger (2019) without having to postulate JudgmentP. In this way, we only need to postulate the SAP (ActP) and CommitP for the expressive component of the utterance and the C-system for the propositional component.

Chapter 5, "Questions and the Commitment Phrase"

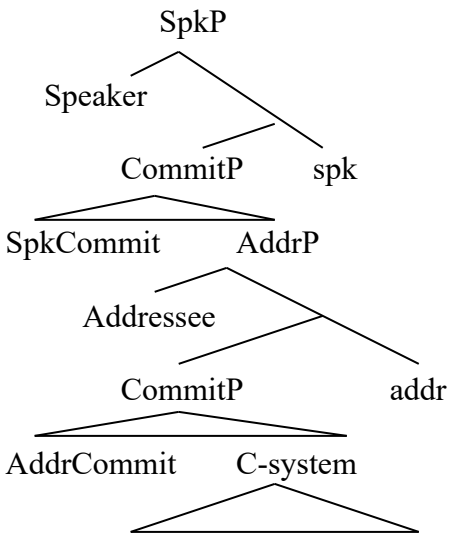
The idea I am proposing in this monograph is that an utterance has two major components: the expressive component, which contains the illocutionary-force structures of SAP (ActP in Krifka's work) and CommitP, and the propositional component that occurs within an extended C-system. In this chapter, I will explore how these two components interact. As noted earlier, Geurts (2019: 3) states, "commitment is a three-place relation between two individuals, [the speaker] and [the addressee], and a propositional content, p: [the speaker] is committed to [the

addressee] to act on p [...].” The manner of this “act” depends on the speech act. For an assertion, this “act” is the speaker committing to the truthness of p. In the case of commissives, the speaker commits to making p true (see Bach and Harnish 1979). A directive commits the speaker to the goal of the addressee making p come true (Geurts 2019: 10).

In this chapter, I will look at questions. I will pursue the idea that questions are requests for information (see Frege 1918). This is assumed widely in the pragmatic theories of speech acts (e.g., Searle 1969, Bach and Harnish 1979). Geurts (2019), using commitments instead of the standard notion of intentions, proposes that in questions, the speaker commits to the goal that the addressee should commit to (some form of) p. In the case of a yes-no question, the addressee should commit either to p or not p.

We will address two questions. First, what is the expressive structure for questions? Second, what precisely, is the addressee being asked to commit to? The latter question is an issue about the interaction between the expressive component and the propositional component. For the first question, we will translate Geurts’s idea for questions by postulating two Commitment Phrases. I will revert to Krifka (2019b) as opposed to (2020) in labeling the CommitP with a participant (Krifka only uses “Sp”; I am adding “Addr” to the mix).

(84)



As shown, the commitment is associated with the speaker (Krifka 2019b). I will also suggest that the commitment associated with the addressee is labeled as such. The speaker commitment is the same as in the case of, for example, assertions: the speaker is committing to a goal, and that goal is to get the addressee to commit to p, as indicated by AddrCommit. I will give evidence for these two kinds of commitments from Newari, a Tibeto-Burman language.

For the second question, we will look in detail at wh-questions and their answers. Typically, in a wh-question the addressee is expected to commit to an exhaustive set of propositions that comprise the answer — the propositions that are true. Thus, if you ask the question *What are you bringing to the picnic?*, the common -sense assumption is that you would list all the items that you plan to bring to the picnic. In this way, the addressee commitment involves not just any set of p, but an exhaustive set of p. The question here is, where does this exhaustivity come from? Is it part of the addressee's commitment in questions? I will argue that in Japanese, we can actually see the source of this exhaustivity contained in the Q-particle.

(85) Anata-wa pikunikku-ni nani-o mottekuru no?
you-TOP picnic-to what-ACC bring Q
'What will you bring to the picnic?'

The speaker who asks this question naturally assumes that the addressee will commit to providing an exhaustive set of answers. However, as has been noted by a number of linguists, the Q-particle may optionally be omitted (Takahashi and Nakayama 1995, Ueyama 1992, Yoshida and Yoshida 1997).

(86) Anata-wa pikunikku-ni nani-o mottekuru (no)?
you-TOP picnic-to what-ACC bring Q
'What will you bring to the picnic?'

With the Q-particle "dropped," the question no longer has the sense that the addressee must give an exhaustive answer; some subset of what the addressee plans to bring to the picnic would be sufficient (Miyagawa 2001). I will look in some detail at cases where the addressee is asked to commit to both exhaustive and nonexhaustive sets of p's. In so doing, we will explore some basic issues regarding questions, such as pair-list, mention-some, and Question Under Discussion.

The final chapter, Chapter 6, will provide some final thoughts on the issues covered in the monograph.

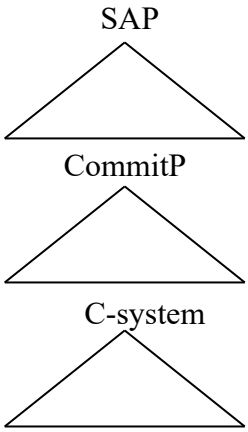
Chapter 2

The SAP and the politeness ϕ-feature

1. Introduction

In this monograph, we are concerned with how language interfaces with discourse context. The particular interface we are looking at is the one that relates to speech acts. The idea that I am pursuing is that high in the tree structure, syntax encodes information that assists in the performance of speech acts. Following recent proposals such as Krifka (2017, 2019b, 2020), Speas and Tenny (2003), Wiltschko (2014, 2017, also Wiltschko and Heim 2016), and my own work (Miyagawa 2012a, 2017), I propose that the top layer of this structure contains the representation of the speaker and the addressee, which Speas and Tenny (2003) call the "Speech Act Phrase" (saP), and which I call the "Speaker-Addressee Phrase" with the same three letters, SAP. Below the SAP, there is a layer called the Commitment Phrase (Krifka 2017, 2019b, 2020), which represents the speaker's (or in some cases, the hearer's) commitment to act on the proposition — for example, the speaker commits to the truthfulness of the proposition, or the speaker commits to making the proposition true as in the case of a commissive. Below that is the core utterance, which is composed of a CP with an articulated C-system (Rizzi 1997) and subsumes what Krifka calls the Judgment Phrase.

(1)



In Chapter 1, we saw evidence for the representation of the speaker occurring high in the structure, from Romanian and Italian. We also briefly looked at data from Basque, which suggests the existence of the representation of the addressee high in the structure. In this chapter, I will give further evidence for the addressee representation in the SAP by looking at Japanese. The specific point I will focus on is the politeness marking, which turns an expression into one that is appropriate for speaking to someone to whom respect should be paid, such as a teacher, an elderly person, or a stranger. Politeness marking is an indication of the speaker being aware of the social status of the addressee. Correspondingly, we will see that the politeness marking targets the addressee representation in the SAP, very much as we saw for Basque, which we will also look at in some detail. The linguistic phenomenon that makes the politeness marking possible is allocutive agreement, which we have already seen in Basque. In Japanese, allocutive agreement turns out to have a syntactically dynamic function because the actual politeness marker occurs low in the structure, near the vP, yet the politeness marking must mark the entire utterance as being in the polite register. It is the allocutive agreement feature that starts low in the structure, and raises all the way to the head of the SAP associated with the addressee representation. In sections 2 and 3, I will summarize earlier works that establish the

basic function of the allocutive agreement feature in Japanese. In the rest of the chapter, I will consider two major problems that face the allocutive-agreement analysis of politeness marking. One is that the overt politeness marking occurs too low in the structure, thus mismatched with its function as marking the overall utterance for politeness. The second is that, although the regular politeness marking occurs in highly restricted domains that make it a main clause phenomenon, there is a second politeness marker that can occur fairly freely in embedded structures (Uchibori 2007, 2008, Yamada 2019a). For this latter issue, I will introduce data on allocutive agreement in Magahi (Alok, to appear, Alok and Baker 2018) from which we will draw ideas on how to deal with the second type of politeness marking in Japanese. Since this chapter is concerned strictly with the SAP, I will ignore the Commitment Phrase in the analysis of the politeness marking. In Chapter 3, when we look at sentence-final particles, I will provide evidence for all the layers in the structure given in (1).

2. Where is the politeness marker?

Japanese has two levels of politeness: colloquial and formal. The latter is indicated by -*mas*- as an inflection on the verb, or the formal copula -*des*- if attached to a nominal. I will limit the examples to -*mas*- for much of the chapter, and will consider -*des*- as a separate entity later in the chapter.

(2) a. Hanako-wa piza-o tabe-ru.

Hanako-TOP pizza-ACC eat-PRS

'Hanako will eat$_{\text{COLLOQUIAL}}$ pizza.'

b. Hanako-wa piza-o tabe-mas-u.

Hanako-TOP pizza-ACC eat-MAS-PRS

'Hanako will eat$_{\text{FORMAL}}$ pizza.'

The decision to use the colloquial or the formal level of speech depends on the speaker's perceived relationship with the addressee. If the relationship is one of close friendship, one would normally use the colloquial register. If speaking to an older person, a teacher, or a stranger, one would use the formal register. In the first extensive syntactic study of this phenomenon, Harada (1976) aptly called *-mas-* "performative honorific," since its use is contingent on the relationship between the speaker and the addressee. As is often the case with politeness markers such as *-mas-*, one sometimes finds it in a context that does not fit the standard designation. For example, when scolding a child, a mother may use the *-mas-* form, not to be polite, but to put distance between her and the child. This function of placing distance between the participants is a basic function of politeness markers, which in normal circumstances has the effect of inducing politeness. However, in special cases such as the mother-child conversation, the distance takes away — at least in that moment — intimacy between the mother and her child, allowing the mother to enforce her will on the child.

The question we wish to answer is: What are the factors that allow *-mas-* to express politeness? In order to address this question, we wish to look closely at the morphology and the syntax of this construction. Let's begin by considering: Where

does -*mas*- occur in the sentential structure? This basic question, one that should be easy to answer, turns out to be one of the most difficult issues for -*mas*-, and it is one that can easily lead us down the wrong path for understanding its function.

If we look at where -*mas*- occurs, it is evident that it appears in the "wrong" place in the sentential structure, considering its function. In (2b) above, we see that the politeness marker occurs in front of tense (-*mas*-*u* 'MAS-PRS'), which suggests that -*mas*- occurs lower in the structure than tense. In fact, its position is even lower, as we can see by the example below.

(3) Hanako-wa piza-o tabe-mas-en.
Hanako-TOP pizza-ACC eat-MAS-NEG
'Hanako will not eat$_{\text{FORMAL}}$ pizza.'

Not only does -*mas*- occur structurally below tense, but as the example in (3) shows, it occurs below negation (the non-past tense here presumably is represented by a null morpheme; in the past tense there is the overt past-tense copula *desita* that follows the negation). So what's wrong with this placement of -*mas*-? What is wrong is that the function of the politeness marker is to mark the entire utterance for the formal registry, and not, for example, just the vP (Miyagawa 1987, Yamada 2019a). Thus, the correct position of the politeness marker is at the top of the structure, where it would have the entire expression within its domain, and not just a partial portion of the structure.

The oddity of the location of -*mas*- is further shown by comparing it to the politeness marking in Korean, Thai, and Tamil. In these languages the morpheme that

marks politeness occurs precisely where one would expect it, at the top of the utterance (these examples are drawn from Yamada 2019a).

(4) Korean (Pak 2008: 122)

Cemsim-ul mek-ess-**supnita**.

lunch-ACC east-PST-DECL.HON$_{A}$

'(I) ate$_{HON\text{-}A}$ lunch.'

(5) Thai (Iwasaki et al. 2005: 207)

lian yɛ̂ɛ ləy lɔ̌ **khráp**.

study problematic PP Q POLITE$_{MASC}$

'She studies so badly?'

(6) Tamil (McFadden 2017, 2018)

Naan jaangiri vaang-in-een-**ŋæ**.

I Jangri buy-PST-1.SG.SUB-ALOC

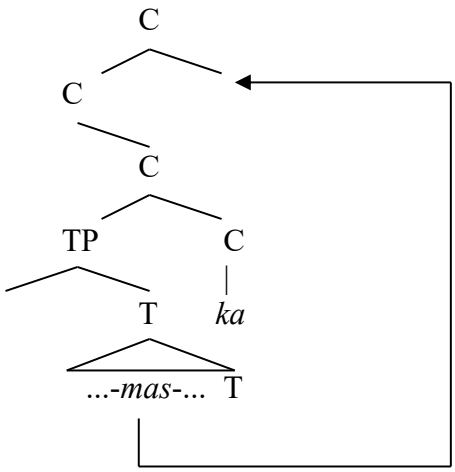
'I bought Jangri.'

To consider the example from Korean, the politeness element *supnita*, which is glossed as HON$_{A}$ (addressee honorific), occurs at the very end of the sentence, which would put it at the top of the structure given that Korean is head final. *Supnita* therefore transparently marks the entire expression in the formal registry. The same point holds for the Thai and Tamil examples in (5) and (6).

3. Moving *-mas-* to the "correct" location

We recognize that if *-mas-* is the politeness marker, it must be interpreted in a position other than where it appears, specifically in a position that would have the entire expression in its scope. I argued in Miyagawa (1987) that the morpheme raises at LF by excorporation to the highest position in the utterance. The following structure shows this for an interrogative construction marked by the Q-particle *ka*.

(7) *-mas-* (Miyagawa 1987)



I called this a form of LF affix raising, which puts the politeness marker where one would expect it, at the top of the structure. This proposal puts *-mas-* at the highest C, in a position where similar politeness marking is found (such as in Korean, Thai, and Tamil), from which it can mark the entire utterance as being in the formal registry of speech.

The core observation in Miyagawa (1987) for the LF affix raising is that there is a variation in grammaticality for *wh*-questions with and without the politeness marker.

(8) Dare-ga ki-*mas*-u *ka*? (FORMAL)

who-NOM come-MAS-PRS Q

'Who will come?'

(9) *Dare-ga kuru *ka*? (COLLOQUIAL)

who-NOM come Q

'Who will come?'

In (8), the verb contains the politeness marker -*mas*- and the *wh*-question with the question particle *ka* is fine, but in (9), the same question without the politeness marker is degraded. To ask this question, one must resort to some other form of the question without *ka*, such as rising intonation or the alternative question particle *no*.

The problem with (9) is that the question particle *ka* is not selected.

(10) *ka* must be selected by a head. (Miyagawa 1987)

We can see this in the following contrast between bridge and non-bridge matrix verbs.

Bridge/Non-Bridge verbs

(11) a. Bill-wa [$_{CP}$ dare-ga kuru *ka*] itta.

Bill- TOP who-NOM come Q said

'Bill said who will come.'

b. ?*Bill-wa [$_{CP}$ dare-ga kuru *ka*] donatta.

Bill- TOP who- NOM come Q shouted

'Bill shouted who will come.'

As shown, only bridge verbs allow *ka*, which suggests that *ka* must be selected by a head. Returning to the contrast in (8/9), given that *ka* must be selected, and the occurrence of the politeness marker in (8) makes that possible, I argued that this must be due to the fact that the politeness marker selects *ka.* In Miyagawa (1987), I suggested that -*mas*- excorporates at LF and raises to a position above *ka*, as we saw in the structure in (7) given earlier.[1]

4. Allocutive agreement at C

We saw evidence above that -*mas*- is closely tied to C despite the fact that it occurs lower in the structure. Further evidence that this kind of politeness form is linked to C is found in Basque (Miyagawa 2012a, 2017), to which I now turn.

Souletin, an eastern dialect of Basque, has the so-called allocutive agreement along with the familiar subject/object/indirect object agreement. The following, taken from Oyharçabal (1993), all mean 'Peter worked.'

(12) Four ways to say *Peter worked* in Souletin, an eastern dialect of Basque, depending on **who you're talking to** (Oyharçabal 1993)

subj. agr. allocutive agr.

a. *To a male friend*

Pettek lan egin di**k**.

Peter.ERG work do.PRF AUX-3.S.ERG-2.S.COL.M.ALOC

'Peter worked.'

b. *To a female friend*

Pettek lan egin di**n**.

Peter.ERG work do.PRF AUX-3.S.ERG-2.S.COL.FM.ALOC

c. *To someone higher in status (formal)*

Pettek lan egin di**zü**.

Peter.ERG work do.PRF AUX-3.S.ERG-2.S.F.ALOC

d. *Plural addressee*

Pettek lan egin du.

Peter.ERG work do.PRF AUX-3.S.ERG

All four sentences have the same subject-verb agreement, 3rd person, singular, ergative, as expected. What is unusual is that there is another agreement, the so-called allocutive agreement, that varies from sentence to sentence. This form of agreement marks levels of politeness, very much like the politeness marker -*mas*- in Japanese.[2] In (12a), the allocutive agreement is 2nd person, singular, colloquial, masculine, and the sentence with this agreement would be uttered to a male friend; in (12b) it is 2nd person, singular, colloquial, feminine, and this sentence would be intended for a

female friend; (12c) is for someone higher in status than the speaker, and the allocutive agreement indicates this — 2nd person, singular, formal; (12d) shows that there is no plural allocutive agreement. The allocutive agreement clearly agrees with the type of hearer to whom the sentence is uttered — namely, male/female friend, male/female superior.

The allocutive agreement is authentic agreement, as we can see by the fact that it competes with the normal 2nd person agreement morpheme. If the sentence contains a 2nd person subject, object, or indirect object, the allocutive agreement does not arise (Oyharçabal 1993). In Basque there can only be one 2nd person agreement in a clause (also only one 1st person agreement). In the following, no allocutive agreement is allowed because there is already second person agreement that goes with the object or the subject.

(13) a. (Nik **hi**) ikusi **h**aut.
(1.S.ERG **2.S.COL.ABS**) see.PRF AUX-**2.S.COL.ABS**-1.S.ERG
'I saw you.'

b. (**Zuek** ni) ikusi nai**zue**.
(**2.P.ERG** 1.S.ABS) see.PRF AUX-1.S.ABS-**2.P.ERG**
'You saw me.'

Hence, the 2nd person allocutive agreement is in direct competition with the "argument" 2nd person agreement, indicating that the allocutive agreement belongs to the regular agreement system.

Another property of the allocutive agreement, one that links it to the politeness marking in Japanese, is that, despite the fact that it appears fairly low in the structure,

around vP or T, it is closely linked to C. The argument for this comes from the fact that the allocutive agreement is not allowed in the main clause if it is a question.

(14) a. Lan egiten duia hire lagunak?

work AUX.3.ERG.Q your friend.ERG

'Does your friend work?

b. *Lan egiten dina hire lagunak?

work AUX.3.ERG.**ALOC.**FM.Q your friend.ERG

Oyharçabal (1993) argues that the reason why the allocutive agreement cannot occur in a question is that there is already material — Q-marking — on C, and this Q-marking prohibits anything else to occur at C, including allocutive agreement. We see the same point with a relative clause and with complementation, neither of which allows the allocutive agreement because there is overt material at C.

Relative clause

(15) a. [Lo egiten duen] gizona Manex dun

sleeping AUX.3.ERG.COMP man John COP.3.A.ALOC.FM

'The man [who is sleeping] is John.'

b. *[Lo egiten dinan] gizona Manex dun

sleeping AUX.3.ERG.**ALOC.**FM.COMP man.the John 3.A.COP.ALOC.FM

Complementation

(16) a. Ez dinat nahi [gerta dakion]

NEG AUX.1.ERG.ALOC.F want happen 3.A.AUX.3.D.COMP

'I don't want it to happen to him.'

b. *Ez dinat nahi [gerta diakionan]

NEG AUX.1.ERG.ALOC.FM want happen 3.A.AUX.3.D.**ALOC.**FM.COMP

We can see that the allocutive agreement is in competition with material at C, which indicates that the agreement is being borne at C. It is ultimately pronounced at T, as we can see by the fact that it is pronounced in the same cluster as subject agreement, a point I will return to for Japanese. I hasten to add that in Japanese, -*mas*-, which I will equate with the allocutive agreement in Basque, may occur in questions, as we saw earlier. The reason is that while Basque does not allow multiple-headed C's, Japanese does (Miyagawa 2012a, 2017).

As further demonstration of the C-nature of the allocutive agreement, we saw that the agreement does not occur in a question even if it is a main clause. However, it turns out that in Batua Basque, allocutive agreement may occur in a question (Zu 2015, 2017).

(17) Batua Basque

a. Lan egiten **al** di-∅-k hire lagunak.

work Q AUX-3.SG.ERG-**ALOC.M** your friend.ERG

'Does your friend work?' (said to a male friend)

b. Lan egiten **al** di-∅-n hire lagunak.

work Q AUX-3.SG.ERG-**ALOC.FM** your friend.ERG

'Does your friend work?' (said to a female friend)

What is the difference between Batua and Souletin? As Zu notes, in Batua Basque, the question particle *al* occurs away from C.

(18) a. John ikusi **al** d-u-zu?SEP Batua Basque

John see Q 3.ABS-AUX-2.SG.ERG

'Have you seen John?'

b. John ikusi d-u-zu-**ia**? Northeastern Basque (Souletin)

John see 3.ABS-AUX-2.SG.ERG-Q

'Have you seen John?'

In (18a), the question particle *al* occurs mid-sentence and away from C, which occurs at the end of the sentence. On the other hand, in (18b), which is Souletin, called "Northern Basque" by Zu, the question particle, which is *ia* in this dialect, occurs directly on C. This question particle blocks allocutive agreement from occurring in Souletin, but not in Batua Basque.[3]

In both Basque and Japanese, politeness marking/allocutive agreement functions to mark the politeness level of the expression. Second-person agreement marks either the colloquial or the formal registry in Basque, while in Japanese, -*mas*- marks the formal registry, the colloquial registry being unmarked. In both languages the marking for politeness appears low in the structure (I will turn to the exact position of -*mas*- below) but it is directly linked to C. This is what we expect, because the politeness marking renders the entire expression as being in the formal registry (or colloquial, in the case of Basque), so that we would expect the politeness marking to be borne at C despite the fact that the actual element associated with the politeness

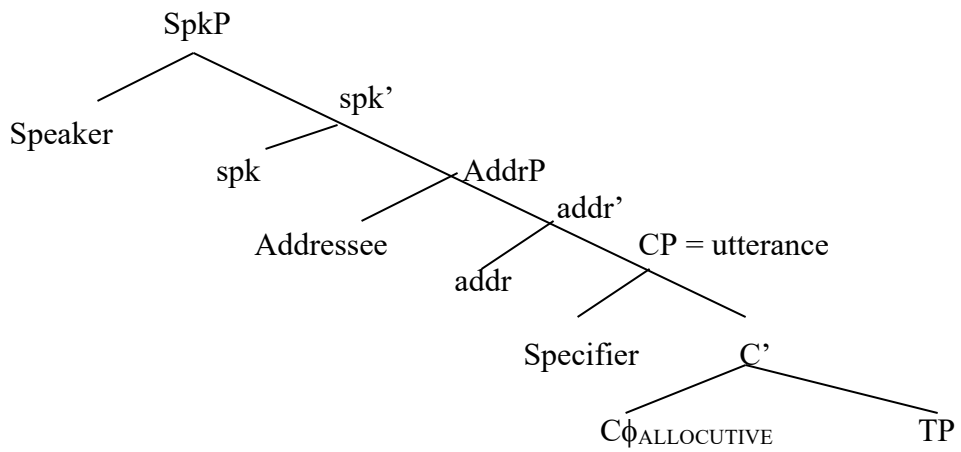
level occurs lower in the structure. Below, I will argue that the allocutive agreement does not stop at C, but raises even higher in the structure.

4.1. SAP

The politeness expression is directed at the addressee — the choice of the registry is a reflection of the social relation of the addressee relative to the speaker. This idea of addressee-orientation comes out directly in Basque, where the allocutive agreement takes the form of 2nd person agreement. As we saw, the allocutive agreement takes the same form as the "normal" 2nd person agreement, and in fact, it competes with the 2nd person agreement within TP. Although Japanese does not have the traditional ϕ-feature agreement system, I have argued that the parallels between the allocutive agreement in Basque and the politeness marking in Japanese are suggestive of the politeness marking in Japanese representing allocutive agreement in the 2nd person (Miyagawa 2012a, 2017). I will therefore use "allocutive agreement" also to refer to the politeness system in Japanese.

We saw from the Souletin examples earlier (12) that for the sentence "Peter worked," the 2nd person allocutive agreement shows up, despite the fact that there is no overt 2nd person in the sentence. In Miyagawa (2012a, 2017), I argued that the 2nd person entity that licenses the allocutive agreement occurs in a superordinate structure reminiscent of Ross's (1969) performative analysis. I adopted the modern version of the performative analysis by Speas and Tenny (2003), with a modification made to it by Haegeman and Hill (2011), and further modifications I have made to label the participant projections specifically as SpkP and and AddrP.[4]

(19)



We saw earlier that in Basque the allocutive agreement is a main clause phenomenon, being limited to the matrix clause. [footnote]Antonov (2015) reports a striking universality of this restriction across seven unrelated languages: Basque, Pumé, Nambikwara, Mandan, Beja, Japanese, and Korean. Even in the matrix clause it cannot occur if there is material on C, as in the interrogative construction in Souletin, but not in Batua Basque. The Japanese allocutive agreement is also highly constrained in where it can occur (Harada 1976). In Miyagawa (2012a, 2017), I argued that the distribution of the allocutive in Japanese exactly matches Emonds's (1970) original conception of the root, repeated below.

(20) *Root*

A root will mean either the highest S in a tree, an S immediately dominated by the highest S, or the reported S in direct discourse. (Emonds 1970: 6)

Emonds's point is that there are transformations which are only limited to the root, what he calls non-structure-preserving transformations. NCP is one such transformation.

(21) a. Never had I had to borrow money.

b. Because never had I had to borrow money, I have a lot saved.

c. John said that never had he had to borrow money.

d. *The fact that never had he had to borrow money is well-known.

The first example is the "highest S"; the second example with *because* is "S immediately dominated by the highest S"; and the third example is "S in direct discourse." The final example does not fit any of the environments for root, hence a root transformation cannot apply.

Contrary to Emonds, Hooper and Thompson (1973) argue that there is no need to distinguish between the two types of domains, root and non-root. They show that much of what Emonds noted follows from semantic/pragmatic factors. Hooper and Thompson (H&T, 1973) point out that root transformations apply in a wider variety of clauses than what Emonds called root clauses. The following shows that NCP may apply in the subordinate clause of *find out*, an environment that does not fit any of Emonds's environments for root.

(22) I found out that never before had he had to borrow money. (H&T (119))

Although H&T presented convincing counterexamples to the data that Emonds gave for his conception of the root, it is noted in Miyagawa (2012a, 2017) that the distribution of the allocutive agreement -*mas*- in Japanese precisely matches Emonds's characterization of the root, as illustrated in (23).

(23) a. *Highest S*

Hanako-wa ki-*mas*-u.

Hanako-TOP come-MAS-PRS

'Hanako will come.'

b. *S dominated by highest S*

Hanako-ga ki-*mas*-u kara, ie-ni ite-kudasai.

Hanako-NOM come-MAS-PRS because home-at be-please

'Because Hanako will come, please be at home.'

c. *Reported S in direct discourse*

Taroo-wa Hanako-ga ki-*mas*-u to itta.

Taro-TOP Hanako-NOM come-MAS-PRS C said

'Taro said that Hanako will come.'

In contrast, other kinds of complements do not allow the allocutive.

(24) Taroo-wa [Hanako-ga kuru/*ki-*mas*-u to] sinzitei-ru.

Taro- TOP [Hanako-NOM come/come-PRS C believe-PRS

'Taro believes that Hanako will come.'

(25) Taroo-wa [Hanako-ga kita/*ki-*mas*-u koto]-o hitei-sita.

Taro-TOP [Hanako-NOM came/come-MAS-PRS C -ACC deny-PST

'Taro denied that Hanako will come.'

(26) Taroo-wa [Hanako-ga kita/*ki-*mas*-i-ta koto]-ni odoroi-ta.

Taro-TOP [Hanako-NOM came/come-MAS-PST C_{FACT}-DAT surprise-PST

'Taro was surprised that Hanako came.'

(27) Taroo-wa [sono hikooki-ga tuirakusita/*tuirakusi-*mas*-i-ta koto]-o

Taro-TOP that plane-NOM fall/fall-MAS-PST C-ACC

sira-nakat-ta.

know-NEG- PST

'Taro didn't know that the airplane fell down.' (adapted from Harada's (104b))

Why does the distribution of the allocutive agreement match Emonds's original conception of the root? Given that the allocutive agreement requires the SAP, I believe that Emonds's original idea was in fact about the distribution of the SAP, and not about the so-called non-structure-preserving transformations (Miyagawa 2012a, 2017). Under this view of the root, the SAP occurs most readily in the main clause, although it can occur in highly restricted embedded structures, as characterized by Emonds. This makes sense because the allocutive agreement is a linguistic form that connects the expression to discourse, and one would expect it to occur in the root environment. In Chapter 4, when we look at topicalization, which is typically considered a main clause phenomenon, we will see that in both German and Japanese topicalization has a wider distribution, which reflects the predicate classification by H&T (1973).

As I noted in Chapter 1, the SAP is restricted in its distribution, its domain defined by Emonds's root definition, because the SAP is equivalent to Krifka's ActP (Krifka 2017, 2019b). As Krifka (2014, 2020) and also Frey and Meinunger (2019) suggest, the ActP (SAP in our proposal) is the locus of illocutionary force of the

expression, and thus a main clause phenomenon limited only to where the illocutionary force may appear in the expression. In this way, Emonds's original idea of the root was really about the distribution of illocutionary force associated with utterances. What we are seeing with the politeness marking is that it identifies precisely this domain of illocutionary force, because -*mas*- is dependent on the occurrence of the addressee representation of the SAP.

Later, I will consider a recent study by Yamada (2019a), who suggests that the SAP may occur in a wide array of embedded contexts beyond the root contexts. I will show that the data he gave conflates the standard allocutive agreement with another kind of -*mas*- that Uchibori (2007, 2008) identified, which, as I will argue, has licensing conditions distinct from the standard allocutive form.

4.2. Style adverbs in English

Although English does not have anything resembling the politeness form in Japanese with which we could test Emonds's original conception of the root, there is another set of linguistic elements whose distribution substantiates Emonds's characterization. These are the so-called style adverbs. According to Greenbaum (1969), style adverbs indicate the speaker's manner of expression (e.g., *frankly*). Amano (1999) proposes that this type of adverb need not modify an assertion, and importantly, its occurrence is limited to Emonds's original characterization. First, we see that style adverbs are compatible with all types of main clauses (Amano 1999: 210).

(28) a. *Frankly*, did you like the article? (question)

b. *Truthfully*, who broke the window? (question)

c. *Honestly*, don't tell him about it. (order)

However, style adverbs in embedded contexts are only compatible with Class A verbs (see Chapter 1, section 4).

(29) She said, "Honestly, I do not know anything about their plans." (Class A)

Amano goes on to point out that style adverbs are only compatible with Emonds's original characterization of root clauses. He notes this for indirect questions and indirect requests, as in (30a) and (30b) below. Examples (30c) – (30f) are created using Amano's examples above and replacing the attitudinal adverb with a style adverb (see also Jackendoff 1972 and Cinque 1999, 2004) (Class B-E verbs refer to the classification in H&T 1973).

(30) a. *She asked me whether *honestly* I would stay. (ind. question)

b. *He requested that, *frankly*, the papers be turned in next Monday. (ind. request)

c. *Bill believes that *honestly* John will lose the election. (Class B)

d. *I doubt Kissinger *frankly* is negotiating for peace. (Class C)

e. *I regret that I *frankly* attended the concert. (Class D)

f. *I know that Santa *honestly* has lost a lot of weight. (Class E)

Finally, Amano notes that style adverbs are compatible with reason-clauses ("?" is based on native speakers he consulted; I have switched the gender roles from his example).

(31) ?Mary fired her secretary, because, *frankly*, he was incompetent. (reason)

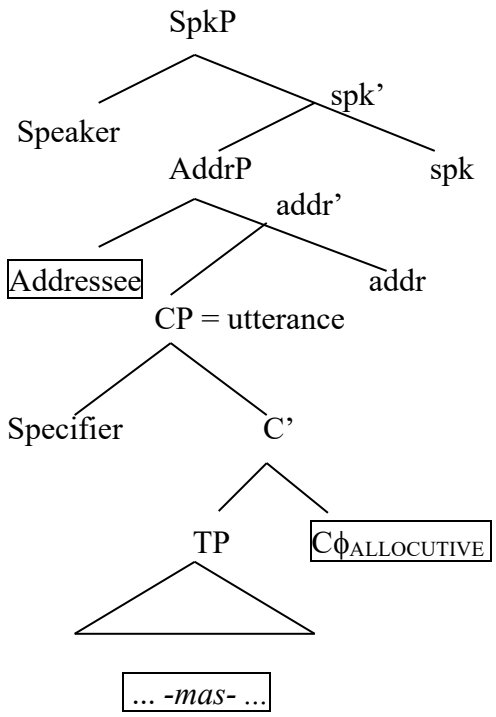
Why should style adverbs require the speech act structure? In a semantic analysis of adverbs, Bellert (1977: 349), who calls style adverbs "pragmatic adverbs," notes that these adverbs "are the only ones that are strictly speaking speaker-oriented adverbs, for one of the arguments is the speaker." The semantic representation of requirement of the speaker would be expressed in the SAP.

5. Politeness marking: Discrepancy between form and function

Up to now, I have essentially summarized the work reported in the literature, including my own work. From here on, I will present a new analysis of the allocutive agreement in Japanese that draws on previous studies.

Based on the discussion so far, what we have is a three-way relation for licensing the allocutive agreement in Japanese. There is the *-mas-* itself, the allocutive agreement ϕ-feature, and the addressee represented in the SAP. This is diagrammed as follows.

(32)



I will give further justification for this tripartite relationship below. Also, I will argue that the allocutive ϕ-feature raises further into the SAP.

We saw from earlier discussion that there is good reason to believe that the SAP exists, it is part of syntax, and its distribution is defined by Emonds's (1970) original conception of the root. There is also evidence from Basque and Japanese that the allocutive agreement, despite appearing lower in the structure, is somehow directly linked to C. The questions we wish to answer are:

- What is the source of the allocutive ϕ-feature at C?
- What is the position that -*mas*- occupies in the structure?

5.1. Yamada (2019a)

In his 2019 Georgetown dissertation, Yamada provides an analysis of various types of honorific expressions in Japanese, including the allocutive-based politeness

marking. He presents his analysis within a remarkably extensive discussion of honorifics across a variety of languages, as well as illuminating discussions of the historical development of the various forms of honorifics in Japanese. It is an important study, rich in cross-linguistic and historical information that will inform our research in this area for years to come. I will limit my discussion of his work to the allocutive form and its analysis.

He follows previous research (Miyagawa 2012, 2017) in assuming that the allocutive form involves agreement with the addressee in the SAP (Yamada 2019a: 231). Beyond that, he presents an analysis that is distinct from previous studies. In recognition of the fact that the allocutive form occurs somewhere above vP, and not higher than NegP (see example repeated below), he suggests, rather counter-intuitively, that -*mas*- appears in the NegP projection, but does so only post-syntactically (pp. 244-245).

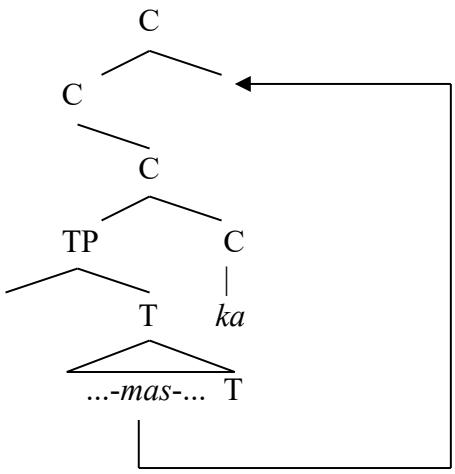
(33) Hanako-wa piza-o tabe-mas-en.
Hanako-TOP pizza-ACC eat-MAS-NEG
'Hanako will not eat$_{\text{FORMAL}}$ pizza.'

According to Yamada, his proposal to put -*mas*- in the NegP domain is to avoid having to create another projection between vP and NegP; it is an argument based on economy.

I will pursue a fundamentally different approach, one which takes Miyagawa (1987) as a starting point. In that work, I suggested that -*mas*- undergoes LF affix raising from its lower position and adjoins to C, thereby addressing the discrepancy between form and function: while the allocutive should have the entire expression in

its scope, its surface position is much lower in the structure; the LF affix hopping closed the gap created by this discrepancy. The structure is repeated below.

(34) *-mas-* (Miyagawa 1987)



I assume with Yamada (2019a) that *-mas-* contains an uninterpretable feature that needs to be valued. I depart from his analysis, which posits an "honorific feature," in proposing that this feature is the allocutive ϕ-feature, the same feature we find in Basque. Furthermore, I propose that it is this allocutive ϕ-feature that raises from *-mas-* to C. This part also differs from Yamada, who does not incorporate C into his analysis; instead, he accounts for the "high" interpretation of the allocutive marking by stating that it enters into agreement with the addressee in the SAP. Because the *-mas-* form only sprouts in NegP in a post-syntactic, morphological component, only the "honorific" addressee is interpreted, and it is in a high position in the structure.

We now have the answer to the first question posed above, namely, what is the source of the allocutive ϕ-feature at C? Our proposal is that it originates in the *-mas-*

form that occurs lower in the structure, and undergoes raising to C. A question that arises here is: Does this raising of the allocutive ϕ-feature occur in one fell swoop from -*mas*- to C, or does it occur step-by-step from one head to the next until it reaches C? If this movement is a kind of head movement, as it appears to be from the evidence we saw that it is able to license the Q-particle *ka*, we would expect it to follow the Head Movement Constraint (Travis 1984), which requires a raising head to adjoin to all heads as it moves up the structure. Is there evidence for this with respect to allocutive ϕ-feature raising?

In fact, an interesting piece of data given by Yamada (2019a) provides strong evidence that the allocutive ϕ-feature does make a stopover at each head as it moves toward C.

(35) Hanako-wa iki-mas-**en desita**.

Hanako-TOP go-NEG COP.PST

'Hanako didn't go.'

There are two remarkable points to observe in this example. First, the negation takes the form -*en*; this is the only place in standard Japanese that the negation takes this form. In all other occurrences, the negation takes the form -*na*-, as in the following.

(36) Taroo-wa piza-o tabe-**na**-i.

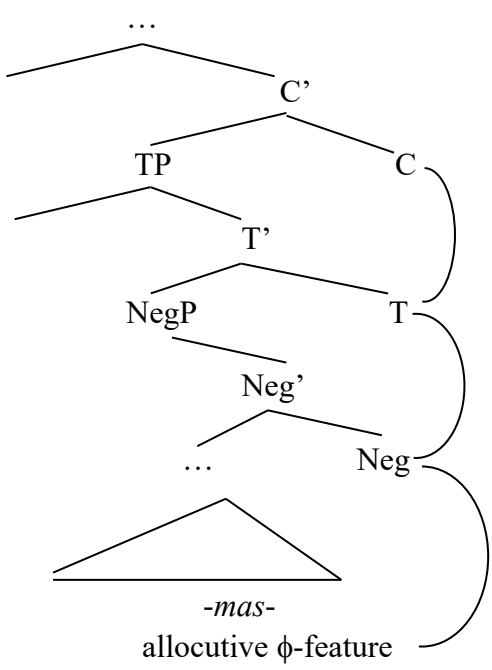
Taro-TOP pizza-ACC eat-NEG-PRS

'Taro doesn't eat pizza.'

The second unusual feature of the example in (35) is that, along with -*mas*-, the copula that supports the tense inflects for the formal level, so that in this example, there are two instances of the formal level marker, -*mas*- and -*desita*.

We can account for the unusual form that negation takes, and the occurrence of the second instance of the politeness marker, by assuming that the allocutive ϕ-feature undergoes head-to-head movement instead of moving to C directly. Part of this raising analysis parallels one version of a proposal that Yamada made earlier (Yamada 2017, 2018, 2019b), which he ultimately dispenses with in favor of a sprouting analysis. Where we part ways from his earlier proposal is that he does not assume that C plays any role, and the raising terminates at T. Instead, I assume that the allocutive feature raises all the way to C (and beyond, as I will argue later).

(37)



Assuming that movement leaves a copy at each stopover, what we have is the following:

(38) NEG – allocutive ϕ-feature → *-en*

T_{PAST} – allocutive ϕ-feature → *desita*

NEG with the allocutive ϕ-feature would be pronounced as *–en*. Given that this is the only place in all of standard Japanese that there is this combination of NEG and allocutive ϕ-feature, a point due to Yamada (2019a: 240), we make the right prediction that this is the only place that negation has this unique pronunciation. Past T with the allocutive ϕ-feature would have the pronunciation of *desita*. The occurrence of the copula *des-* is presumably to support the past T complex, akin to *do-* support. In the present tense, T is a zero-morpheme when occurring next to negation (*tabe-mas-en* 'eat-MAS-NEG-∅'), thus T with the allocutive ϕ-feature here would be silent. If there is no NEG, the allocutive ϕ-feature would raise from *-mas-* directly to T, and this T would have the following, "standard" pronunciations for present and past tense.

(39) T_{PRS} – allocutive ϕ-feature: *-u* (*tabe-mas-u*)

T_{PST} – allocutive ϕ-feature: *-ta* (*tabe-mas-i-ta*)

In the absence of negation, the present tense is pronounced as in any verbal complex as *-u*; there is no need to support this tense since it is a direct inflection on *-mas-*. In the past tense, again in the absence of negation, the pronunciation is for the standard verbal past tense *-ta*; the *i* vowel that appears here (*...mas-i-ta*) is an epenthetic vowel for forming verb stems in consonant-ending verbal entities such as *-mas-*.

This feature raising from *-mas-* to C reflects one of Yamada's (2019a: 240) suggestions, in which the feature $\text{HONORIFIC}_{\text{ADDRESSEE}}$ (HON_{A}) originates with *-mas-*

and raises to NEG, and then to T. I adopt this version of his analysis, but the problem with his approach is that there is no motivation for the raising of HON_A from *-mas-* to NEG to T. In our approach, there is strong motivation: the allocutive ϕ-feature needs to raise to C (and beyond) in order to receive valuation, and given that the raising of the allocutive ϕ-feature is standard head raising, it moves head-to-head, positing its feature along the way — NEG and T. So overall, I adopt Yamada's analysis described here, aside from the fact that he does not see C as a critical component of the allocutive system. Perhaps in recognition of the fact that there is no motivation in this version of his proposal for raising the HON_A feature from *-mas-* to higher heads, he ultimately adopts a different approach based on morphological sprouting (pp. 243-251), a process couched in Distributed Morphology. Since I will not adopt this version of his proposal, I will not attempt to describe it in any detail. In the discussion below, I will also adopt an earlier version of Yamada's proposal for the position of *-mas-* instead of the sprouting analysis.

There is, in fact, clear evidence that the allocutive ϕ-feature raises to C, instead of stopping at T as Yamada suggests. Nitta (1991) (quoted in Uchibori 2007) notes the following double polite form.

(40) Nimotu-wa moo todoki-*mas*-i-ta *desyoo* ka? (Nitta 1991: 6.5 (11))
package-TOP already arrive-MAS-PST INTERJECTION Q
'Has the package arrived already?'

This example has the *-mas-* form and the interjection *desyoo,* which is in the polite form. The colloquial version is the following.

(41) Nimotu-wa moo todoi-ta *daroo* ka?

package-TOP already arrive-PST INTERJECTION Q

'Has the package arrived already?'

This example does not have -*mas*- and the interjection is in the colloquial form *daroo*. This interjection, in the colloquial or the formal version, is normally used to indicate the speaker's inference ("probably"), but in these examples, it is simply used as a way to less directly ask the question.

Where does this interjection occur in the structure? These examples indicate that it is below the Q-particle, so is it at T? The following example shows that it occurs somewhere between T and C.

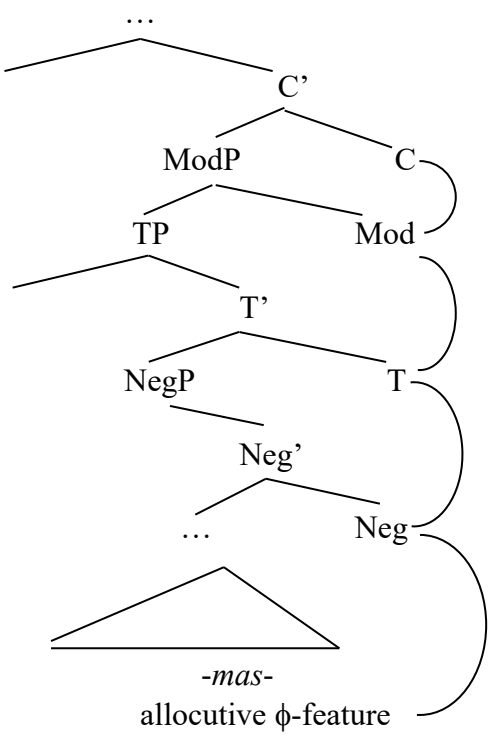
(42) Nimotu-wa todoki-mas-en-desita *desyoo* ka?

package-TOP arrive-MAS-NEG-COP.PST INTERJECTION Q

'Didn't the package arrive?'

This example has -*mas*-, followed by the allocutive-unique negation form -*en*, the polite form of the copula in the past tense as *do*-support, *desita*, followed finally by the interjection *desyoo*. The interjection is clearly above T; I assume that it is in a position of modality above TP. In fact, Koizumi (1991, 1993) proposes this modality projection between TP and CP precisely to deal with elements such as *daroo*/*desyoo* (see also Saito 2015). The raising of the allocutive ϕ-feature is shown below.

(43)



In each stop of this head-to-head movement, the allocutive ϕ-feature adjoins to the head (e.g., Neg), creating an adjunction structure, [$_H$ [H] allocutive ϕ-feature]; this allows the allocutive ϕ-feature to license the Q-particle once the allocutive ϕ-feature reaches C: [$_C$ [Q-particle] allocutive ϕ-feature]. As the final step to C, we have already seen that the politeness marking licenses the Q-particle *ka* at C, which is evidence that the allocutive ϕ-feature moves all the way to C.

As further evidence for the head movement analysis, once -*mas*- is inserted, all relevant heads must undergo allomorphy for politeness; it is utterly ungrammatical to pronounce one of the heads in the colloquial form (thanks to Norvin Richards for suggesting that I look at this).

(44) Nimotu-wa todoki-mas-en-*desita/*datta* *desyoo/*daroo* ka?

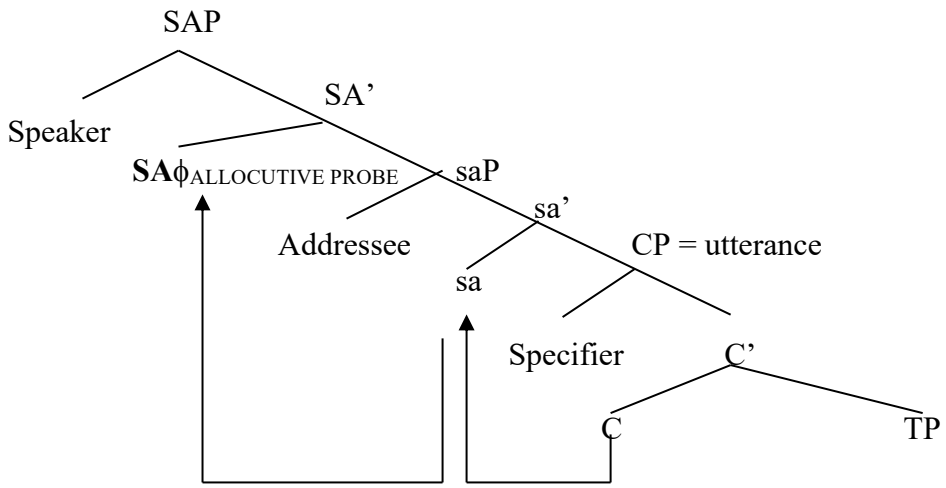
package-TOP arrive-MAS-NEG-COP.PST INTERJECTION Q

'Didn't the package arrive?'

In this way, I assume that C is an important component of the allocutive system, contrary to Yamada (2019a), who depends on the occurrence of the addressee representation in the SAP to do much of the work. We see this from the analysis of the licensing of the Q-particle in Japanese (Miyagawa 1987) and in the allocutive system described by Oyharçabal (1993), with extensions in Miyagawa (2012a, 2017) and Zu (2015, 2017).[5] I capture the role of C by assuming that the allocutive ϕ-feature raises from -*mas*-, which occurs lower in the structure than C, making stops along the way on heads that occur between -*mas*- and C.

A question that we should ask at this point is: Is C the last stop for the allocutive ϕ-feature? Remember that the motivation of this raising is to rectify a gap between form and function: while -*mas*- occurs low in the structure, the politeness associated with it renders the entire expression as being in the formal registry. If this is the case, we have to consider the fact that there is more structure above the CP in the form of the SAP. In earlier works (Miyagawa 2012a, 2017), I assumed that the allocutive ϕ-feature, which in those works I assumed originated in C, raises into the SAP, where it ultimately c-commands the addressee, which is its goal for valuation. The following, taken from Miyagawa (2012a, 2017), illustrates this with a head-initial structure.

(45)



This raising of the allocutive ϕ-feature accomplishes two things. First, it puts the allocutive ϕ-feature in the appropriate position of having the entire expression in its domain. Second, by raising to the position indicated, the allocutive ϕ-feature, which I assume is an unvalued feature, is in a position where it c-commands its goal, addressee, and thus is able to receive valuation in the standard way for all unvalued probes.[6] In the present work, I assume that the allocutive ϕ-feature raises to the addr head where it is given valuation above the AddrP. In these earlier works, I simply assumed this raising was into the SAP. However, could there be evidence that this movement is to the highest point in the structure instead? I will present such evidence below.

As mentioned earlier, verbs such as 'say,' that can take as their complement direct discourse, allow -*mas*- in the complement without requiring the matrix verb to also have -*mas*- (Harada 1976). This is in sharp contrast to verbs such as *think*, which do not allow this combination.

(46) Hanako-wa [minna ki-mas-u to] it-ta.

Hanako-TOP everyone come-MAS-PRS C say-PST

'Hanako said that everyone will come.'

(47) *Hanako-wa [minna ki-*mas*-u to] omott-ta.

Hanako-TOP everyone come-MAS-PRS C think-PST

'Hanako thought that everyone will come.'

As argued earlier in the chapter, (46) is an instance of the root phenomenon as Emonds (1970) originally characterized. This means that the complement of verbs such as 'say' is able to project the SAP, and if what is suggested in earlier works is correct (Miyagawa 2012a, 2017), the allocutive ϕ-feature that originates at -*mas*- sits at the top of the structure, having adjoined to the highest head in the SAP. What examples such as (46) with 'say' suggest, is that 'say' optionally selects a complement with the allocutive ϕ-feature on its head, just as verbs such as 'ask/know' subcategorize for an indirect question with Q on its head.

There is empirical evidence for the presence of the allocutive ϕ-feature in the SAP. Note first, the example below with the verb 'say'; the second example below shows that the -*mas*- complement may be scrambled to the head of the sentence.

(48) a. Taroo-ga [Hanako-ga amerika-e ik-i-mas-u to] it-ta.

Taro-NOM Hanako-NOM America-to go-MAS-PRS C say-PST

'Taro said that Hanako will go to America.'

b. [Hanako-ga amerika-e ik-i-mas-u to] Taroo-ga it-ta.

Hanako-NOM America-to go-MAS-PRS C Taro-NOM say-PST

Let us now test for the Condition C effect using the scrambling example, comparing the *-mas-* complement to a non-*mas-* complement.

(49) a. (??)[Hanako$_i$-no kodomo-ga amerika-e ik-u to] kanozyo$_i$-ga it-ta.

Hanako-GEN child-NOM America-to go- PRS C she-NOM say-PST

'Hanako's child will go$_{\text{COLLOQUIAL}}$ to America, she said.'

b. *[Hanako$_i$-no kodomo-ga amerika-e ik-i-mas-u to] kanozyo$_i$-ga it-ta.

Hanako-GEN child-NOM America-to go-MAS-PRS C she-NOM say-PST

'Hanako's child will go$_{\text{FORMAL}}$ to America, she said.'

Fifteen speakers from a graduate program in linguistics in Japan were asked to judge these and similar sentences. All judged (49a) as grammatical, with a few feeling a slight awkwardness, while all judged (49b) to be outright ungrammatical or, in a few cases, highly awkward.[7] In other words, there is a sharp contrast between the example without *-mas-* and with *-mas-* with regard to Condition C. With *-mas-,* Condition C is triggered, which means that the scrambled complement with *-mas-* must obligatorily reconstruct to its original position. But if the complement does not contain *-mas-*, the complement apparently need not obligatorily undergo reconstruction. This requirement of the complement to obligatorily reconstruct in the presence of *-mas-*

can be attributed to the existence of the allocutive ϕ-feature, which occurs on the highest head in the complement and which is selected by the main verb. Note that the allocutive ϕ-feature must be at the highest level in the SAP; if it were on C, for example, the main verb would not be able to detect it because of the SAP structure that intervenes between C and the main verb. We saw this with indirect questions, where the inclusion of *-mas-* in the indirect question leads to ungrammaticality because the SAP that is projected would block the main verb ('ask/know/etc.'), which subcategorizes for a question, from being able to select Q. Finally, when we asked the same speakers about a parallel pair of examples, but without any pronoun binding possibility, hence no potential Condition C violation, all speakers judged both kinds of examples — those with and without *-mas-* in the scrambled complement — as fully grammatical. This gives further credence to the idea that it is *-mas-* in the complement clause and the allocutive ϕ-feature, which raises from it to the SAP, that is triggering the obligatory reconstruction.[8]

Later I will give further evidence for the raising of the allocutive ϕ-feature into the SAP based on data given by Uchibori (2007, 2008).

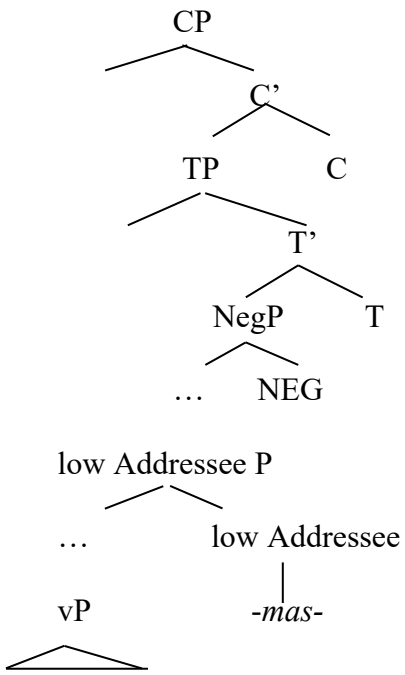
5.2. The position of *-mas-*

The allocutive ϕ-feature raising analysis, which roughly follows one of Yamada's (2019a) proposals that he ultimately does not adopt, compensates for a discrepancy between form and function. The function of the allocutive ϕ-feature is to be part of a system that marks the entire expression as being in the formal register of speech. This function would require the allocutive ϕ-feature to be at the top of the expression, which is what we see in other languages with an allocutive ϕ-feature — e.g., Korean, Tamil, and Thai. Yet the form that the allocutive construction takes in

Japanese places *-mas-*, the source of the allocutive ϕ-feature, lower in structure — lower than T, in fact lower than NEG. Why is there this discrepancy in Japanese? According to Yamada (2019a), *-mas-* began not as allocutive marking, but as object honorification. As such, we would expect it to occur in the vP region so that it can agree with the internal argument. Its function began to shift to today's allocutive system some 150 years ago, yet the form did not shift, perhaps because the Japanese morphological system could not accommodate the *-mas-* form occurring at the end of the sentence after tense and, in fact, after C. As a result, *-mas-* stayed in its original position of object honorification, while the allocutive ϕ-feature, which it took on once it shifted its function to the addressee-oriented allocutive system, compensated for the discrepancy in position by undergoing raising to C and into the SAP.

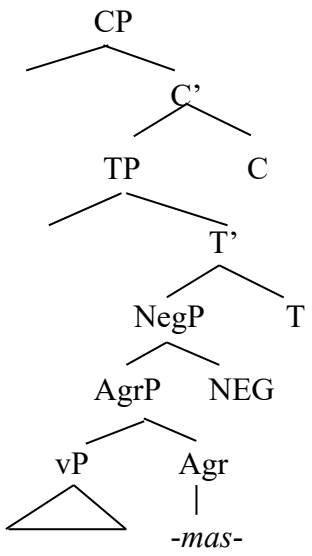
We now turn to the second question we posed at the beginning of this section, namely, where is *-mas-*? Given its historical origin as object honorification, we would expect it to be in the vicinity of vP. I am going to adopt a modified version of Yamada's earlier proposal (2017, 2018, 2019b) and identify its location as being above the basic vP.

(50)



Unlike Yamada, who proposes this special projection, “low addressee projection” above the vP (and AspP) (see Yamada 2019a: 230-231 for description), which he ultimately rejects for a sprouting analysis, I will simply assume that -*mas*- occurs in an agreement projection above the vP, akin to the agreement projection of the early minimalist-program proposals (e.g., Mahajan 1990, Chomsky 1993).

(51)



This is not only to capture the discrepancy between form and function in Japanese, but also to capture the agreement pattern we see in Basque.

We can see below that *-mas-* occurs above the subject honorification (SH) marker (Yamada 2019a).

(52) Tanaka-sensei-wa kyonen ronbun-o o-kaki-ni nari-mas-en desita.
Prof.Tanaka-TOP last.year article-ACC SH-write NI SH-MAS-NEG PST
'Professor Tanaka did not write$_{SH/ALOC}$ an article last year.'

SH targets the subject of the sentence, whose referent must be socially superior to the speaker (Harada 1976). As shown, SH consists of a disjoint morphological system that prefixes *o-* to the verbal stem, followed by the particle *ni* and the verbal copula form *nar-* (see, for example, Harada 1976, Shibatani 1990, Kikuchi 1997, Yamada 2019a). In addition, the *-mas-* indicates that the speaker deems the addressee of this sentence to be socially superior to the speaker. The addressee and the subject need not refer to the same entity; the speaker of (52) above may be speaking to a colleague of

Professor Tanaka, perhaps Professor Suzuki, showing his/her respect to Professor Tanaka by means of SH, and to the addressee, Professor Suzuki, by means of the allocutive form. Without the allocutive form, the sentence would be in the colloquial register of speech.

(53) Tanaka-sensei-wa kyonen ronbun-o o-kaki-ni nar-anakat-ta.
Prof.Tanaka-TOP last.year article-ACC SH-write NI SH-NEG-PST
'Professor Tanaka did not write$_{SH}$ an article last year.'

This expression indicates the speaker's respect towards the subject, Professor Tanaka, and the expression itself is directed to an addressee who the speaker deems to be at least equal in social status, such as a close friend, so that the allocutive form is not included, rendering the expression to be in the colloquial register of speech.

To pinpoint the location of the allocutive -*mas*-, we need to identify precisely the location of the SH. Whatever the location of SH is, -*mas*- would be structurally above it. As far as I know, Kishimoto (2012) is the only work that makes a specific proposal about the location of SH. According to him, SH occurs in a projection he calls Honorific Phrase (HP), immediately above vP.[9]

(54) $[_{TP}$ […$[_{HP}$ $[_{vP}$ DP $[_{VP}$ …] (V) v] H]-ni nar] u]
+honorific +honorific

Contrary to Kishimoto, I have argued (Miyagawa 2012b), based on nominalization (Kishimoto 2006), that the SH is inside the vP, and in fact, it is actually the spell-out of small v. Thus, the actual structure of SH is as follows,

following the general structure that Kishimoto (2012) gave, but embedding his honorific structure directly under v.

(55) $[_{TP}\ [_{vP}$ DP $[\ [\ [_{VP} \ldots]$ (V) H …] v] u]
+honorific +honorific

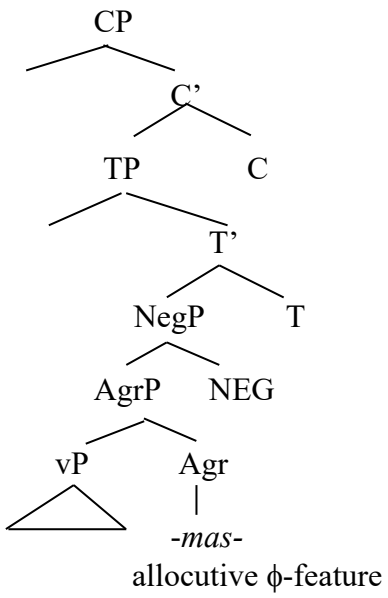
The verb (V) with the honorific prefix *o*- (H) raises into the v, which is spelled out by the entire SH morphology *…ni nar*-.

Now we are ready to consider the location of the allocutive -*mas*-. We saw from earlier that -*mas*- occurs higher than SH but lower than negation; the example is repeated below.

(56) Tanaka-sensei-wa kyonen ronbun-o o-kaki-ni nari-*mas*-en desita.
Prof.Tanaka-TOP last.year article-ACC SH-write NI SH-MAS-NEG PST
'Professor Tanaka did not write$_{SH/ALOC}$ an article last year.'

What I suggest, as I noted earlier, is that -*mas*- occurs right above vP, thus above SH, in the position that Yamada (2019a) suggests. Instead of marking the projection as Honorific, as he does, I will simply mark it as an agreement projection, following the early minimalist-program structure (Mahajan 1990, Chomsky 1993).

(57)



An advantage to viewing the original location of the allocutive ϕ-feature as being in an Agreement projection that immediately c-commands the vP is that we can capture a restriction we saw in Basque, in which the allocutive agreement, which is a 2nd person agreement, is prohibited from occurring if there is already a 2nd person argument in the sentence — subject, object, indirect object (Basque agrees with all three). Thus, as noted earlier, in the following, the allocutive cannot occur because there is a 2nd person argument.

(58) a. (Nik **hi**) ikusi **h**aut.

(1.SG.ERG **2.SG.COL.ABS**) see.PRF AUX-**2.SG.COL.ABS**-1.SG.ERG

'I saw you.'

b. (**Zuek** ni) ikusi nai**zue**.

(**2.P.ERG** 1.SG.ABS) see.PRF AUX-1.SG.ABS-**2.P.ERG**

'You saw me.' (Miyagawa 2012a, 2017)

In Basque, the allocutive agreement, which is simply agreement that competes with the regular sentential agreement and which is located above the vP as noted in (58), would first probe down into the vP. If it finds a 2nd person argument, it gets its valuation from the ϕ-feature of that argument and nothing more happens. If, however, there is no 2nd person argument, the ϕ-feature raises head-to-head to C, and on into the SAP, where it is interpreted expression-wide as allocutive agreement, getting its valuation from the Addressee in the SAP. In Japanese, there is no sentential ϕ-feature agreement, so the allocutive ϕ-feature automatically raises head-to-head into the SAP.

6. The other politeness marking and allocutive agreement

The postulation of the allocutive ϕ-feature in Japanese stems from two considerations. One is theoretical: Strong Uniformity (Miyagawa 2010, 2017), which states that all languages share the same set of grammatical features, predicts that some form of ϕ-feature agreement should exist in Japanese, despite the standard characterization of the language as being agreementless. The other is empirical: the politeness marker -*mas*- occurs in the "wrong place" in that it is pronounced low in the structure, apparently just above vP, yet its function is to mark the entire utterance as being in the formal registry of speech. The allocutive ϕ-feature, which originates in -*mas*- low in the structure, raises by head movement all the way to the SAP, where it gets its valuation from the addressee representation in the SAP. We saw evidence for head movement in which the allocutive ϕ-feature stops at every head along the way and, in most cases, the head to which it adjoins takes on a special form that identifies the presence of the allocutive ϕ-feature.

In this section I will examine -*des*-, which is the formal counterpart of the informal copula *da*; it adjoins to a nominal to mark the utterance as being in the formal register.

(59) a. Hanako-wa sensee-*des*-u.
Hanako-TOP teacher-DES-PRS
'Hanako is$_{\text{FORMAL}}$ a teacher.'
b. Hanako-wa sensee-*da*.
Hanako-TOP teacher-DA
'Hanako is$_{\text{COLLOQUIAL}}$ a teacher.'

As shown in (59a) above, just as we saw for –*mas*-, -*des*- here occurs low in the structure, below tense. Under negation, -*des*- actually disappears, and is replaced by the verbal form for existence followed by negation.

(60) Hanako-wa sensee-dewa-*ari*-*mas*-en.
Hanako-TOP teacher-DEWA-EXIST-MAS
'Hanako is not$_{\text{FORMAL}}$ a teacher.'

Given that –*des*- occurs low in the structure, we predict that the allocutive ϕ-feature originates with –*des*- and raises by head movement to the highest point in the structure. We would thus predict that the allocutive ϕ-feature can license the question particle *ka*, just as we saw for –*mas*-. This is shown below.

(61) a. Dare-ga sensee-des-u ka?

Who-NOM teacher-DES-PRS Q

'Who is a teacher?'

b. *Dare-ga sensee da ka?

Who-NOM teacher DA Q

'Who is a teacher?'

As shown, without the politeness marking *–des-*, the *wh*-question is completely ungrammatical. The ungrammatical question form may be turned into a grammatical form if *ka* is licensed by a main verb, just as we saw earlier.

(62) Taroo-wa [dare-ga sensee da ka] sittei-ru.

Taro-TOP who-NOM teacher DA Q know-PRS

'Taro knows who is the teacher.'

Although we cannot observe converting negation to *–en* with *–des-*, since the negative form uses the verbal paradigm, as we saw above, we can see the effect of head raising of the allocutive ϕ-feature in the following example.

(63) Hanako-wa sensee-des-i-ta desyoo.

Hanako-TOP teacher-DES-PST INTERJECTION

'Hanako was$_{\text{FORMAL}}$ probably a teacher.'

Desita is the past form of the polite copula; we can see that the allocutive ϕ-feature raises above the TP and marks the interjection *desyoo* as polite (the colloquial

counterpart is *daroo*). As we saw earlier, this interjection occurs as the head of the Modal Phrase above the TP (Koizumi 1991, 1993).

6.1. Second type of *-des-*

Along with the polite form of the copula that we just observed, there is another *-des-* that occurs quite high in the structure — in fact it is the one politeness marker that appears as close to being in the "right" position as possible in Japanese, although still not quite high enough.[10] It is the *-des-* that occur with adjectives.

(64) a. Ano piza-wa taka-i *desu*.
that pizza-TOP expensive-PRS DESU
'That pizza is expensive.'

b. Ano piza-wa taka-kat-ta *desu*.
that pizza-TOP expensive-PST DESU
'That pizza was expensive.'

Adjectives in Japanese inflect for tense (*-i* 'present', *(-kat)-ta* 'past') and the politeness marker follows tense. We can see this by the fact that this *desu* never inflects for tense.

(65) *Ano piza-wa taka-(i) desita.
that pizza-TOP expensive DESITA
'That pizza was expensive.'

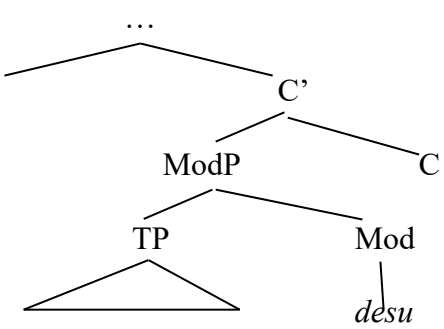
The fact that the *desu* that accompanies adjectives always follows tense, and never inflects for tense itself, indicates that it occurs higher than TP, apparently in Koizumi's (1991, 1993) ModP, below C. We can see this by the fact that it precedes the Q-marker.

(66) Ano piza-wa taka-kat-ta *desu* ka?

that pizza-TOP expensive-PST DESU Q

'Was that pizza expensive?'

(67)



This *desu* only occurs with adjectives, thus it needs to be designated as such; it cannot occur with verbs.

(68) *Taroo-wa ne-ta desu.

Taro-TOP sleep-PST DESU

'Taro went to bed.'

Although this *desu* does not occur with verbs, it is possible to use this modal *desu* with the negative form of the verb, since the negative form that negates a verb is adjectival in form.

(69) Taroo-wa ne-na-i desu.
Taro-TOP sleep-NEG-PST DESU
'Taro won't go to bed.'

This negation form is synonymous with the -*mas*- negation form.

(70) Taroo-wa ne-mas-en.
Taro-TOP sleep-MAS-NEG
'Taro won't go to bed.'

While both forms of negation exist in modern Japanese, apparently the younger generation is showing a preference for the *desu* form over the -*masen*- negation (Sachiko Kiyama, personal communication).

This "modal" *desu* shows the familiar property of licensing the Q-marker *ka*.

(71) a. Nani-ga taka-i desu ka?

what-NOM expensive-PRS DESU Q

'What's expensive?'

b. *Nani-ga taka-i ka?

what-NOM expensive-PRS Q

'What's expensive?'

c. Hanako-wa [nani-ga taka-i ka] sittei-ru.

Hanako-TOP what-NOM expensive-PRS Q know-PRS

'Hanako knows what's expensive.'

As shown, while *desu* licenses *ka*, without *desu*, the *wh*-question is ungrammatical unless it is embedded under a verb that selects *ka* (e.g., "know").

The fact that this "modal" *desu* occurs at the Modal head places it in the same position as the interjection *desyoo* 'probably'. However, there is one important difference. While the interjection *desyoo* does not itself carry the allocutive ϕ-feature to begin with, the "modal" *desu* does. We see this by the fact that while *desyoo* occurs with the politeness form *desita*, the "modal" *desu* does not.

(72) a. Taroo-wa sensee desita desyoo.

Taro-TOP teacher DESITA INTERJECTION

'Taro probably was a teacher.'

b. *Taroo-wa sensee desita desu.

Taro-TOP teacher DESITA DESU

'Taro was a teacher.'

The reason why *desyoo* may occur with *desita* is that *desita* is the source of the allocutive ϕ-feature that raises to the Mod head, where *desyoo* occurs, rendering it into the polite form. Otherwise, it would take on the colloquial interjection form *daroo*. In the case of the "modal" *desu*, it itself brings the allocutive ϕ-feature, thus for it to co-occur with *desita* would redundantly put two allocutive ϕ-features into the derivation within the same structure.

7. An interlude: Magahi allocutive agreement

We saw that the -*mas*- politeness marking is a form of allocutive agreement that occurs in the root environments as defined by Emonds (1970). The reason for this "root" distribution is that -*mas*- is dependent on the SAP to furnish its antecedent – the second person pronoun – and the SAP's distribution is what Emonds's root environments entail. This is because Emonds's root turned out to define where the illocutionary force associated with an expression may occur, and the SAP is the locus of illocutionary force. In contrast to this -*mas*-, we will later see that there is a form of -*mas*- that can occur more freely in embedded contexts beyond the root environments. However, before looking at this form of -*mas*-, we will look at allocutive agreement in Magahi, which, unlike Japanese and Basque, is relatively freely available in embedded contexts, thus it is not a main clause phenomenon. The analysis of Magahi allocutive agreement points toward an account of the -*mas*- that can occur in embedded clauses beyond the root environments. As we will see, the much freer distribution of the allocutive agreement in Magahi is related to the fact that the allocutive agreement is licensed by an element lower in the structure, in the C-system, and not at the SAP. In this way, the Magahi case parallels what we saw with the

speaker representation for tense interpretation that we discussed in Chapter 1 (Giorgi 2010).

Magahi, an Eastern Indo-Aryan language spoken in the state of Bihar in India, has an allocutive system with a three-way distinction along with a neutral register (Alok, to appear; Alok and Baker 2018; examples and analysis are taken from these two works).[11]

(73) a. Ham jaa-it h-i. (Addressee unspecified)
I go-PROG be-1.SG
'I am going.'

b. Ham jaa-it h-i-au. (Addressee nonhonorific; e.g., a peer)
I go-PROG be-1.SG-NH.ALOC
'I am going.'

c. Ham jaa-it h-i-o. (Addressee honorific; e.g., a parent, grandparent)
I go-PROG be-1.SG-H.ALOC
'I am going.'

d. Ham jaa-it h-i-ain. (Addr. high honorific; e.g., a king, priest, professor)
I go-PROG be-1.SG-HH.ALOC
'I am going.'

In (73a) the auxiliary verb has no marking for honorific, thus this sentence can be used to address any type of addressee; in (73b) the non-honorific marking specifies that the addressee is a peer to the speaker; in (73c) the honorific marking indicates that the addressee is someone that the speaker honors; and in (73d) the high honorific

marking specifies that the addressee holds a high position in society in general, such as a professor or a queen.

We saw that in Souletin Basque, the allocutive agreement competes with second person agreement within the clause, so that if there is a second-person pronoun in an argument position, there is second-person agreement with that argument and the allocutive agreement is excluded. This is evidence that the allocutive agreement is second person agreement. Alok (to appear) provides data that show a similar pattern in Magahi. Allocutive agreement in Magahi may occur with first and third-person subjects (there is an additional honorific marking preceding the allocutive that specifies the subject's relation to the speaker).

(74) Ham dauR-l-i-ain.

I ran-PRF-1-NHS.HHA

'I ran.' (to a teacher; the subject is NHS because it is 'I')

(75) PanDii-Jii dauR-la-thi(n).

priest-HH run-PRF-HHS.HHA

'The priest ran. (to a teacher; the subject is HHS because it is 'priest')

While the allocutive is possible with first and third-person subjects, it is prohibited with a second-person subject.

(76) a. Tu dauR-l-eN-(*au).

you.NH run-PRF-2.NHS-(NHA)

'You (friend) ran.'

b. Apne daubR-l-thi(n)-(*ain).

you.HH run-PRF-2.HHS-(HHA)

'You (a professor) ran.'

We can see that the second-person subject itself is marked for register (friend, professor) and the subject honorific marking also shows up, demonstrating that the honorific meaning per se is not excluded with second-person subjects. Yet, in these examples, the allocutive agreement is excluded. This indicates that the allocutive agreement is second person and it competes with the second person honorification for the subject, in turn showing, as we saw in Souletin, that the allocutive agreement is second person.

The following examples show that the Magahi allocutive agreement is free to occur in a wide range of embedded contexts.

(77) a. Santeeaa sochk-au ki Banteeaa bhag ge-l-au.

Santee thought-NH.ALOC that Bantee run go-PRF-NH.ALOC

'Santee thought that Bantee went to run.' (said to a peer)

b. Santeeaa sochk-o ki Banteeaa bhag ge-l-o.

Santee thought-H.ALOC that Bantee run go-PRF-H.ALOC

'Santee thought that Bantee went to run.' (said to a parent)

c. Santeeaa sochk-ain ki Banteeaa bhag gel-ain.

Santee thought-HH.ALOC that Bantee run go-PRF-HH.ALOC

'Santee thought that Bantee went to run.' (said to a teacher)

In these three examples, the allocutive agreement on the matrix and the embedded verbs are the same, in each case signaling the kind of addressee the sentence is directed at. It is also possible for the matrix and embedded allocutive agreements to be different, as shown below.

(78) a. Santeeaa Banteeaa-ke kahk-ain ki Ram-ke

Santee Bantee-DAT told-HH.ALOC that Ram-DAT

Sita-se baat kareke chah-au.

Sita-INS talk do.INF should-NH.ALOC

'Santee told Bantee that Ram should talk to Sita (said to a teacher).'

b. Santeeaa profesar saaheb-ke kah-au ki Ram Sita-ke

Santee professor HH-DAT told-NH.ALOC that Ram Sita-ACC

dekhl-ain ha-l.

saw-HH.ALOC be-PRF

'Santee told the professor that Ram saw Sita.' (said to a peer)

In (78a) the HH marking on the matrix verb ‘tell’ indicates that this sentence is directed to someone who holds a high status (e.g., a teacher), while the NH marking on the embedded verb is directed to the referent of the matrix goal phrase ‘Bantee,’ indicating that Bantee is a peer to the speaker. In (78b) the NH marking on the matrix verb specifies that the addressee of this sentence is a peer to the speaker, while the HH marking on the embedded verb shows high honor paid to the referent of the matrix goal ‘professor.’

The matrix allocutive agreement, which “agrees” with the addressee, presumably agrees with a second-person pronoun somewhere high in the structure, the actual position of which we will see below. But what about the embedded allocutive agreement that is directed at the matrix goal DP, which in these examples is a third person DP (‘Bantea’, ‘professor’)? We have seen evidence that the allocutive agreement is second person, thus the connection between the embedded allocutive agreement and the third person DP in the matrix goal position cannot be a direct one. It must somehow be mediated in a way to allow the allocutive, which is second person, to link to a third person DP. Alok and Baker (2018) argue that this mediation is accomplished in parallel with another property of Magahi, to which we turn below.

Magahi allows indexical shift, which is famliar from works on other languages with this property (Schlenker 1999, 2003, Anand and Nevins 2004, Anand 2006, Shklovsky and Sudo 2014, Deal 2017, 2018).

(79) a. John socha h-ai ki ham tej h-i.

John think be-3.NH.SG that I smart be-1.SG

'John thinks that I (=John, or =speaker) am smart.'

b. Santeeaa Banteeaa-ke kah-kai ki ham toraa dekhl-i ha-l.

Santee Bantee-DAT told-3.NH.SG that I you.ACC saw-1.SG be-PRF

'Santee told Bantee that I (=Santee or =speaker) saw you (=Bantee or =addressee).'

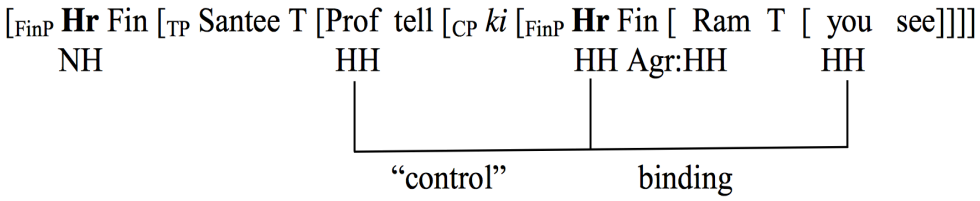
In (79a), the first-person pronoun 'I' of the embedded subject may refer to the speaker of the overall sentence (the unshifted reading) or to the matrix subject 'John' (the shifted reading). In (79b), along with the embedded subject 'I' (which is ambiguous between unshifted and shifted readings), the embedded object 'you' can refer to the addressee of the sentence (the unshifted reading) or the goal of the matrix verb 'tell', 'Bantee' (the shifted reading). If one is unshifted, the other must also be unshifted; and if one is shifted, the other must also be shifted. Alok and Baker (2018) provide a number of arguments, similar to those given by Schlenker (1999, 2003), Anand (2006), and others, to show that the shifted interpretation is not due to direct quote; see their article.

We face the same issue with shifted indexicals as we did with allocutive agreement, in that first- and second-person pronouns are linked to a third-person antecedent. With shifted indexicals, we have a way to deal with this issue, namely, the so-called monstrous operator that can mediate this kind of relationship (Schlenker 1999, 2003; also Anand and Nevins 2004, Anand 2006, etc.).

(80) ... John$_i$... OP$_i$ ... 'I$_i$' ...

The question here is: What is the nature of the monstrous operator, and where is it located? Alok and Baker (2018) argue that the same operator responsible for indexical shift is also responsible for allocutive agreement, including the embedded allocutive agreement, as we observed earlier when it targets the matrix goal DP, which may be third person. They give this operator the name Hr (Hearer), and given that allocutive agreement — in fact all agreement in Magahi — occurs in tensed clauses, they suggest that the Hr operator occurs above (tensed) TP, "FinP" in Cartography. The following is the structure for the shifted indexical in which the embedded 'you' refers to the matrix goal DP 'professor'.

(81) For the sentence "Santee told the professor that Ram saw you." (Alok and Baker 2018)



The relation of the matrix DP ("Prof") and the Hr is one of control since the antecedent is a common DP, while the relation of Hr to the lower "you" is binding, because the antecedent is an operator.

The reason for unifying allocutive agreement and shifted indexicals into one analysis involving Hr (and also Sp(eaker), as we will see later) is that the two interact directly. In the following examples, the embedded second person can only have the shifted indexical reference.

(82) a. Santeeaa Banteeaa-ke kahk-ain ki Ram toraa dekhl-i-au ha-l.

Santee Bantee-DAT told-HH.ALOC that Ram you.ACC saw-1.S-NH.ALOC be-PRF

'Santee told Bantee that Ram saw you (=Bantee, not hearer).'

(said to a teacher)

b. Santeeaa profesar saaheb-ke kah-au ki Ram apne-ke

Santee professor HH-DAT told-NH.ALOC that Ram you.HH-ACC

dekhl-i-ain ha-l.

saw-1.S-HH.AL be-PRF

'Santee told the professor that Ram saw you (=the professor, not hearer).'

(to a peer)

In both of these examples, the allocutive agreements on the matrix and embedded verbs are distinct: in (82a) the matrix allocutive is HH, which directs the sentence to a teacher, while the embedded allocutive agreement is NH, which directs the embedded clause to a "peer," "Bantee" of the matrix goal DP. In (82b) the matrix allocutive is NH, thus directing the sentence to a peer, while the allocutive in the embedded clause is HH, directing the embedded clause to 'professor,' in the matrix goal position. It is striking that, in these examples, the embedded object second-person pronoun, which in principle can take either the unshifted or the shifted reading, may only take the shifted reading, being co-referential with the matrix goal DP instead of the overall addressee of the sentence. Alok and Baker (2018) explain that this is because both the allocutive agreement and shifted indexical depend on the Hr operator. If the Hr operator connects the lower allocutive agreement to the matrix goal DP, the embedded (second person) pronoun must also shift and be co-referential with this matrix goal DP.

(83) [... told DP_i... [Hr_i [...'you_i'... allocutive $agreement_i$]]]

Finally, we saw earlier that the indexical shift may shift not only the embedded object 'you,' but also the embedded subject 'I'. When we apply allocutive agreement to the embedded clause that targets the matrix goal DP, both embedded pronouns obligatorily take on the shifted reading.

(84) a. Santeeaa Banteeaa-ke kahk-ain ki ham toraa
Santee Bantee-DAT told-HH.ALOC that I you.ACC
dekhl-i-au ha-l.
saw-1.SG-NH.ALOC be-PRF
'Santee told Bantee that I (=Santee) saw you (=Bantee).' (said to a teacher)

b. Santeeaa profesar saaheb-ke kah-au ki ham apne-ke
Santee professor HH-DAT told-NH.ALOC that I you.HH-ACC
dekhl-i-ain hal.
saw-1.S-HH.ALOC be
'Santee told the professor that I (=Santee) saw you (=the professor). (to a peer)

In (84a) the matrix allocutive, HH, directs the sentence to a teacher, while the embedded allocutive, NH, directs the embedded clause to the matrix goal DP 'Banteeaa,' whose referent is a peer to the speaker. As a result, the embedded subject 'I' can only have the shifted reading of being co-referential with the matrix subject 'Santee'. The embedded allocutive also forces the embedded object 'you' to

exclusively take on the shifted reading. In (84b), the matrix allocutive, NH, directs the sentence to a peer, while the embedded allocutive, HH, directs the embedded clause to the matrix goal DP 'professor'. As a result, the embedded subject 'I' can only have the shifted reading of being co-referential with the matrix subject 'Santee'.

We saw that the first person pronoun may refer to the speaker of the overall expression or to the subject of the matrix clause. The fact that 'I' can alternate in this way gives evidence that, along with Hr, there is the operator Sp(eaker), in the same position that allows the shifted interpretation, thus replicating the SAP but within the CP structure.

(85) [Santee$_i$ told Bantee$_j$... [spk$_i$ Hr$_j$ [... 'I$_i$' ... 'you$_i$' ... allocutive agreement$_i$]]]

One question that arises is: Why must the embedded 'I' and 'you' necessarily shift together, instead of one taking on the shifted reading and the other the unshifted reading? This effect shows up even in the absence of the allocutive agreement, as we saw earlier in (84b). The fact that both 'I' and 'you' must shift together is a reflection of the Shift Together effect of Anand and Nevins (2004) and Anand (2006) that has been widely observed in indexical-shift languages. An effect similar to Shift Together of pronouns is observed even if there is just one pronoun in the environment of an allocutive agreement that must be "together" with the pronoun.

(86) John socha h-au ki ham tej h-i-au.

John think be-NH.ALOC that I smart be-1.SG-NH.ALOC

'John thinks that I (=speaker, not =John) am smart.' (said to a peer)

In principle, the lower 'I' could either have the unshifted or the shifted reading. Because the NH allocutive marker on the embedded as well as the matrix clause indicates that both allocutive agreements target the overall speaker of this sentence, the lower allocutive agreement is bound to the spk at the left edge of its clause that is co-indexed with the matrix spk. As a result, the lower 'I' must necessarily also refer to the overall speaker of the sentence. In this way, both the embedded 'I' and the embedded allocutive agreement are unshifted.

(87) [spk_i ... [spk_i ...['I_i' ... NH_i]]]

In the examples we saw earlier in (84b), in which the 'I' and 'you' in the embedded clause are both shifted, and the allocutive agreement in the embedded clause targets the matrix goal phrase, we see that all three together — 'I', 'you', and the allocutive agreement — have the shifted reading.

The key point about Magahi and the occurrence of allocutive agreement freely occurring in a variety of embedded contexts is that what licenses the embedded allocutive agreement is not the SAP. Rather, it is licensed by the operator that corresponds to the speaker/addressee, and this operator occurs in the C domain, not higher in the SAP. This is similar to the representation of the speaker needed for double access tense discussed in Giorgi (2010) that we saw in Chapter 1. Because the embedded allocutive agreement in Magahi does not depend on the occurrence of the SAP, the agreement may occur freely across embedded structures beyond Emonds's root contexts. Below, we return to Japanese and to a second kind of *-mas-,* which, unlike the one we have been looking at, is free to occur in embedded contexts beyond

Emonds's root contexts. As we will see, this second *-mas-* is licensed by means other than the SAP, thus similar to what we just observed for Magahi.

8. Politeness marking in embedded, non-root contexts

I presented arguments based on Miyagawa (2012a, 2017) that the distribution of the allocutive *-mas-* matches Emonds's (1970) original conception of the root, repeated here in (88):

(88) *Root*

A root will mean either the highest S in a tree, an S immediately dominated by the highest S, or the reported S in direct discourse. (Emonds 1970: 6)

(89) a. *Highest S*

Hanako-wa ki-mas-u.

Hanako-TOP come-MAS-PRS

'Hanako will come.'

b. *S dominated by highest S*

Hanako-ga ki-mas-u kara, ie-ni ite.

Hanako-NOM come-MAS-PRS because home-at be

'Because Hanako will come, be at home.'

c. *Reported S in direct discourse*

Taroo-wa Hanako-ga ki-mas-u to itta.

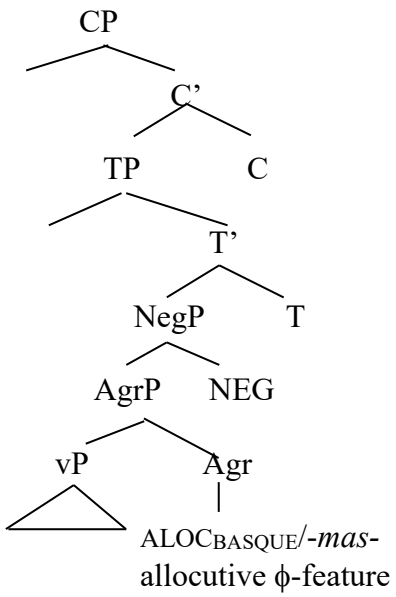
Taro-TOP Hanako-NOM come-MAS-PRS C said

'Taro said that Hanako will come.'

An important point about the (89b) and (89c) examples (I changed (89b) from earlier) is that in neither case does the main clause have the politeness marking, yet the sentence is grammatical, a point originally noted by Harada (1976) with respect to examples such as (89c). I argued that the reason why the allocutive agreement fits exactly the description of the root given by Emonds is that this description was really about the distribution of the SAP. The SAP may occur in the main clause, and it can also occur in subordinate structures that fit the "S immediately dominated by the highest S" or "reported S in direct discourse." In this section, I will consider what appear to be counterexamples to this idea that Emonds's notion of root defines the distribution of the allocutive *-mas-* by looking at occurrences of *-mas-* in embedded structures other than the environments defined by Emonds's root. These examples were first noted by Harada (1976) and expanded upon with an interesting analysis by Uchibori (2007, 2008), which I will adopt with some refinement. More recently, Yamada (2019a) rediscovers some of Uchibori's observations and proposes an analysis that we will critically examine.

As we explore this new set of data, it becomes crucial that we posit, as I did earlier, that the allocutive ϕ-feature begins in a position immediately above vP; in Basque, if this ϕ-feature finds a 2nd person argument within the vP, the subject, object, or indirect object, it receives its valuation at its original position.

(90)



If, however, there is no 2nd person argument, the allocutive ϕ-feature raises head-to-head into the SAP. In Japanese, this raising to the SAP occurs automatically since there is no ϕ-feature for arguments. In either case, the overt form that introduces the allocutive ϕ-feature in Basque and Japanese is pronounced low, in the position noted above. We saw this for Japanese, in which *-mas-* occurs below negation.

8.1. *-koto* and *-yooni* complementizers

Harada (1976: 556) pointed out that *-mas-* can occur in "nondiscourse complements" which are headed by the "factive" complementizer *-koto* (see also Nonaka and Yamamoto 1985). The following is taken from Uchibori (2008) with her judgment.

(91) (?) Hitobito-wa [ame-ga huri-mas-u koto]-o negai-masi-ta.

people-TOP rain-NOM fall-MAS-PRS *koto*-ACC hope-MAS-PST

'People hoped that it would rain.'

Although Uchibori marks this as (?), I believe that for many speakers it is acceptable without any trace of awkwardness. A point that Uchibori makes that differentiates this kind of embedded *-mas-* from the root *-mas-* is that, as seen in this example, the embedded *-mas-* must be accompanied by *-mas-* in the matrix clause. Without the matrix clause *-mas-* the sentence becomes unacceptable, a point also noted by Yamada (2019a).

(92) *Hitobito-wa [ame-ga huri-mas-u koto]-o negat-ta.
people-TOP rain-NOM fall-MAS-PRS *koto*-ACC hope-PST
'People hoped that it would rain.'

Uchibori (2007, 2008) suggests that this requirement for a double-occurrence of *-mas-* reflects a licensing condition whereby the Addressee element in the matrix clause, which she labels as a Modal (MOD), licenses both occurrences of *-mas-* by local and long-distance licensing.

(93) [[$_{CP}$ [$_{TP}$ … [$_{CP}$ [$_{TP}$ …*-mas-* …] *koto/yooni*] … *-mas-*]] MOD$_{ADDRESSEE}$]

On the other hand, Yamada (2019a: 376) states that an example such as (92) is stylistically inconsistent because it "sounds as if s/he has changed their speech level, betraying the audience's expectation" (see also Tagashira 1973, Nonaka and Yamamoto 1985). I will argue that the chain of licensing that Uchibori suggests is the correct account of the double-occurrence of *-mas-*, although I will diverge from her analysis in the way that the long-distance *-mas-* is licensed. Following what we

observed in Magahi, I will propose that even this embedded -*mas*- is licensed locally. Although there is no SAP in the embedded structure, I will show there is an element in the subordinate C-system that licenses the lower allocutive agreement, paralleling the indexical shift operator in Magahi.

Along with -*koto*, Uchibori notes that the complementizer -*yooni* allows embedded -*mas*- as long as there is the additional matrix -*mas*- (I have changed her example somewhat).

(94) Isya-wa kanzya-san$_i$-ni [e$_i$ kusuri-o nomi-mas-u yooni] motome-masi-ta.
doctor-TOP patient-DAT medicine-ACC take-MAS-PRS C ask-MAS-PST
'The doctor asked the patient to take medicine.'

As with the embedding of -*mas*- under *koto*, if there is no matrix -*mas*-, the sentence is unacceptable.

(95) *Isya-wa kanzya-san$_i$-ni [e$_i$ kusuri-o nomi-mas-u yooni] motome –ta.
Doctor-TOP patient-DAT medicine-ACC take-MAS-PRS C ask-PST
'The doctor asked the patient to take medicine.'

In sharp contrast to *koto* and *yooni*, the complementizer *to* does not allow embedded –*mas*-, even in the presence of matrix -*mas*-, except with direct discourse, a point that Yamada (2019a) also notices. The following is from Uchibori (2008), her example (4).

(96) *Taroo-wa [Hanako-ga kinoo sono hon-o kai-masi-ta to]
Taro-TOP Hanako-NOM yesterday that book-ACC buy-MAS-PST C
omoi-masi-ta
think-MAS-PST
'Taro thought that Hanako bought that book yesterday.'

Why do the complementizers -*koto* and -*yooni*, but not *to*, allow the embedded -*mas*-? And why is there a requirement that there must also be -*mas*- in the matrix clause? This is a requirement that we do not see for -*mas*- in root environments. To answer the question of why -*koto* and -*yooni* but not *to,* Uchibori (2007, 2008) makes the interesting observation that -*koto* and -*yooni*, but not *to*, can turn a matrix declarative sentence into an imperative (Yamada 2019a also notices this for -*koto*).

(97) a. Sono kusuri-o maisyoku-go nom-u-yooni.
that medicine-ACC each meal-after take-PRS-YOONI
'Take that medicine after each meal.'
b. Sono kusuri-o maisyoku-go nom-u-koto.
that medicine-ACC each meal-after take-PRS-KOTO
'Take that medicine after each meal.'

The complementizer *to* not only fails to have this imperative function, it simply cannot occur in the matrix clause at all.

(98) *Sono kusuri-o maisyoku-go nom-u-to.

that medicine-ACC each meal-after take-PRS-TO

'Take that medicine after each meal.'

To account for the imperative usage of *-koto* and *-yooni*, Uchibori (2007, 2008) suggests that there is an addressee modality element high in the structure, something resembling the SAP, and when one of these complementizers occurs in its presence, the complementizer does not block long-distance licensing of *-mas-*. I have added the feature ADDR (see Yamada 2019a) on the complementizers to demonstrate this.

(99) [[$_{CP}$ [$_{TP}$ …] *koto/yooni*] MOD$_{ADDRESSEE}$]
[ADDR]

For the embedded *-mas-*, as noted earlier, Uchibori suggests a chain of licensing (Uchibori 2007).

(100) [[$_{CP}$ [$_{TP}$ … [$_{CP}$ [$_{TP}$ …*-mas-* …] *koto/yooni*] … *-mas-*]] MOD$_{ADDRESSEE}$]

The long-distance portion of this licensing scheme is blocked if the complementizer is *to*.

(101) [[$_{CP}$ [$_{TP}$ … [$_{CP}$ [$_{TP}$ … *mas-* …] *to*] … *-mas-*]] MOD$_{ADDRESSEE}$]

I believe that the general insights by Uchibori are correct, namely, that the addressee representation occurs only in the matrix clause, as indicated in (100), and that the licensing of the embedded *-mas-* has to do with some form of long-distance licensing, again as indicated in (100). In contrast, Yamada (2019a) proposes that the embedded *-mas-* with *-koto* indicates that the SAP can occur relatively freely in embedded contexts. The reason why this embedded *-mas-* must be accompanied by *-mas-* in the matrix clause is that otherwise there is, as noted earlier, a conflict in style between the formal level of the embedded clause and the colloquial level of the matrix (Yamada 2019a: 376). However, there is evidence to the contrary. As originally noted by Harada (1976), in certain contexts, which we are calling the root contexts following Emonds (1970), the subordinate clause has *-mas-* but the matrix clause need not have it.

(102) a. *S dominated by highest S*

Hanako-ga	ki-mas-u	kara,	ie-ni	ite.
Hanako-NOM	come-MAS-PRS	because	home-at	be

'Because Hanako will come, be at home.'

b. *Reported S in direct discourse*

Taroo-wa	Hanako-ga	ki-mas-u	to	itta.
Taro-TOP	Hanako-NOM	come-MAS-PRS	C	said

'Taro said that Hanako will come.'

Therefore, a more compelling view is the one by Uchibori, where the embedded *-mas-* is somehow licensed long-distance by whatever is licensing the matrix *-mas-*. Note, by the way, that the reported S above need not be a pure reporting of the utterance.

(103) Taroo-wa kare-zisin-ga ki-mas-u to itta.

Taro-TOP he-himself-NOM come-MAS-PRS C said

'Taro said that he himself will come.'

Here, the subject of the subordinate clause is an anaphoric element that refers to the matrix subject, thus it is, at least in part, an indirect quote, not a direct one. See Kuno (1988) for an extensive study of quotation in Japanese (see also Shimamura 2018).

Although I will adopt the general approach in Uchibori (2007, 2008), there are still questions we must answer. First, looking at the double-licensing of -*mas*- in (100), it is not clear what the function of the -*koto*/-*yooni* complementizer is. As presented by Uchibori, MOD$_{\text{ADDRESSEE}}$ is responsible for the actual licensing of both occurrences of -*mas*-. The long-distance portion of this licensing is allowed if the complementizer is -*koto*/-*yooni* because these are complementizers that can take on addressee orientation in the domain of MOD$_{\text{ADDRESSEE}}$. We saw evidence of this with the imperative interpretation that these complementizers, but not *to*, make possible. But what precisely is the function of -*koto*/-*yooni* in the long-distance licensing in (100)? It is as if their addressee orientation somehow makes the lower CP domain transparent to long-distance licensing. However, this view runs into a problem with examples that Uchibori (2007) herself notes. If we put -*mas*- on the imperative forms with -*koto*/-*yooni*, the sentence becomes completely ungrammatical.

(104) a. *Sono kusuri-o maisyoku-go nomi-mas-u-koto.

that medicine-ACC each meal-after take-MAS-PRS-KOTO

'Take that medicine after each meal.'

b. *Sono kusuri-o maisyoku-go nomi-mas-u-yooni.

that medicine-ACC each meal-after take-MAS-PRS-YOONI

'Take that medicine after each meal.'

If *-koto*/*-yooni,* when rendered as addressee oriented, becomes transparent to licensing of *-mas-* by $\text{MOD}_{\text{ADDRESSEE}}$, we would expect these examples to be perfect, contrary to fact. Uchibori suggests that their ungrammaticality stems from the fact that it is stylistically inconsistent to utter an imperative and at the same time show politeness to the addressee. However, this explanation becomes questionable when we consider another example that Uchibori notes in which the *-koto*/*-yooni* imperative becomes fine with *-mas-* if we add subject honorification.

(105) Sono kusuri-o maisyoku-go o-nomi-ni-nari-mas-u-yooni.

that medicine-ACC each meal-after SH-take-NI-NAR-MAS-PRS-YOONI

'Take that medicine after each meal.'

According to Uchibori, by using subject honorification the speaker verbally recognizes the relationship with the addressee, which somehow allows the use of *-mas-*. Regardless of how we explain this, the fact remains that the *-mas-* form is fine in this sentence, so it is not clear why it is utterly ungrammatical in the examples in (104), as opposed to just being stylistically awkward. I will return to this issue below.

Another issue is that in Uchibori's system, the licensing of the simple, matrix -*mas*- is apparently by MOD$_{\text{ADDRESSEE}}$.

(106) [[$_{\text{CP}}$ [$_{\text{TP}}$ .... -*mas*- ...]]] MOD$_{\text{ADDRESSEE}}$]

On this analysis, it is not at all clear how one deals with the kind of example earlier that Yamada (2019a) noted.

(107) Hanako-wa ki-mas-en-desita.

Hanako-TOP come-NEG-PST

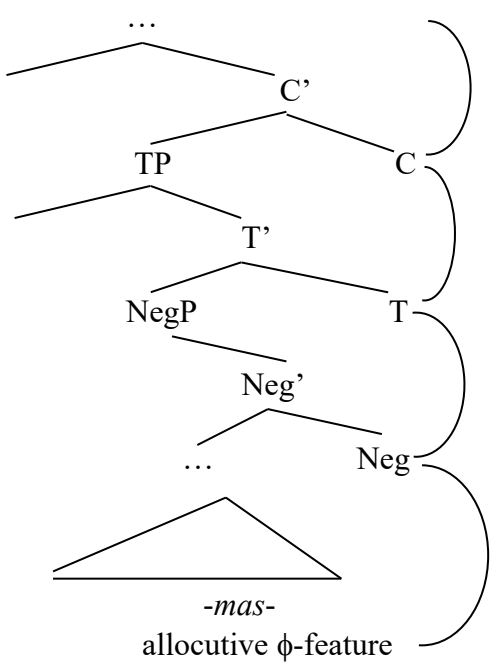
'Hanako didn't come.'

Since -*mas*- is licensed directly by MOD$_{\text{ADDRESSEE}}$ that occurs high in the structure, the elements that occur in-between, the special form of the negation and the formal form of the past tense, would not be accounted for.

8.2. Feature raising and embedded -*mas*-

What I will propose is that the kind of data Uchibori has observed are best accounted for by the raising of the allocutive ϕ-feature.

(108)



We saw that this analysis straightforwardly accounts for the unique form that negation takes with the allocutive -*mas*-, as well as the occurrence of the form *desita*, a formal form of the past tense.

Let us begin by considering the role of the two addressee-oriented complementizers that Uchibori identified, -*koto* and -*yooni*. I suggest that these complementizers have a much more direct role in licensing -*mas*- than in Uchibori's approach. In Uchibori's system, these complementizers, being addressee oriented, make the embedded CP transparent, while the MOD$_{\text{ADDRESSEE}}$ in the matrix clause is responsible for the actual licensing of the lower -*mas*-, this licensing being made possible by the transparency of the -*koto*/-*yooni* CP.

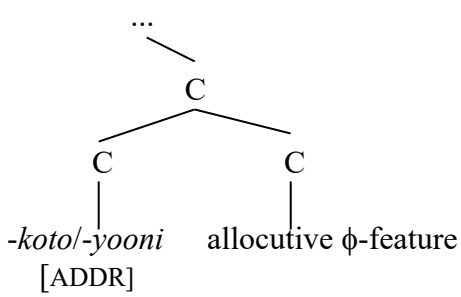
To make the direct licensing of the lower -*mas*- by -*koto*/-*yooni* possible, I begin with Uchibori's assumption that these complementizers may be addressee oriented. In fact, I suggest that these, but not the complementizer *to*, may be associated with the ADDR(ESSEE) feature. These complementizers are comparable to the operator in the C-system in Magahi for licensing indexical shift, and in the

speaker representation for the double-access reading for tense (Giorgi 2010). This feature must ultimately be checked by the addressee representation in the SAP of the matrix clause, as Uchibori observes, but in the derivation it is present and comes as an option when *-koto*/*-yooni* is merged into the structure.

(109) *-koto*, *-yooni*, *to*
[ADDR] [ADDR] [...]

As I argued in Miyagawa (1987), when the politeness element raises to C, it adjoins to C. In the current analysis, the element that is raised is the allocutive ϕ-feature.

(110)



At this point the allocutive ϕ-feature behaves like that of the allocutive ϕ-feature in Basque before raising: it looks to see if there is an appropriate goal, and if it finds a 2nd person argument within the vP, it agrees with it. In the structure above, the allocutive ϕ-feature finds the appropriate ADDR feature at C and enters into an agreement with it. In this way, the addressee oriented complementizer with its ADDR feature acts as a proxy for the matrix addressee in the SAP, without actually projecting the SAP in the embedded clause. If the complementizer is the non-addressee oriented *to*, the allocutive ϕ-feature fails to find an appropriate goal, and the derivation crashes. There is no option of the allocutive ϕ-feature moving higher than

the CP in which -*mas*- occurs because of locality, something we see in head raising in general except in highly exceptional cases involving clitic climbing (Rizzi 1978, 1982). Clitic climbing involves lower clauses that are infinitival (or less, Wurmbrand 2004). The allocutive ϕ-feature raises to a full, tensed CP, so the clitic-climbing structure does not hold, and the allocutive ϕ-feature must stop at the local C as shown above.

An important point to note is that the ADDR feature optionally associated with *koto/yooni* is not marked as being in the formal registry. This is why it can occur with the colloquial registry for imperatives that we saw above. But to license the allocutive ϕ-feature, the ADDR must be in the formal register; that is made possible by it being bound by the higher, formal Addressee in the matrix SAP. This is why the higher –*mas*- is needed.

One piece of evidence for the agreement analysis of the embedded -*mas*- just presented comes from examples I presented earlier from Uchibori's (2007, 2008) work. They are repeated below. First, recall that the two addressee oriented complementizers may occur in the matrix clause to form an imperative.

(111) a. Sono kusuri-o maisyoku-go nom-u-koto.
that medicine-ACC each meal-after take-PRS-KOTO
'Take that medicine after each meal.'

b. Sono kusuri-o maisyoku-go nom-u-yooni.
that medicine-ACC each meal-after take-PRS-YOONI
'Take that medicine after each meal.'

These become ungrammatical if one adds -*mas*-.

(112) a. *Sono kusuri-o maisyoku-go nomi-mas-u-koto.

that medicine-ACC each meal-after take-MAS-PRS-KOTO

'Take that medicine after each meal.'

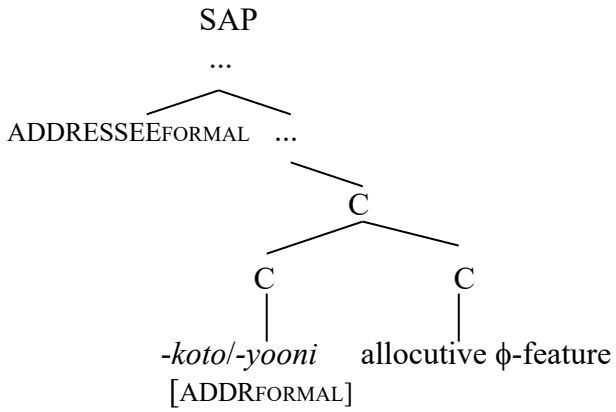
b. *Sono kusuri-o maisyoku-go nomi-mas-u-yooni.

that medicine-ACC each meal-after take-MAS-PRS-YOONI

'Take that medicine after each meal.'

Although Uchibori attempts to account for the ungrammaticality of the examples with *-mas-* by stating that there is an inconsistency between telling someone to do something and being polite to him/her, the unacceptability here is much more severe than just a stylistic inconsistency. What I suggest is that the inclusion of *-mas-* prevents the allocutive ϕ-feature from raising all the way to the top of the expression, into the SAP, which it must do in order to mark the entire expression in the formal register. Note the following structure.

(113)



The allocutive ϕ-feature receives its valuation at C in this structure because it c-commands *-koto/-yooni* with the appropriate ADDR feature. The raising of the

allocutive ϕ-feature thus comes to a halt at this point, although in order to fulfill its function it needs to move up into the SAP. This is why this sentence is ungrammatical. This analysis is also further evidence that the allocutive ϕ-feature moves into the SAP; if it does not, the structure is ungrammatical.

Recall that, as Uchibori (2008) notes, examples such as those in (112) can be made grammatical if subject honorification is added.

(114) Sono kusuri-o maisyoku-go o-nomi-ni-nari-mas-u-yooni.
that medicine-ACC each meal-after SH-take-NI-NAR-MAS-PRS-YOONI
'Take that medicine after each meal.'

It is not clear why the honorification allows -*mas*- to occur in an otherwise inappropriate context. Although I will not attempt an analysis, I note that this is related to a point that Harada (1976) made that honorification somehow makes an otherwise unacceptable occurrence of -*mas*- possible. The following example contains the honorific marker *sare* (Harada's (131b)).

(115) Yamada-kun-ga kono tabi Nooberu-syoo-o zyuyo-sare-*mas*-i-ta
Yamada-NOM lately Nobel Prize-ACC was.given-MAS-PST
koto-wa mina-sama go-zonzi to omoi-mas-u.
fact-TOP you all know C think-MAS-PRS
'I think all you know that Mr. Yamada was given the Nobel Prize lately.'

What Harada notes is that the occurrence of the honorific *sare* on the predicate 'was given' appears to make the politeness marker sound more felicitous, just as the subject

honorification makes the -*yooni* imperative with -*mas*- felicitous. This does appear to be a real phenomenon, one which I do not fully understand. I will leave this point with the example below, in which there is -*mas*- in a -*koto* phrase without another -*mas*- in the matrix. Although not as natural as an example with the matrix -*mas*-, or without -*mas*- in the -*koto* phrase, the subject honorification does improve the felicity, as Harada noted.

(116) a. *-mas- in -koto phrase, subject honorification, no -mas- in matrix*

?Hanako-wa [sensee-ga kusuri-o o-nomi-ni-nar-i-mas-u koto]-o

Hanako-TOP teacher-NOM medicine-ACC SH-take-NI-NAR-MAS-PRS KOTO-ACC

negat-ta.

hope-PST

'Hanako hoped that the teacher will take the medicine.

b. *-mas- in -koto phrase, no subject honorification, no -mas- in matrix*

*Hanako-wa [sensee-ga kusuri-o nom-i-mas-u koto]-o

Hanako-TOP teacher-NOM medicine-ACC take-MAS-PRS KOTO-ACC

negat-ta.

hope--PST

c. *-mas- in -koto phrase, -mas- in matrix*

Hanako-wa [sensee-ga kusuri-o nom-i-mas-u koto]-o

Hanako-TOP teacher-NOM medicine-ACC take-MAS-PRS KOTO-ACC

nega-i-mas-i-ta.

hope-MAS-PST

d. *No -mas- in -koto phrase, no -mas- in matrix*

Hanako-wa [sensee-ga kusuri-o non-da koto]-o

Hanako-TOP teacher-NOM medicine-ACC take-PRS KOTO-ACC

negat-ta.

hope--PST

Let us turn to the licensing of ADDR that comes with the addressee oriented complementizers *-koto*/*-yooni*. Can this licensing take place over unlimited layers of structure, similar to the relation that pronouns have with their antecedent, or is it more

local, limited say to the subjacency layer, which would make it similar to (A') movement? The latter would be more indicative of an agreement relation rather than some anaphoric relation. We know that this relation can be between two adjacent CPs from all the examples of double occurrences of *-mas-* that we have observed. Now observe the following in which a CP with the non-addressee oriented *to* intervenes between the two CPs with *-mas-*.

(117) *[Hanako-wa [$_{CP}$ kodomo-ga daigaku-ni iki-masu koto]-o
Hanako-TOP child-NOM university-to go-MAS C-ACC
kitaisite-iru to] omotte-i-mas-u.
hope-PRS C think-MAS-PRS
'Hanako thinks that she hopes that her child will go college.'

This indicates that the Addressee – *-koto*/*-yooni* [ADDR] relation is limited to adjacent CPs.

There are exceptions to *-mas-* being ungrammatical with *-yooni*. The following example from Uchibori (2008) is repeated from earlier.

(118) *Sono kusuri-o maisyoku-go nomi-mas-u-yooni.
that medicine-ACC each meal-after take-MAS-PRS-YOONI
'Take that medicine after each meal.'

However, as Uchibori herself notes in an earlier work (Uchibori 2006), a non-imperative with *-yooni* allows *-mas-*.

(119) Asita-wa hare-mas-u-yooni.

tomorrow-TOP clear-MAS-PRS-YOONI

'I hope that tomorrow will clear (in weather).'

This example is not a counterexample to our analysis of the ungrammatical (118) because, as Uchibori notes, this example is not said to the addressee, but to some undefined audience. Therefore, -*yooni* does not have ADDR, the allocutive ϕ-feature that originates with -*mas*- is not given valuation at -*yooni*, and thus it moves up the SAP structure appropriately.

In examples such as the following (Uchibori 2006), -*koto* can co-occur with -*mas*-.

(120) Kiree-na bara-ga saitei-mas-u koto.

pretty rose-NOM bloom-MAS-PRS KOTO

'What pretty roses are blooming!'

This utterance, like the earlier one, is not directed specifically to the addressee and the usage of -*mas*- turns the expression more elegant. Here again, the complementizer -*koto* does not carry the ADDR feature, allowing the allocutive ϕ-feature to raise into the SAP.

9. Conclusion

In this chapter, I gave evidence for the existence of the Speaker-Addressee Phrase (Speas and Tenny 2003; also Krifka 2017, 2019b, 2020 as ActP) by showing that there must be a representation of the addressee in a structure above CP. By

extending earlier studies (Miyagawa 2012a, 2017, Yamada 2019a, Uchibori 2006, 2007, 2008), I argued that the politeness marker -*mas*- (and some forms of the politeness marker -*des*-) contains ϕ-feature agreement that is specialized to agree with the discourse participant, specifically, second person. This is called allocutive agreement and it shows up in languages such as Basque as true 2nd person agreement. The allocutive agreement is true agreement in that it competes with the agreement that goes with the arguments of the clause. Basque only allows one 2nd person agreement in a clause and if an argument (subject, object, indirect object) is 2nd person, the 2nd person agreement on the argument blocks the allocutive agreement. Given that the allocutive agreement functions to mark the entire expression as being in a certain registry of speech (-*mas*- marks the expression as being in the formal registry), it should contain the entire expression within its domain. We see this for the allocutive agreement in Korean, Tamil, and Thai, where it is pronounced at the highest level possible within the overt form — at C. But in Japanese, the source of the allocutive agreement is pronounced lower in the structure, below negation, which puts it in the vicinity of vP. We saw that the function of the allocutive ϕ-feature is to raise from -*mas*- all the way to the SAP, via every head that comes between the original position and the Addressee head, rendering most of the heads, such as negation, past tense, and the modal, into the polite level, in a way that dramatically demonstrated head-to-head movement.

Chapter 3

The SAP, CommitP, and Sentence Final Particles

1. Introduction

Languages have ways to express the speaker's attitude towards the addressee or the proposition. In English, if one wishes to convey certainty about the proposition of his/her utterance, one could end the utterance with a strong intonation that would be written with the exclamation mark in orthography (*He will eat pizza!*), or use an expression that embodies certainty (*I'm sure he will eat pizza*). Many languages employ what are called sentence particles for this purpose, including Japanese. Other languages that have received attention in this regard include Cantonese (e.g., Heim et al. 2016, Tang 2015), Gunbe (Aboh 2007a, 2007b, 2010, 2016), and Romanian (Hill 2007, 2013, Haegeman and Hill 2014). I will comment on Romanian later in the chapter, and also Cantonese briefly.

In Japanese, to express certainty, the sentence final particle *yo* is typically used.

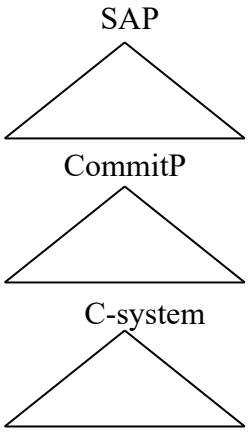
(1) Kare-wa piza-o tabe-ru yo.
he-TOP pizza-ACC eat-PRS YO
'He will eat pizza!'

These particles always occur at the end of the sentence in Japanese. These sentence-final particles do not carry a lexical meaning of their own, and therefore, they do not contribute to the truth condition of the expression (Yamada 1908). Rather, they have a

strictly expressive function, for example, to amplify the speech act of the expression by strengthening the force of the assertion or the request. A striking property of a sentence-final particle (SFP) is that despite its small size (typically one mora long as in *yo* above — although in rare cases an SFP may be two moras), it receives the most attention in the utterance. I will argue that this is because SFPs have a special position in syntax and prosodically, they typically receive prominent stress. In other words, you simply cannot ignore them. This property of prominence that SFPs have turns out to give a language like Japanese an enormous advantage in language acquisition for concepts, such as certainty and uncertainty of the speaker's attitude towards the proposition, compared to those languages that do not have sentential particles. I will introduce an experimental study of this below.

Why do SFPs have such a strong impact on conveying the speaker's attitude toward the proposition or the addressee? Following previous studies on this topic (Haegeman 1993, Haegeman and Hill 2010, Endo 2010, Saito 2015), I will argue that SFPs typically occur above the CP, in many cases within the SAP, where they occur on an SAP head. An SFP that heads an addressee SAP projection "speaks directly to the addressee," which would explain the direct conveyance of the message from the speaker to the hearer. Lower in the structure, in the CommitP, where some SFPs occur, the SFP is structurally associated with the speaker's commitment to the proposition (e.g., Krifka 2017, 2019a, 2020). We will also see some SFPs occurring even lower, in the C-system, in what Krifka (2019b, 2020) calls the Judgment Phrase, which I assume to be a part of the articulated CP. We will see examples of the "judgment" SFPs from Japanese and Romanian, the latter, mostly as sentence-initial particles. The diagram of the superordinate structure is given below.

(2)



In some cases, a particle begins lower in the structure, such as in the C-system, and raises higher in the structure, all the way to the Speaker-Addressee Phrase (SAP), where it receives agreement valuation. We will see such cases from Japanese and Romanian. Since sentential particles do not contribute to the truth-value of the proposition, this movement of a particle from the CP into the SAP is simply an indication that the CP is reserved for elements that are part of the proposition and contribute to its truth-value.

In this chapter, I will establish the high expressivity of SFPs by reporting on several experiments, then I will look in particular at three SFPs, *yo* (certainty), *ne* (confirmation), and *kana* (uncertainty), in order to present a syntactic analysis of SFPs. I will then take a close look at the sentential particle *hai*(*de*) in Romanian, drawing on the work of Hill (2007, 2013) and Haegeman and Hill (2014). We will see that this Romanian particle gives strong support to the two-layered structure of SAP and Commitment Phrase, as well as certain instances of particles that occur in the articulated CP structure, which parallels the Judgment Phrase of Krifka (2019b, 2020). In the last section, I will return to Japanese SFPs, and will look at the linguistic behavior of autistic children with regard to the two SFPs *yo* (certainty) and *ne*

(confirmation). We will see an asymmetry in the way these SFPs appear that gives further credence to the SAP/CommitP layering.

I will begin by establishing SFPs as root phenomena in the sense of Emonds, paralleling politeness marking.

2. SFPs as root phenomena

SFPs only occur in the main clause, as illustrated for *yo* below.

(3) Hanako-wa [kare-ga piza-o tabe-ru (*yo) to (*yo)] omottei-ru/sinzitei-ru.
Hanako-TOP he-NOM pizza-ACC eat-PRS YO C YO think-PRS/believe-PRS
'Hanako thinks/believes that he will eat pizza.'

We can show the same with the confirmation SFP *ne*.

(4) Hanako-wa [kare-ga piza-o tabe-ru (*ne) to (*ne)] omottei-ru/sinzitei-ru.
Hanako-TOP he-NOM pizza-ACC eat-PRS NE C NE think-PRS/believe-PRS
'Hanako thinks/believes that he will eat pizza.'

A point about *ne* is that there is a kind of *ne* that is similar to English 'you know' in that it occurs on almost any constituent, including in embedded structures (Saito 2015).

(5) Hanako-wa [kare-ga nepiza-o ne tabe-ru (*ne) to (*ne)] omottei-ru.

Hanako-TOP he-NOM NE pizza-ACC NE eat-PRS NE C NE think-PRS

'Hanako thinks that he will eat pizza.'

This *ne* is fundamentally different from the SFP *ne* that we will deal with in its freedom to occur sentence-internally with almost any constituent. We can see that it is not the SFP *ne* by the fact that the *ne* that occurs in the position of the SFP is ungrammatical in embedded constructions as expected, since SFPs are root phenomena.

What precisely is the distribution of SFPs? In Chapter 2, I demonstrated that the politeness marker -*mas*- (and its nominal counterpart -*des*-) has a distribution as characterized by Emonds's (1970) original conception of a root, because the politeness marking is addressee-oriented.

(6) *Root*

A root will mean either the highest S in a tree, an S immediately dominated by the highest S, or the reported S in direct discourse. (Emonds 1970: 6)

Emonds's point is that there are transformations which are limited only to the root, what he calls non-structure-preserving transformations.

As we will see, many SFPs are also oriented to the discourse participant, thus dependent on the SAP. From this perspective, we would predict that SFPs should have the same distribution as the politeness marker, and in fact, they do. One caveat is that the most common SFP in the language, *yo*, which is used to mark certainty of the expression — something akin to an exclamation mark in English — is often described

as speaker-oriented, although I will argue otherwise. We will see that the SFP occurs in a projection directly beneath the SAP, in the CommitP. I illustrate this for the confirmation *ne* and the certainty *yo*.

The following shows that SFPs have the "root" distribution we saw earlier for the politeness marker. I illustrate this with *yo* and *ne.*

(7) a. *Highest S*

Hanako-wa ku-ru yo/ne.

Hanako-TOP come-PRS YO/NE

'Hanako will come!, Hanako will come, right?'

b. *S dominated by highest S*

Hanako-ga ku-ru kara yo/ne, ie-ni ite-kudasai.

Hanako-NOM come-PRS because YO/NE home-at be-please

'Because Hanako will come (!/right?), please be at home.'

c. *Reported S in direct discourse*

Taroo-wa Hanako-ga ku-ru yo/ne to itta.

Taro-TOP Hanako-NOM come-PRS YO/NE C said

'Taro said that Hanako will come (!/right?).'

We have seen that these SFPs do not occur in other contexts; an example is repeated below.

(8) Hanako-wa [kare-ga piza-o tabe-ru (*yo/*ne) to (*yo/*ne)] omottei-ru.

Hanako-TOP he-NOM pizza-ACC eat-PRS YO/NE C YO/NE think-PRS

'Hanako thinks that he will eat pizza.'

Given that SFPs and the politeness marker have the same distribution, it would not be surprising to find interactions between the two. In fact, later in the chapter, we will look at constructions where certain SFPs block the occurrence of the politeness marker.

One issue I will address as we look at the sentential particles in Japanese and also in Romanian is this: How far down in the structure given in (2) is constrained by Emonds's root environments? We saw in Chapter 2 that the SAP has the distribution of this root context. The reason we gave, following Krifka (2014, 2015, 2020), Frey and Meinunger (2019), and others is that the SAP (what they call ActP following Krifka) is the locus of illocutionary force, so that Emonds's definition was really about the distribution of illocutionary force associated with speech acts. What about CommitP, and even further down, the C-system? As we will see, CommitP, like the SAP, only occurs in the root context. This makes sense because the CommitP is what links the SAP to the proposition in the CP (Geurts 2019, Krifka 2019a/b, 2020); without the SAP, the CommitP could not exist, hence it is directly linked to the SAP in its distribution.

The C-system is fundamentally different from the SAP and CommitP in that it houses the proposition that carries a truth-value (for assertions), while the SAP and the concomitant CommitP are part of the expressive component of the utterance that is associated with the speech act. This means that the root definition would not constrain the distribution of anything in the C-system. This is generally true. However, we will see examples from Japanese and Romanian of sentential particles that originate in the extended C-system — what Krifka (2019b, 2020) calls the Judgment Phrase. As we will see, these items always raise out of the C-system into the higher,

expressive component of the utterance. These are items that belong in the extended C-system because of some selectional requirement, yet they are also associated with the discourse participants. In this way, something that originates in the C-system moves up the structure, and as a result, its distribution is defined by the root context, despite the fact that its initial position is not. In Chapter 4, we will look at topicalization in German and Japanese, which occurs in the extended C-system. Unlike sentential particles, topicalization does not raise the topic out of the C-system, so the root definition does not constrain its distribution. We will see that there are other constraints imposed on it, though these are much less stringent than that of the root.

I will begin with the expressivity of SFPs as compared to regular lexical items with similar meaning.

3. Expressivity of SFPs

For one reason or another, we sometimes hold beliefs that are contrary to fact. If we are lucky, we come to realize the falsehood of these beliefs, thanks to evidence we encounter that reveals that what we held to be true was, in fact, not so. It turns out that this ability to set aside false beliefs develops fairly early, with four and five-year olds showing signs that they can detect false beliefs (Wellman, Cross, and Watson 2001). On the other hand, three-year olds have been shown to perform poorly on tests for false beliefs. There are generally two competing hypotheses for this failure of three-year olds to judge when a belief is erroneous. One is that they have not cognitively developed the concept of belief, so that they cannot separate beliefs from simple facts (Perner 1991, Flavell, Flavell and Green 1983, Gopnik and Graf 1988). The other is that the three year olds do have the concept of belief, but they lack processing ability to comprehend what is expressed linguistically as a belief as such (Carlson and Moses

2001, Roth and Leslie 1998, Russell 1997).

As an example of a false-belief test, Wellman and Bartsch (1988) presented scenarios such as the following:

> Jane wants to find her kitten. Jane's kitten is really in the playroom, but *Jane thinks her kitten is in the kitchen*. Where will Jane look for her kitten?

Three-year olds performed below chance — over half said Jane will look for the kitten in the playroom, while four-year olds were at chance. This indicates that, for whatever reason, three-year olds were unable to judge the false belief as such (*Jane thinks her kitten is in the kitchen*), while four-year olds begin to show some sign that they can judge a belief to be false. For the three-year olds' poor performance, the analysis that children at this age have not developed the concept of belief would attribute the poor performance to the failure of these children's inability to distinguish between belief (*Jane thinks...*) and fact. On the processing deficit analysis, these children do have the concept of beliefs, but the actual statement *Jane thinks...* did not linguistically register as a belief, possibly due to its semantic complexity. Further evidence for this is that children apparently do not fully understand the meaning of mental state predicates such as *know*, *think*, and *believe* until four years of age (Bartsch and Wellman 1995, Shatz, Wellman, and Silber 1983). Whatever the reason, this failure of three-year olds to recognize false beliefs persisted in follow-up studies (Flavell et al.1990, Perner et al. 2003).

3.1. Experiments on the expressivity of SFPs

Matsui et al. (2006) explored the question of whether three year olds lack the

concept of beliefs or if there is some linguistic issue that is circumventing their ability to comprehend beliefs as such. Their study examined two types of linguistic elements, both present in Japanese, contrasting them to see if young children's reactions to expressions containing them could shed light on the research question. The two types of linguistic items are the high-frequency sentence final particles that express speaker's certainty (*yo*) or uncertainty (*kana*) about the truthfulness of the proposition, and low-frequency mental-state verbs that express the same notion of certainty (*sitteiru* 'know') and uncertainty (*omou* 'think'). The idea is that if a child is able to judge whether a speaker is certain or uncertain of the proposition, the child is able to understand that the speaker holds a belief that is certain in one case and uncertain in the other, therefore demonstrating that the child is able to distinguish between beliefs and simple statements of fact. Matsui et al. (2006) also look at another parameter having to do with the quality of evidence expressed for the proposition, something I will not explore.

That the SFPs are high frequency compared to the mental-state verbs is shown by the JCHAT corpus (Miyata 2000) of conversations between a child, Tai, from the age of 1;5 to 3;2, and his mother. The conversations were recorded for 40 minutes once a week. The following is taken from Matsui et al. (2006).

Table 1. Frequency counts for certainty and evidentiality markers in the Tai corpus.

		Child	Mother
Certainty			
Verb	*shitteru* (*know*)	34	70
	omou (*think*)	12	51
Particle	*yo*	3317	3955
	kana	145	970

While the certainty SFP *yo* occurs over 7,000 times between the child and the mother, the corresponding mental-state verb *sitteiru* 'know' only occurs around 100 times. The uncertainty SFP *kana* occurs approximately 1,100 times, while its mental-state verb counterpart *omou* 'think' only occurs around 60 times. These frequency facts alone suggest that a three-year old Japanese child is capable of expressions that distinguish between certainty and uncertainty, at least on the basis of SFPs.

Ninety-seven Japanese children divided almost equally among three-, four-, five-, and six-year olds participated in experiments in which they were asked to judge the certainty of information. When information was presented with an SFP (*yo*, *kana*), three-year olds performed well on distinguishing between certainty and uncertainty, showing that they understood the difference. The same three-year olds performed poorly when the information was presented with mental-state verbs *sitteiru* 'know' and *omou* 'think'. In contrast, four-year olds performed reasonably well with the mental-state verbs; in fact, the largest improvement with mental-state verbs was from three to four, with a more gradual improvement into the higher ages. In the case of SFPs, the improvement was gradual across the four age groups, with the starting age of three being significantly higher than the mental-state verbs.

These results indicate that even three-year olds are capable of distinguishing between certain and uncertain beliefs, in turn suggesting that these children have a notion of the speaker's mental state. But this is only true with SFPs; the three-year olds were unable to make the certain/uncertain distinction when the information was presented with the mental-state verbs. This supports the idea that children apparently do not fully understand the meaning of mental-state predicates such as *know*, *think*, and *believe* until four years of age (Bartsch and Wellman 1995, Shatz, Wellman, and Silber 1983). This is true with English, and it is true with Japanese as well. What we

see from the study is that this is not an indication that the children fail to distinguish the meaning of certainty vs. uncertainty. When presented with a different linguistic cue — SFPs —, even three-year olds were generally able to make this distinction, thus showing awareness of beliefs as opposed to simple facts.

Why do SFPs have this high expressive property, even for three-year olds, to differentiate ideas that cannot be distinguished with "normal" words? One reason is their frequency. As we saw, SFPs occur significantly more frequently than their mental-state predicates. But is that the only reason?

3.2. Follow-up experiments: Matsui et al. (2009)

In a later work, Matsui et al. (2009) further compare SFPs with mental-state verbs, but this time the mental-state verbs are in German, which does not have SFPs or other grammatically explicit markers for certainty vs. uncertainty. Their experiments all have the following design. With three-year olds as subjects in both languages, a statement of belief is presented that clearly is false, and the child understands it to be false. The speaker then presents this false-belief accompanied by the SFP *yo* for certainty, and the SFP *kana* for uncertainty. The child understands that the speaker holds a false belief, but if the speaker is certain that it is true (*yo*), the child would predict that the speaker would act according to his/her belief. In contrast, when presented with the uncertain *kana*, the speaker's action based on the false-belief is much less predictable. Similar sentences in German are presented, but with mental-state verbs in place of SFPs.

In one such experiment, a puppet placed a marble in location A, then the puppet disappeared. In its absence, the experimenter moved the marble to location B. The child was then asked where the marble was at that time (B), and whether the puppet

had seen how it was put there (no). Then the puppet would return, and express its false belief with the certainty SFP *yo* (*The marble is at A* <u>*yo*</u>). In the German version, the puppet said that the marble is in location A, not in location B. The test question of where would the puppet look for the marble was asked. The children were then taken through the same scenario, but with the puppet expressing the false belief with the uncertain *kana* in Japanese, and in German with the phrase "Perhaps the marble is in location A, not in location B." This was followed by the same test question of where would the puppet look for the marble. In the case of the Japanese three-year olds, twice as many said that the puppet would act on the false belief when presented with *yo* as compared to *kana*. But with German children, there was no significant difference in reaction to the two presentations of the false belief.

In the second experiment, the German expressions were changed to include more explicit linguistic content for certainty and uncertainty. In contrast to the first study, in which certainty was expressed simply with a declarative sentence (*The marble is in location A*.), in the second experiment, this meaning of certainty was strengthened as in *It must in any case be in location A.* For uncertainty, the expression used was *It might perhaps be in location A.* The Japanese sentences were the same, with *yo* for certainty and *kana* for uncertainty. Despite this strengthening of the expressions of certainty and uncertainty in German, the results were the same: there was no significant difference in reaction to the two false-belief statements. In other words, strengthening the meaning of mental-state verbs with additional information did not help at all in the case of German. This result again demonstrates the special ability that SFPs have pragmatically to convey notions such as (un)certainty in a highly robust way, beyond what mental-state predicates are capable of.

4. The structure of SFPs

We saw that SFPs have significantly more expressive power in conveying epistemic notions, such as certainty, over mental-state verbs with comparable meaning. Matsui et al. (2009) note three properties of SFPs that contribute to their high expressivity: (i) grammaticalization, (ii) a set that is closed, and (iii) high frequency. By grammaticalization, we mean that SFPs have a special position of their own within the sentence; we will present a detailed analysis of these positions. SFPs comprise a small, closed set containing around ten SFPs, with only five of them being the most common. With so few in the set, each has a uniquely and immediately discernable function so that comprehension is instantaneous. The high frequency of SFPs is clearly evident in the natural corpus, JCHAT (Miyata 2000). For example, the certainty SFP *yo* was uttered over 7,000 times in weekly recordings over a 21 month period between the child and the mother, while the comparable mental-state verb *sitteiru* 'know' appeared only around 100 times. As another example of high frequency, Maynard (1997) reports that in a 60-minute conversation, SFPs occurred in every 2.5 phrase-final positions (equivalent to main clauses), or approximately 40% of the time.

4.1. Three layers of structure and SFPs

Uyeno (1971) was the first to extensively analyze SFPs in modern linguistics, categorizing them and studying their occurrences, both as single items and in combinations. For example, in characterizing the two most frequent SFPs, *ne* and *yo*, Uyeno (1971: 96) points out that *ne* is used if the speaker expects the addressee to be familiar with the information in the proposition, whereas *yo* is used if the speaker

assumes that the addressee is not aware of the information (see extensive discussion in Davis 2011).

(9) Sonna koto-wa atarimae da ***ne/yo***.
such thing-TOP matter.of.course COP NE/YO
'That goes without saying.'

In a different although not incompatible approach, Suzuki (1976), extending the works of traditional grammarians, Yamada (1908), Tokieda (1951), and Sakuma (1952), categorizes SFPs into speaker-oriented and addressee-oriented, and puts *yo* in the former and *ne* in the latter.

While Uyeno and Suzuki utilize the notions of speaker and addressee, Takubo and Kinsui (1996) (see also Kinsui 1993, etc.) propose a discourse theoretic approach, in which special items in a language, such as SFPs, mark operations for registering, computing, and inferring information. Though the terminology and the concepts they propose are different, in spirit their approach reflects the earlier work by Stalnaker (1978). Whenever we engage in conversation, we have a series of goals, and we have strategies by which to achieve those goals. We do this within a conversational context that is changing constantly as new assertions are added, which, if successfully navigated, add to the "common ground" (Stalnaker 1978). Deviating somewhat from Takubo and Kinsui, and drawing on more recent extensions of Stalnaker's work (Roberts 1996, Farkas and Bruce 2010, etc.), *ne* is similar to a tag question — in fact, it is often translated as a tag question in English. In this sense, *ne* assumes that the addressee knows the information and the speaker is asking for permission to register the information to the common ground (in Takubo and Kinsui's terminology, *ne*

marks the operation by which the speaker is incorporating an assumption from the indirect experience domain to the direct experience domain). For *yo*, instead of referring to Takubo and Kinsui's work, which attempts to account for a number of subtleties in its usage, I simply refer to the work of Matsui et al. (2009), who showed that *yo* is a clear marker of certainty of the truthfulness of the proposition. In Stalnakian terms, the speaker is overtly marking the proposition as being added to the common ground.

How do *ne* and *yo* so clearly mark the proposition as described above? And where does the grammaticalization property come from? Following the studies of SFPs in Germanic and Japanese, I believe that these and other SFPs occupy a special position in the structure dedicated to functions we have seen for *ne* and *yo*. Do they occur in the same position in the sentential structure? The tendency, from the earliest studies (Uyeno 1971, Suzuki 1976, etc.), is to view them as being in opposition, for example, *yo* marking speaker certainty through assertion, and *ne* inviting the addressee to ascertain the truthfulness of the proposition.

However, there are reasons to believe that *ne* and *yo* should be viewed as having fundamentally different functions. The SFP *ne* necessarily engages the addressee because, as in a question, the speaker assumes that the addressee knows the truthfulness of the proposition and is confirming that. In sharp contrast, *yo* amplifies the commitment by the speaker to the speech act embodied in the CP, whether it is an assertion or a directive, something I will show below. I will argue that this difference indicates that the two SFPs occur in different positions in the syntactic structure. Another reason why we do not want to consider these two SFPs as occurring in the same syntactic layer is that the two may co-occur, in the order *yo-ne*, but never in the order **ne-yo*.

The SFP *yo* may occur with assertions and imperatives, and in both cases, *yo* amplifies the speech act embodied in the expression.

Assertion

(10) Hanako-wa ik-u yo!

Hanako-TOP go-PRS YO

'Hanako will go!'

Imperative

(11) Ik-e yo!

go-IMP YO

'Go!'

In (10), by attaching to a declarative sentence, *yo* emphasizes the truthfulness of the statement, thereby enhancing certainty, as we saw from the work of Matsui et al. (2006, 2009). In (11), by attaching to an imperative, *yo* strengthens the speaker's commitment to have the addressee realize p ('go'). We can further observe this function of *yo* as strengthening the speaker commitment by looking at the occurrence of *yo* with *ne*.

(12) a. Hanako-wa ik-u ne?

Hanako-TOP go-PRS NE

'Hanako will go, right?'

b. Hanako-wa ik-u yo ne?

Hanako-TOP go-PRS YO NE

'Hanako will go, right?'

In (12a), which does not have *yo*, the occurrence of *ne* signals that the speaker is attempting to ascertain the truthfulness of the proposition 'Hanako will go'. In (12b), which contains *yo* along with *ne,* the speaker wishes the addressee to confirm *with certainty* the truthfulness of the proposition. We see again the idea that while *ne* directs the expression to the addressee to ascertain the truthfulness of the proposition, *yo* functions to amplify the commitment to the proposition, in this case, an assertion.

In their most basic uses, *yo* and *ne* resemble the *me1* and *ho2* particles found in Cantonese, as studied by Heim et al. (2016: 121) (the numbers indicate tone); see also Tang (2015).

(13) mat1 ngo5 san1 joeng5 zo2 zek3 gau2 me1?
what 1SG new keep ASP Cl dog PRT
'What, I have a new dog?! (But I don't!)'

(14) nei5 san1 joeng5 zo2 zek3 gau2 ho2?
2SG new keep ASP Cl dog PRT
'You have a new dog, eh?'

The particle *me1* in (13), like the Japanese *yo*, commits the speaker to the truthfulness of the proposition that the speaker does not have a dog. The particle *ho2* in (14), like the Japanese *ne*, confirms with the addressee the truthfulness of the proposition. Although the details of my analysis of *yo* and *ne* will differ from Heim et al. (2016), simply because the actual structure I adopt is different, my analysis is very much

informed by their use of superordinate structures for these and other particles. Thus, they associate *ho2* with what they identify as "Call of Addressee," relating this particle directly to the addressee within the SAP, a point that I will adopt in my analysis for *ne*. For *me1*, they associate with speaker commitment, something that I will also adopt, albeit in a slightly different structural configuration.

Given what we have observed for the SFPs *ne* and *yo*, I propose that *ne* is merged directly onto the head associated with the addressee in the SAP, while *yo* is associated with the Commitment Phrase. Although I will not attempt to analyze Chinese, I assume that *ho2* and *me1* are associated with the same positions as *ne* and *yo* in Japanese.

The SFPs *ne* and *yo* can also occur with a question.

Question + ne

(15) Hanako-wa ik-u ka ne

Hanako-TOP go-PRS Q NE

'Do you think Hanako will go?'

Here, *ne* is asking the addressee to confirm whether he or she knows the answer to the question 'Will Hanako go?' There is no explicit assumption that the speaker believes that the addressee knows the answer. Note that this is different from *ne* attaching to the declarative counterpart.

(16) Hanako-wa ik-u ne?

Hanako-TOP go-PRS NE

'Hanako will go, right?'

Here the speaker assumes that the addressee knows whether the proposition is true and is confirming the truthfulness of it. For the addressee to answer 'I don't know' would be somewhat unexpected, although such an answer is perfectly felicitous to the question + *yo* in (12b). On the other hand, if the addressee knows the answer, the appropriate response is not "Yes, I know," which would be distinctly odd, but rather the expectation is simply to answer the yes-no question with "Yes, she will come" or "No, she won't come."

We observed that *ne* has the function to ask for confirmation of the content of the assertion or the question with the addressee. In this regard, there are two additional points I want to note about *ne*. First, *ne* does not occur with an imperative.

Imperative

(17) *Ik-e ne!
go-IMP NE
'Go!'

This is expected because there is no truthfulness (assertion) associated with the imperative expression that the speaker is trying to ascertain. Second, there is a form of *ne* that can freely occur in almost any constituent (e.g., Saito 2015).

(18) Hanako-wa-*ne* yuube-*ne* piza-o-*ne* tabe-ta.
Hanako-TOP-NE last.night-NE pizza-ACC-NE east-PST
'Hanako ate pizza last night'

This use of *ne* resembles "you know" in English, although "you know" cannot occur so freely as this *ne*. What is clear is that this *ne* is fundamentally different from the SFP *ne* in meaning and syntactic structure in which it can occur. Saito (2015) does not distinguish between the two kinds of *ne*, and concludes that *ne* may essentially occur with almost any constituent. However, I believe that the two *ne* are different in function and in their distribution, and I will only deal with the SFP *ne* that asks for confirmation and not the "you know" *ne* we see above.

Turning to *yo,* we saw that its function is to amplify the commitment to the speech act embodied in the expression to which it attaches, as we saw with assertions and imperatives.

Assertion

(19) Hanako-wa ik-u yo!

Hanako-TOP go-PRS YO

'Hanako will go!'

Imperative

(20) Ik-e yo!

go-IMP YO

'Go!'

What about questions? While we can readily imagine that *yo* enhances the commitment relative to assertion or directive, it is not so easy to imagine what *yo* would amplify for the interrogative speech act. Does that mean that *yo* cannot occur

with questions? On the contrary, as Saito (2015) observes, *yo* does occur with questions, as his examples below show.

Question + *yo*

(21) a. Dare-ga soko-ni ik-u ka yo!

who-NOM there-to go-PRS Q YO

'Who will go there? = No one will go there!'

b. Taroo-ni nani-ga deki-ru ka yo!

Taro-DAT what-NOM can.do-PRS Q YO

'What can Taro do? = Taro can't do anything!'

What is noteworthy is that, as Saito points out, these are not simple *wh*-questions, but instead they are rhetorical questions with the meaning 'no one will go there' or 'Taro can't do anything.' While Saito does not give an explanation for why this special reading is required with *yo*, we can see that this reading makes it compatible with *yo*, namely, the actual meaning of the rhetorical question is an assertion, not a question, despite the interrogative form. In this way, *yo* is able to amplify the commitment to the truthfulness of assertions, just as in those cases where it occurs with a simple declarative sentence.

How do the questions in Saito's examples get the rhetorical question reading that makes it possible for them to occur with *yo*? One thing to notice is that these examples have a negative connotation ('no one will go there', 'Taro can't do anything'). If we carefully consider the form (interrogative) and the actual meaning (assertion with negative connotation), we can say that the negative element functions to negate the basic meaning of the question, which is the set of all possible answers

(Hamblin 1973) or its extension, the set of all possible correct answers (Karttunen 1977. For example, in (21a), the meaning of the question is the set of all those who will possibly go there, and the negation, whatever its source, negates that set, with the resulting meaning being that no one will go there, as Saito observes. The use of *yo* appears to strengthen the negative connotation embodied in this rhetorical expression.

What is mysterious about Saito's examples is that, while there is a clear meaning of negation, there is nothing in the expression that standardly connotes this meaning. So, what is the source of this negation? Oguro (2015) accounts for this negative connotation in rhetorical questions by proposing that the rhetorical *ka* contains a negative feature. Striking support for this comes from the fact that *ka* licenses Negative Polarity Items (NPIs).

(22) Daremo kuru ka!
anyone come Q
'No one will come!'

This example is particularly noteworthy because in Japanese, NPIs must be licensed by an explicit negative element; they cannot be licensed in other downward entailing environments as in English. The fact that the NPI is licensed in (22) strongly supports Oguro's contention that the rhetorical *ka* itself contains negation. We can in fact confirm this by changing Saito's examples into ones with an NPI.

Question + yo

(23) a. Daremo soko-ni ik-u ka yo!

anyone there-to go-PRS Q YO

'No one will go there!'

b. Taroo-ni nanimo deki-ru ka yo!

Taro-DAT anything can.do-PRS Q YO

'Taro can't do anything!'

Although some speakers may find these examples somewhat awkward, they are much more acceptable than a non-rhetorical question without negation as shown below. I use the Q-marker *no* below instead of *ka*, since *no* is not associated with negation in any environment.

(24) a. *Daremo soko-ni ik-u no?

anyone there-to go-PRS Q

'No one will go there!'

b. *Taroo-ni nanimo deki-ru no?

Taro-DAT anything can.do-PRS Q

'Taro can't do anything!'

As a final point about questions and *yo*, we saw that *yo* here has the standard function to amplify the commitment. Although the form comes as an interrogative, the meaning is semantically an assertion expressed as a rhetorical question. The strong amplification of the assertion is shown by the fact that it is compatible with an adverb

such as *zettaini* 'definitely' but is incompatible with an adverb such as *hyottositara* 'maybe' (see Goto 2012 for related discussion).

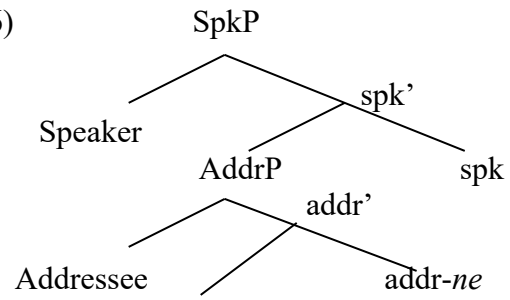
(25) a. Zettaini Hanako-wa kur-u ka yo!
definitely Hanako-TOP come-PRS Q YO
'Definitely Hanako will not come.'

b. ??Hyottositara Hanako-wa kur-u ka yo!
maybe Hanako-TOP come-PRS Q YO
'Maybe Hanako will not come.'

4.2. Structures for *ne* and *yo*

We now turn to the structure of *ne* and *yo.* Since both can occur with the interrogative construction, with each SFP occurring above the Q-particle *ka*, we can safely say that these SFPs occur above CP. Furthermore, the two SFPs may co-occur, but only in one order: *yo-ne,* not **ne-yo*. This means that *ne* is structurally higher than *yo.* What I propose is that these two SFPs occur in the superordinate structure, which has the SAP at the top, and the CommitP below that (see Endo 2010, Saito 2015 for earlier proposals that relate SFPs to the SAP). I will further propose that the SFP *ne,* which is addressee-oriented, occurs with the head whose specifier hosts the addressee representation.

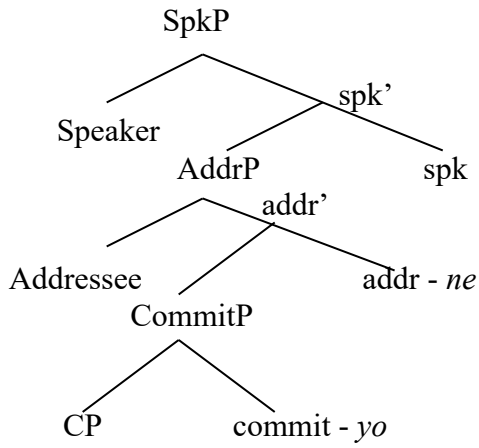
(26)



We find in the literature the idea that sentential particles constitute a head in such works on Germanic as Bayer (2012, 2018, 2020) and Haegeman and Hill (2014).

I will further propose that below the SAP is the CommitP (Krifka 2019b. 2020), which hosts SFPs such as *yo.*

(27)



The fundamental difference between these two layers is that, while an item in the SAP is tied directly to a discourse participant such as the addressee, as in the case of *ne*, which is addressee-oriented, an item in the CommitP relates directly to the speech act in the CP, as in the case of *yo*, which, as a marker of certainty, amplifies the commitment that the speaker makes to the truthfulness of the proposition of the CP. In this sense, CommitP always involves the speaker and the addressee, but as Geurts (2019) notes, as a three-way relation of the speaker committing to the addressee to act

on p, not as specifically directing the commitment to either the speaker or the addressee.

An important point to take away from this discussion is that the CommitP is a root phenomenon per Emonds, just like the SAP. This is because the SFP *yo*, which occurs in CommitP, is subject to the "root" distribution, just like *ne*, as we saw earlier in the chapter. This makes sense because the CommitP is dependent on the SAP for its occurrence, in the sense that the commitment expressed is typically by the speaker to the addressee. Hence, as far as the root context is concerned, the SAP and the CommitP come as a package, together forming the expressive component of the utterance. Below, we turn to SFPs that occur lower than CommitP, but with a twist.

4.3. *kana* and Judgment Phrase

Recall that Matsui et al. (2006) contrasted *yo* and *kana*, the former marking certainty and the latter marking uncertainty. I noted that *yo* has this ability to mark certainty with declarative sentences by enhancing the speaker's commitment towards the truthfulness of the proposition in the case of assertions. This property of amplifying the truthfulness carries over to imperatives, where *yo* strengthens the commitment to the desire for the addressee to bring about the request. This SFP can even occur with a question, but only if it takes on the meaning of a negative rhetorical question, so that *yo* amplifies the commitment to the proposition of negativity associated with the assertion behind the interrogative form. To associate it directly with the notion of commitment, I proposed that *yo* occurs directly above the CP in the CommitP, under the SAP.

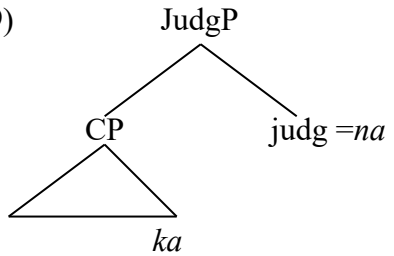
If *kana*, as the marker of uncertainty, directly contrasts with *yo*, which marks certainty, it would make sense to associate *kana* with the same structural position as

yo within the CommitP. However, there are a couple of points we need to consider in order to ascertain the actual position of *kana*. First, *ka* in *kana* is clearly the Q-particle, as we can see by the fact that it licenses a *wh*-phrase in a question.

(28) Dare-ga kur-u ka-na?
who-NOM come-PRS Q-NA
'I wonder who will come.'

Thus, at least the first portion *ka-* of *kana* occurs at C. What about the *-na* portion of this SFP? As the translation of (28) indicates, its meaning is something akin to '(I) wonder', and as such, it reflects some type of attitude — a judgment — the speaker has about the question; while the interrogative portion with *-ka* is a straightforward question, *-na* evokes curiosity, awe, or some such quality on the part of the speaker. What is clear is that *-na* does not pertain to commitment, but instead it is closest to what Krifka (2019b) calls judgment regarding the content of the CP. While Krifka establishes an independent layer that he calls the Judgment Phrase, I will instead assume an articulated C-system in which certain heads select the basic CP. The head may vary depending on the function; for *-na*, I will use Krifka's terminology of Judgment, and this head selects the CP directly that contains *ka*.

(29)

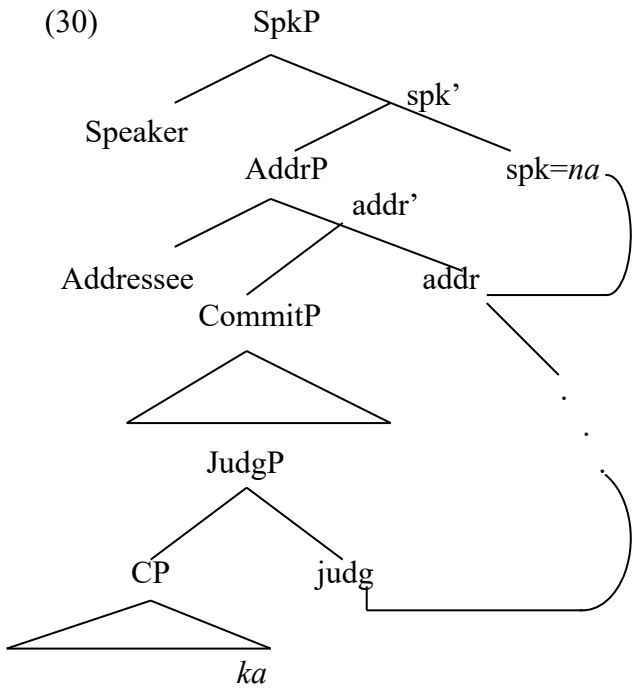


This structure, in which *na* occurs locally c-commanding *ka,* appropriately captures the fact that -*na* selects for *ka* in order to express uncertainty. In Chapter 4, we will see that the Topic Phrase occurs in the same position as the Judgment Phrase above, projecting TopP instead of JudgP, both comprising an extended C-system.

Does the structure above account for all that we need to capture for the uncertainty *kana*? When we contrast it with the certainty SFP *yo*, there is an additional factor we need to consider. The SFP *yo* is identified with the notion of certainty because it amplifies the speech-act force of the CP to which it attaches by strengthening the commitment, either assertion or directive. In that way, it is almost like an adjective such as *very* that amplifies the meaning of the phrase to which it attaches. What about *kana*? The idea of uncertainty cannot just be expressed in relation to the speech act of the CP, but rather some external perspective must be brought in to express the idea of uncertainty, or doubt, or some such notion. Where would such a perspective come from? Clearly it comes from the speaker, since it is the speaker who uniquely brings this perspective of uncertainty. How do we ensure that *na* is associated not only with the C-system, where its basic function is mapped, but also with the speaker, which is the sole source of the uncertainty?

I propose that *na* begins in the C-system as already proposed, then it undergoes head movement all the way to the highest head — the head that is associated with the speaker.

(30)

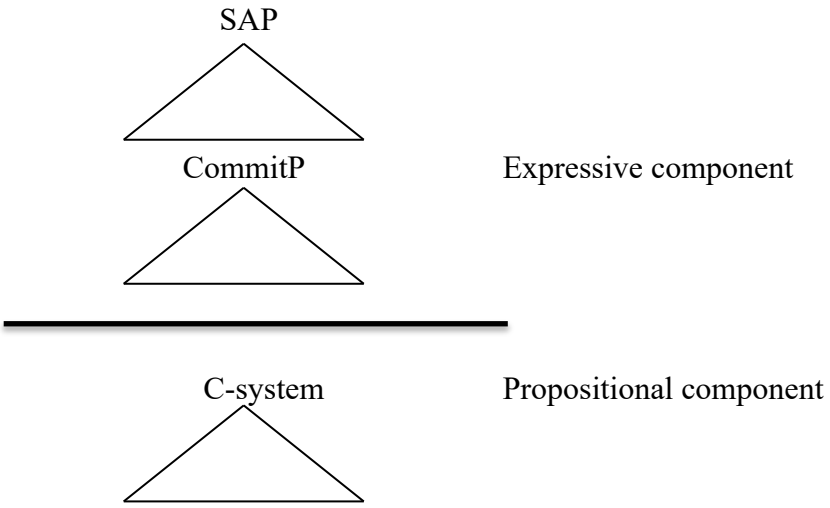


Note that this kind of long-distance analysis of *kana* is necessary because of two opposing forces. First, it must directly select *ka*, which it does by merging in a position that locally c-commands *ka*; this position also has the advantage that it is where judgment elements such as -*na* occur. Second, it must be associated with the speaker, since the judgment inherent in *kana* is linked to the speaker, and by raising -*na* all the way to the head associated with the speaker representation in the SAP, we capture this association. As we will see below, a sentence particle in Romanian also has this property of starting in the judgment position, and raising into the SAP. The latter is clear in Romanian because the particle takes on agreement. We will see an instance from Japanese of agreement with raised Judgement particles shortly.

The idea that the -*na* portion of *kana* begins in the C-system and raises into the SAP is significant for the kind of analysis I am proposing. An item may occur in any of the three layers: SAP, CommitP, or the extended C-system. If it occurs in the SAP or the CommitP, it is a part of the expressive component to begin with, and it would

have the distribution reflective of the root context. If, however, an item occurs in the C-system due to some selectional factor, but it also has some property that connects it to the expressive component, it must move out of the extended C-system. It becomes a part of the expressive component, not inherently, but derivatively. In this way, it is possible to draw a clear line of demarcation between the SAP and the CommitP on the one hand, and the C-system on the other.

(31)

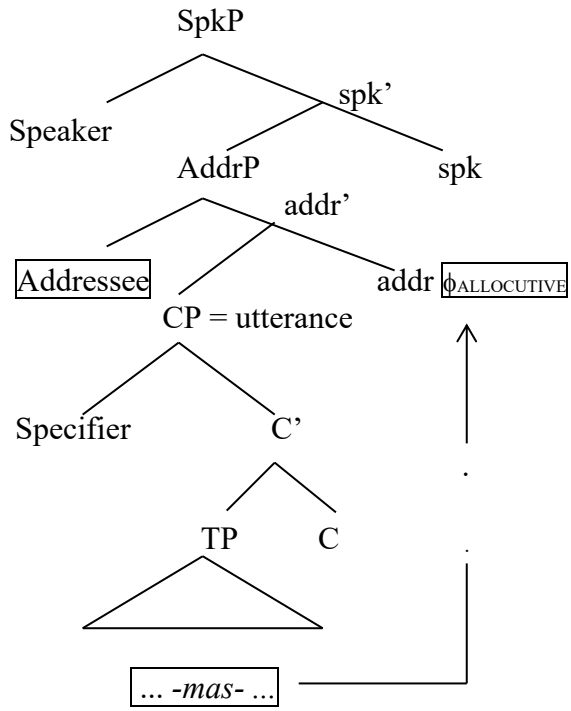


The component above the line, consisting of the SAP and the CommitP, has to do with the expressive component of the utterance, while the component below the line concerns the propositional content of the utterance. This component includes what Krifka (2019b, 2020) calls the Judgment Phrase, indicated by the fact that items such as the subjunctive epistemic *probably* occur in this layer. This item, like most items in this layer, pertains to the truth-value of the proposition. There are exceptions, such as -*na* in *kana*; although its basic meaning locates it in the extended C-system, its function is expressive, hence it must move out of the C-system and into the SAP. In this way, only items that pertain to the truth-value of the proposition remain in the C-

system. Anything else must be located, either to begin with or by movement, in the expressive component.

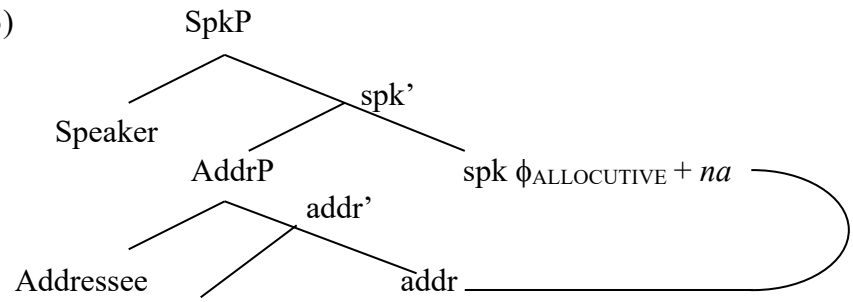
The analysis just presented makes a prediction about the politeness marker -*mas*-. Recall from Chapter 2 that -*mas*- is allocutive agreement which contains the allocutive ϕ-feature that raises all the way to the addressee head in the SAP.

(32)



Note that under the assumption that *na* moves first to the addressee head, then to the speaker head, this allocutive ϕ-feature on the addressee head would be picked up by *na* and taken to the speaker head.

(33)



But the allocutive ϕ-feature agrees with 2nd person, so this new position of the allocutive ϕ-feature, which would force it to agree with the speaker, would be inappropriate. We thus predict that the -*mas*- form cannot occur with *kana*, and this is what we see.

(34) Dare-ga kur-u/*ki-mas-u kana.

who-NOM come-PRS/come-MAS-PRS KANA

'I wonder who will come.'

Note that there is nothing wrong with -*mas*- occurring with the Q-particle *ka* or with other SFPs, as shown below, so that the ungrammaticality of -*mas*- with *kana* is due to some other factor. I propose that it is due to the fact that the allocutive ϕ-feature is inappropriately taken all the way up to the speaker head.

(35) Hanako-wa ki-mas-u ka?

Hanako-TOP come-MAS-PRS Q

'Will Hanako come?'

(36) Hanako-wa ki-mas-u ka ne?

Hanako-TOP come-MAS-PRS Q NE

'Will Hanako come?'

(37) Hanako-wa ki-mas-u ne?

Hanako-TOP come-MAS-PRS NE

'Hanako will come, right?'

(38) Hanako-wa ki-mas-u yo!

Hanako-TOP come-MAS-PRS YO

'Hanako will come!'

The fact that the politeness marker can co-occur with *yo* (38) indicates that *yo* stays in the CommitP and does not move up into the SAP, unlike *na*. Below, I will give further evidence for the head movement analysis we just saw.

4.4. *sira, i*

There are two SFPs, *sira* and *i*, which are virtually identical to *kana* in expressing uncertainty; in fact, both must occur with the Q-particle *ka*, just as we saw for *kana*.

(39) Hanako-wa kur-u ka-sira/-i.

Hanako-TOP come-PRS Q-SIRA/I

'I wonder if Hanako will come.

Just as with *kana*, *sira*/*i* do not allow anything to come between them and *ka* (**ka-ne-sira*/*i,* **ka-yo-sira*/*i*), and likewise, *sira*/*i* do not allow the politeness marker, showing that they begin in the Judgment Phrase in the C-system and raise by head movement from there.

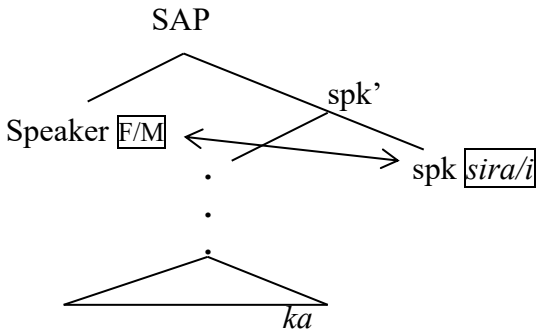
(40) Hanako-wa kur-u/*ki-mas-u ka-sira/-i.

Hanako-TOP come-PRS/come-MAS-PRS Q-SIRA/-I

'I wonder if Hanako will come.'

What is striking about *sira*/*i* is that, as Endo (2020) notes, they are gender-restricted: the usage of *sira* is limited to female speakers and *i* to male speakers. Assuming that *sira*/*i* are heads that move to the head whose specifier hosts the speaker in the SAP, this gender restriction is simply a form of ϕ-feature agreement that occurs in the SAP. These SFPs enter into gender agreement with the Speaker, giving further evidence for head-movement to the Speaker head.

(41)



This is also further evidence that Japanese has ϕ-feature agreement, not within TP, but within the SAP. In this way, *sira*/*i* have the same properties as -*na* in *kana*:

semantically they belong in the C-system, but functionally they are expressive in nature, hence they must move into the SAP.

Finally, I note a possible problem with the analysis just presented. While *kana* and *i* do not co-occur with the addressee-oriented *ne*, the feminine-speaker -*sira* may.

(42) Hanako-wa kur-u ka-sira ne.
Hanako-TOP come-PRS Q-SIRA NE
'I wonder if Hanako will come.'

In terms of order, one would expect *ka-ne-sira*, because *sira* begins below *ne* and by head movement picks up *ne* and moves up to the Speaker head. We can speculate that perhaps *ne-sira* is linearized to *sira-ne* in order for *sira* to be string-adjacent to *ka*, but this is not really a solution and I will leave this as an open question.[1]

5. Romanian *hai*

In this section, we will look at the sentential particle *hai* and its inflected counterparts, collectively referred to as *hai*(*de*) since it is the *haide*- form that takes inflection while *hai* may occur in isolation. I will use the short form *hai* to refer both to the form in isolation as well as the inflected forms. I draw extensively from the work of Hill (2007), with important extensions in Hill (2013) and Haegeman and Hill (2014). One of the interesting properties of *hai* is that it can inflect for gender and number, although in slightly different ways than the typical phi-feature agreement system. We will look in particular at the position of *hai* relative to other elements, in order to identify the details of the structure that supports sentential particles. I will

demonstrate that this evidence from Romanian supports the analysis of the Japanese sentential particles presented earlier.

Hai (*hai, haide, haidem, haideţi*) derives etymologically from the Turkish invariable imperative form (*h*)*ajde* 'go!, let's go!' (Tschizmarova 2005). It has spread throughout the entire Balkan area as a pragmatic marker, but only in Romanian does it inflect for agreement, while in other languages it maintains the invariant property of the original Turkish expression. *Hai* may occur sentence initially or finally (below, "H" is for Hill, "H&H" for Haegeman and Hill, indicating the source of the examples).

(43) a. Hai să citim. (H&H2014, 2a)

HAI SUB read-1PL

'C'mon, let's read.'

b. Să citim, hai. (H&H2014, 2'a)

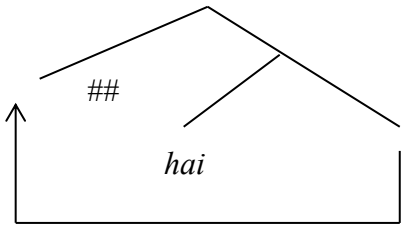
SUB read-1PL HAI

'Let's read, please.'

There are several points to note. First, *hai* can occur clause initially or finally. Second, although the translations for the two versions are slightly different ('c'mon' vs. 'please'), in either position it is addressee-oriented because the speaker is attempting to influence the addressee to carry out the action embodied in the imperative. Third, while there is no significant prosodic break between the sentence-initial *hai* and the rest of the sentence (Hill 2007 characterizes it as the intonation being "fluent"), there is a clear prosodic break before the sentence-final *hai*. The explanation given in Haegeman and Hill (2014) is that the sentence-initial *hai* reflects the original word order, and *hai* is simply a part of the prosodic structure of the overall sentence, thus

there is no significant prosodic break between it and the rest of the sentence. From this "natural" word order, the part of the sentence following *hai* is moved to a higher specifier to derive the sentence-final *hai* order, and it is because of this movement into a high, non-base position, that there is a major prosodic break before the final *hai*.

(44)



In this section, I will focus on *hai* in the sentence-initial position. Fourth and finally, *hai* here is neutral agreement, meaning that it is not agreeing with anything in the structure.

Along with occurring with imperatives and the subjunctive, *hai* may also occur with the 'that' finite clause.

(45) Hai cã iar am greşit/s-a greşit! (H2007, 26a)

hai that again have-I erred/ARB-se has.erred.

'Damn, I messed it up again. /Right, it has been messed up again.'

When occurring with the 'that' clause, *hai* has what Hill (2007) calls "evaluative meaning," or E-meaning, which indicates to the addressee the speaker's attitude toward the proposition (depending on the context, Hill gives translations such as 'damn', 'really', 'right', and so forth).

As the following Table indicates, *hai* and *haideţi* have either the injunctive or the E(valuative) reading depending on whether it occurs with an imperative/subjunctive (injunctive), or with the 'that' clause (E). The other inflected forms, *haide* and *haidem*, only have the injunctive meaning.

Table 2. The forms and interpretation of *hai*(*de*) (Hill 2007).

Form	Speech act		Person			Number	
	Injunctive	E	1	2	any/generic	sg	pl
Hai	+	+	+	+	+	+	+
Haide	+	–	–	+	+	+	–
Haidem	+	–	+	–	–	–	+
Haideţi	+	+	+	+	–	+	+

We can see that the uninflected *hai* may be used across both speech acts, person, and number, while *haide* is limited to the injunctive option, 2nd person, specific/generic, and singular. *Haidem* is also limited to injunctives and 1st person plural inclusive, which means that it has the meaning 'we' that includes the addressee, while *haideţi* may be used for both injunctive and E, for 1st and 2nd person, and singular and plural. I will give examples for some of these below from Hill (2007) and Haegeman and Hill (2014).

Hai

(46) Hai că deja avem o medalie. (H&H2014, 13b)

HAI that already have-1PL a medal

'We already have a medal.' (evaluation; relief; satisfaction)

Haide

(47) Haide sã-mi vezi casa! (H2007, 25f)

HAI-2SG SUB me-DAT see-2SG house-the

'Come to see my house!'

Haidem

(48) Haidem să începem lucrul! (H2007, 25d)

HAI-1PL SUB start work

'Let's start the work!'

Haideţi

(49) Haideţi c-ati întârziat, ce mai! (H&H2014, 26b)

HAI-2PL that have-2PL been-late what else

'Obviously you are late!'

Two of the *hai* forms (*hai, haideţi*) may signal a certain style or registry of speech. The nonagreement form *hai* signals colloquial as opposed to literary style. *Haideţi* addressed to one person, hence with singular agreement, means a form of politeness, while *haideţi* addressed to two or more people, thus plural in agreement, is neutral for formality.

In the examples (46) – (49), a *hai* form occurs directly with the 'that' clause or an imperative; if there is agreement in the lower clause, the *hai* form either agrees with it or is in the nonagreement *hai* version. Does this mean that the agreeing *hai* form always matches the agreement of the lower clause? The following example shows that it does not.

(50) Vai fetelor haideţi că nu e bine. (H&H2014, 20e)

VAI girls.the.VOC HAI.2PL that not is good

'Ah-ah, girls, this is not good, really.'

This sentence begins with the speaker-oriented indirect pragmatic marker *vai*, glossed as 'ah-ah'. This is followed by the vocative 'girls', and *haideţi* is agreeing with this vocative as 2P, PL, because vocatives refer to the addressee, thus 2P. This means that an agreeing *hai* form may agree with the lower agreement or it may agree with a vocative phrase independent of the lower agreement. The latter possibility is shown below (Virginia Hill, personal communication).

(51) Vai fetelor haideţi că nu ne plac dulciurile.

VAI girls.the.voc HAI.2PL that not to.us like.3PL sweets

'C'mon girls we don't like sweets.'

While the lower clause has the 3PL agreement, *haideţi* inflects for 2PL and it agrees with the vocative 'girls'.

5.1. *Hai* and the SAP

The pattern of agreement across various forms of *hai* is that, if it agrees, the target of agreement is either 1st person or 2nd person. As we saw from Chapter 2, based on such languages as Basque, Japanese, and Romanian, this is indicative of an agreement system that targets the representation of the speech participants. As argued in Miyagawa (2012a, 2017), this agreement, which requires the representation of

speaker and addressee in the syntactic structure to implement, provides support for what Speas and Tenny (2003) proposed.

Hill (2013), following this idea of mapping allocutive agreement to the SAP, suggests that the agreement exhibited by the various *hai* forms are instances of the kind of agreement we find in Basque and other languages. The *hai* forms occur where one would expect if they are a part of the SAP — above the CP. We saw this in the earlier examples, one of which is repeated below.

Haideţi

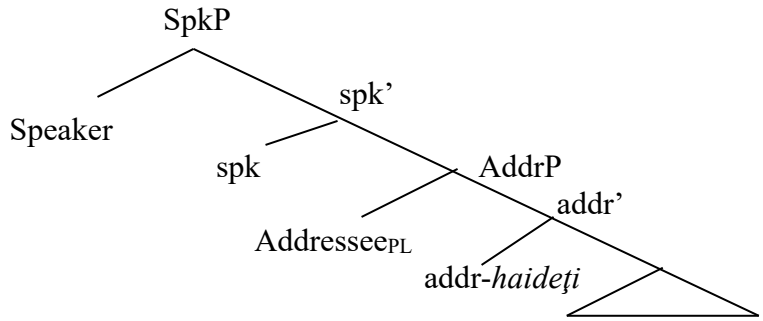
(52) Haideţi c-ati întârziat, ce mai! (H&H2014, 26b)

HAI-2PL that have-2PL been-late what else

'Obviously you are late!'

Haideţi, which in this case inflects for 2nd person, plural, occurs above the 'that' complementizer. Staying with this example, Hill's (2013) proposal is that *haideţi* occurs on a head in the SAP whose specifier hosts the addressee representation, in this case with the plural feature (her analysis is based on the structure proposed in Speas and Tenny 2003; I have changed the structure to the one I have adopted for the present study).

(53)



Haideţi here is 2nd person, plural, which is the same as the agreement on the auxiliary *aţi* 'have-2PL'. The reason for this equivalency is that the addressee is a pronoun with the features 2PL, and this pronoun is coindexed with the subject pronoun of 'have' with the same 2PL features. While I agree that *haideţi* here must end up at the head associated with addressee, I will suggest below that it originates lower in the structure.

Since addressee is unpronounced, how can we tell that *haideţi* is at the head whose specifier contains the addressee, as indicated here? We can see that *haideţi* is the head of the specifier with addressee by inserting an overt vocative into the addressee position, an example of which we saw earlier, repeated below.

(54) Vai fetelor haideţi că nu e bine. (H&H2014, 20e)
VAI girls.the.VOC HAI.2PL that not is good
'Ah-ah, girls, this is not good, really.'

As shown, *haideţi* follows the vocative 'girls,' indicating that the vocative, which is in the addressee position, is in the specifier of the head *haideţi*.

As it turns out, the *hai* form may occur after the vocative/addressee, as we just saw, or it may precede it (Hill 2007).

(55) Vai, (hai) mă (Ioane), (hai) că nu te crede nimeni! (H2007, 38c)
oh HAI you Ion HAI that not you believes nobody
'My god, Ion, give it up, nobody believes you!'

As Haegeman and Hill (2014) suggest, this second possibility of occurring before the vocative/addressee likely shows that the head with the *hai* form can optionally move to the position higher in the structure above the vocative/addressee. This looks at first to be a reflection of Speas and Tenny's idea that the "sa" head moves to a position higher than the addressee. In their case this head movement allows further projection in order to project for the speaker. Note, however, that in this example, there is an independent head *vai* for the speaker even when *hai* occurs above the addressee/vocative. This suggests that this movement of the head is optional and it is to a position above the addressee/vocative, but not as high as the head that projects for the speaker. This movement also appears not to have any effect on the interpretation. Importantly, there is an independent head for the speaker that is merged above the addressee projection. This provides further evidence, contrary to Speas and Tenny, that there is an independent head for the speaker projection (Hill 2013). I will assume this going forward.

5.1.1. Injunctive and evaluative readings

We saw that there are two types of readings associated with *hai*, the injunctive and the evaluative readings.

Injunctive readings of hai

(56) *Haide*

Haide	sã-mi	vezi	casa!	(H2007, 25f)
HAI-2SG	SUB me-DAT	see-2SG	house-the	

'Come to see my house!'

E-reading of hai

(57) *Haideţi*

Haideţi c-ati întârziat, ce mai! (H&H2014, 26b)

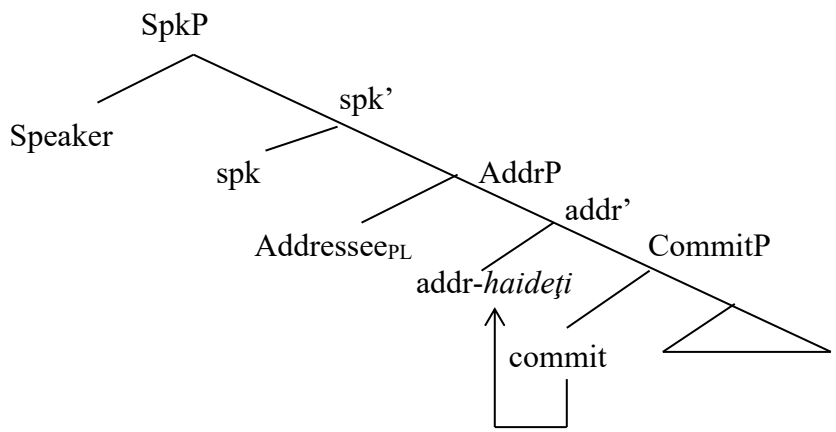
HAI-2PL that have-2PL been-late what else

'Obviously you are late!'

In (56), the *hai* form *haide* occurs with an imperative and it has the injunctive form, which has the effect of amplifying the speech act of directive. In (57), the *hai* form *haideţi* has the E-reading, which is the sole reading possible with the 'that' clause in this type of construction.

Based on the analysis of Japanese *yo*, which expresses certainty by amplifying the commitment to the speech act, a reasonable hypothesis for Romanian is that the injunctive use is associated with CommitP, since the *hai* form with this reading amplifies the commitment to the speech act as well.

(58) Injunctive



As shown, *haideţi* begins in CommitP, just like *yo* in Japanese. Unlike Japanese, this *hai* form raises to the head associated with the addressee, and agrees with it in person and number. I will remark on the significance of this movement later.

What about the evaluative reading, which is the only possible reading for *hai* in the example provided when occurring with the 'that' clause? There are two issues to consider here. First, why does this use of the *hai* form only have the evaluative reading? Note the example below (Virginia Hill, personal communication).

(59) Hai ca e frumoasa.

HAI that is pretty

This sentence can have a variety of meanings depending on the situation, all describable as evaluative readings: "Ok, she's pretty; she's pretty, no doubt; in my opinion, she's pretty; she's pretty, really; see, she's pretty; she's pretty, eh..." Importantly, there is no possibility of this *hai* form taking an injunctive reading or any reading that amplifies the speech act.

Second, what is the relationship of the *hai* form to the 'that' clause? This is the combination that limits the *hai* form to the evaluative reading. As it turns out, there is a direct correlation here: a 'that' clause must have the *hai* form, which means that the *hai* form selects the 'that' clause. In contrast, there is no such restriction with the imperative.

(60) Fetelor sã veniti imediat.

girls.the.VOC SUB come.2PL immediately

'Girls, come immediately.'

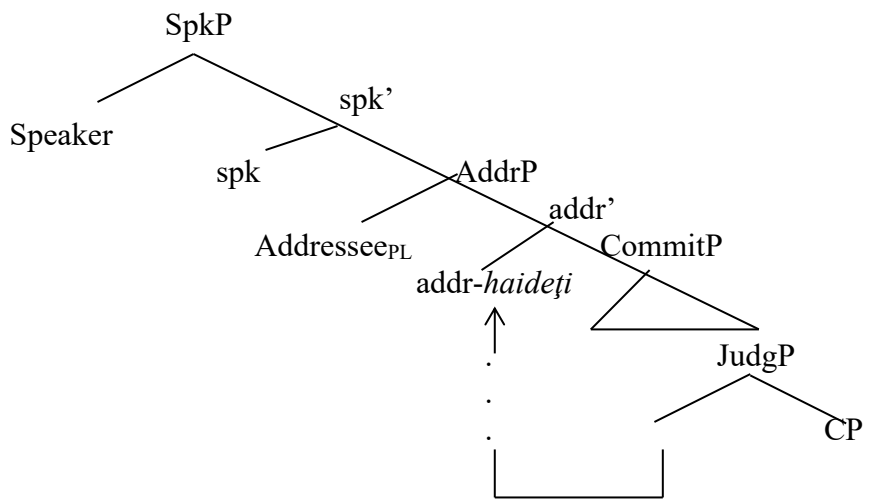
(61) Fetelor *(haideţi) că nu ne plac dulciurile.

girls.the.VOC HAI-2PL that not to.us like sweets.the

'Girls, we dont like sweets.'

While the imperative in (60) is free to occur without a *hai* form, (61) shows that the 'that' clause must be accompanied by a *hai* form. The most direct way to capture this connection between the *hai* form and the 'that' clause is to say that this *hai* form selects the 'that' clause. This means that the *hai* form here occurs in the C-system, similar to *-na* of *kana* and *sira-/i* in Japanese. Just as we suggested for these Japanese SFPs, I suggest that the evaluative reading associated with this *hai* form originates as a Judgement head.

(62) Evaluative



The fact that this *hai* form selects the CP puts it in the Judgment Phrase, which accounts for this *hai* form only being associated with the evaluative reading. The evaluative reading expresses an attitude by the speaker towards the proposition, and this is precisely what belongs in the Judgment Phrase.

Just as we saw for the *hai* form associated with CommitP, *haideţi* moves to the addressee head. Note that this is different from the Japanese *kana* and *sira*/*i*. While originating in the Judge head just like *haideţi*, these Japanese SFPs move to the speaker head, not to the addressee head. In fact, this difference leads to a difference in the expressive nature of these two types of particles. For *haideţi* here, Hill (2007) specifically describes it as having an evaluative meaning, which indicates to the addressee the speaker's attitude toward the proposition. The important point here is that the addressee is always the target of this evaluative reading in Romanian. But in Japanese, -*na* and *sira*/*i*, which also have an evaluative-type meaning, raise to the speaker head. And indeed, utterances with these items need not be directed to the addressee; they can even be statements that the speaker utters to oneself, or thinks in his/her head. Clearly, the difference in agreement between Japanese and Romanian for the same evaluative item that begins in the C-system has consequences for the speech act.

The final point about the E-reading and the 'that' clause is, as noted earlier, that the *hai* form can optionally move above the vocative.

(63) Haideţi fetelor că nu ne plac dulciurile.
HAI-2PL girls.the.VOC that not to.us like sweets.the
'Girls, we dont like sweets.'

Although this appears at first blush to be a counterexample to the idea that the *hai* form that selects the 'that' clause must be adjacent to it, as Haegeman and Hill (2014) note, this movement of the *hai* form is strictly optional and it has no effect on the

interpretation. I assume that this movement occurs post-syntactically, where it has no effect on issues such as selection.[2]

As we saw, the sentential particle *hai* in Romanian parallels many of the properties that we saw for SFPs in Japanese, both in meaning and in structure. In turn, the *hai* form provides further evidence for the kind of speech act structure I have proposed, based on the works of Speas and Tenny (2003), Krifka (e.g., 2019b), Wiltschko (2017), and Witschko and Heim (2016).

6. SFPs and the language of autistic children

I will now return to Japanese SFPs, in particular, to the confirmation SFP *ne* and the certainty SFP *yo*. As I argued earlier, *ne* occurs in the SAP as the head of the addressee projection, while *yo* occurs in the CommitP directly below the SAP and above the C-system. In this section, I will look to see if this two-layer structural analysis is reflected in the linguistic behavior of young autistic children.

In typically developing children, SFPs start to appear quite early in acquisition. For example, *ne* and *yo* appear between the ages of 1.5 to 2 years of age (Nagano 1959). By 2 years of age, most of the common SFPs are acquired, with *yo* constituting about 46% of total SFPs uttered and *ne* constituting 14% of total SFPs (Yokoyama 1992). Together, *yo* and *ne* make up the two most common SFPs in the language from early on.

Autism specialists have observed that linguistically high-functioning young people with autistic spectrum disorders (ASD) tend not to use SFPs, their utterances resembling the telegraphic style of speech (Sadake and Kobayashi 1987). In one study, Watamaki (1997) looked at the linguistic behavior of a pre-school six-year old high-functioning child with ASD and compared him/her to a five-year old with intellectual

disability but linguistically high-functioning. A recording was made of each child conversing with his/her mother for one hour. While the child with intellectual disability uttered both *ne* and *yo* frequently, strikingly reflecting numbers that resemble typically developing children, the child with ASD did not utter *ne* even once, and *yo* only three times. Later we will look in detail at a study by Matsuoka et al. (1997) that also establishes that children with ASD hardly use *ne* and *yo*, but when trained their usage at least of *yo* changes dramatically.

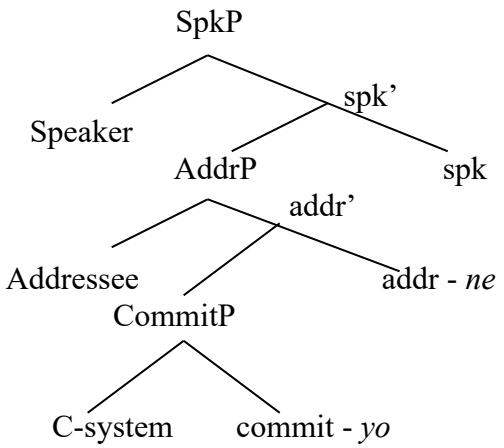
Autism is characterized by abnormalities in social interaction and communication, including language development, and is often classified together with disorders that are very similar, such as Asperger syndrome, as autistic spectrum disorders (ASD). ASD are observed even prior to language use, as in a 12 month old, who "show reduced eye contact, social smiling, social interest...reduced responding to bids for joint attention..." (Tager-Flusberg 2010, referring to work by Nadig et. al. 2007, Ozonoff et al. 2010, Presmanes, Walden, Stone, and Yoder 2007, Zwaigenbaum et al. 2005). ASD are evident in language use when a person with ASD interacts with an addressee. Typical behavior such as turn taking, sharing information, and asking for confirmation is virtually missing in the language use of people with ASD. Watamaki (1997), in explaining the absence of the SFP *ne* in the language of children with ASD, suggests that this SFP expresses empathy on the part of the speaker for the addressee. This empathy can be detected in the speaker's desire for the addressee to confirm the truthfulness of a statement or the answer to a question, giving the addressee the benefit of being the source of the knowledge (see also Sadake and Kobayashi 1987). This kind of pragmatic act of establishing a connection with the interlocutor is often absent in those with ASD, and it is the reason for the absence of *ne* in their speech, as observed by Watamaki (1997). Another example where children

with ASD showed difficulty with the pragmatic aspects of language is noted by Baltaxe (1977), who observed that German children with ASD confused the polite and familiar forms of address, *Sie* and *Du*.

6.1. Structural positions of *ne* and *yo* and ASD

Endo (to appear), following Watamaki (1997), suggests that the absence of *ne* in children with ASD reflects their inability to establish a social connection with the addressee in an appropriate manner. Let us consider this in the light of the structural analysis of *ne* proposed in this chapter. As I have argued, *ne* is the head of the Addressee projection (see Endo 2010 and Saito 2015 for earlier proposals along this line).

(64)



According to this structure, the use of *ne* is predicated on the speaker making meaningful connection with the addressee, something those with ASD are challenged with both verbally and non-verbally. There are a number of ways to consider this issue relative to the structure we see above. Is it that the SAP, at least for the addressee part, is inoperative; or is it that the SAP is operative but the pragmatic knowledge required to access it is absent? We will look at Matsuoka et al. (1997),

which may hold a key to answering this question. Looking more broadly at the structure, *yo* is not part of the SAP, but rather it is in the CommitP. This would predict an asymmetry in the behavior of children with ASD with regard to *ne* and *yo*, something we will see with Matsuoka et al. (1997) as well.

6.2. Matsuoka et al. (1997)

Sadake and Kobayashi (1987) showed that a participant with ASD who did not exhibit use of SFPs can be taught to use them with training. Matsuoka et al. (1997) extended Sadake and Kobayashi's study considerably by working with a participant with ASD who was seven years and two months old and enrolled in first grade. The participant's mental age was evaluated to be five years and six months. As with the participant in Sadake and Kobayashi's (1987) study, the participant in Matsuoka et al. (1997) also did not use SFPs prior to the study.

Matsuoka et al. (1997) conducted their first study (Experiment 1) over a six-month period, for one hour a week, and involved the participant and two testers in a facility with two rooms. In one room, there was a variety of sports equipment to play with, such as a basketball, soccer ball, and baseball. The participant would first play with one of the testers who was present in this room, then the participant was asked to go into the other room to tell the tester who was waiting there what game was played. In one situation, the tester was the same one who had played with the participant, and in the other situation, the tester had not played and was in the second room from the beginning. To establish a baseline, the participant was first asked to tell the tester who played with them the game that they played; then the participant was asked to do the same with the tester that did not participate in the game. In both cases, the participant simply said "I played such-and-such" without any SFP. The absence of an SFP was

expected for the participant with ASD. After establishing the baseline, the scenario was repeated, but with the tester who played with the participant prompting them to use *ne*, and the tester who did not play with the participant prompting them to use *yo*. Over time, the participant began to use the two SFPs with the prompt, at first only about 25% of the time, but by the end of the six months their performance had improved to 100%, demonstrating that with assistance the participant with ASD could learn to use the SFPs. A concern with Experiment 1 is that the participant may simply be repeating the prompt provided by the tester, and this ability to repeat is what improved over the six-month period.

In the second experiment (Experiment 2), the researchers attempted to address the concern just noted by devising a method that did not require the tester to give a verbal prompt. Just as in Experiment 1, the participant first played a game in one room. Then instead of reporting this to a tester, the participant was shown a board with pictures of the two testers: one who the participant played with, the other who did not participate in the game. The participant was given two cards, one for *ne*, the other for *yo*, and was asked to place each card by a tester. Right away, an interesting phenomenon occurred. To get a baseline, the participant was asked to complete the task without any training. In this situation, the participant was able to place the *yo* card correctly, yet they ignored the *ne* card. This demonstrated that they had retained the usage of *yo* from Experiment 1, but had lost the usage of *ne*. Then, over an eight-month period, the participant was trained once a week, until their performance reached 100% for *ne* as well as *yo*.

In the final phase of the study, the researchers went to observe the participant at home, spending 75 minutes a week in their home for five weeks. During this observation period, the participant interacted with his/her parents, as well as their

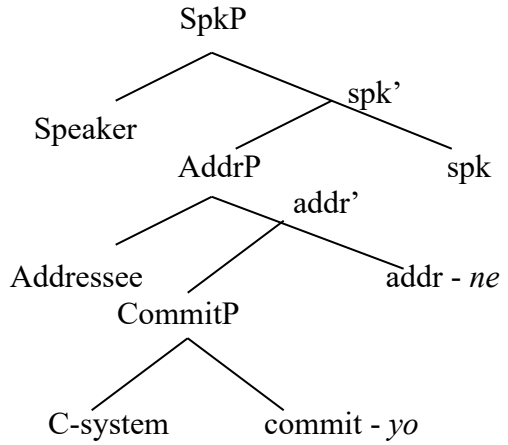
siblings. The participant produced 271 occurrences of *yo*, while they produced *ne* just four times. Another item *desyoo?*, which in function is similar to *ne*, appeared 21 times. However, since *desyoo?* is not an SFP, nor was there any training for it in the earlier experiments, I will set it aside. What we see in this final phase of the study is that the participant clearly retained the use of *yo* from the earlier experiments, something we saw as the baseline for Experiment 2, carrying over from Experiment 1. On the other hand, the dearth of their usage of *ne* shows that this SFP did not get retained in any meaningful way, even after two lengthy trainings. There were four instances of *ne*, however it is possible that these were prompted by its usage by the addressee, just as we observed in Experiment 1, in which case we would not consider them as examples of the natural occurrence of *ne*.

There are a couple of questions we can ask about the experimental results we just observed. First, why is it that the participant with ASD did not use either *ne* or *yo* before the study? Second, why is it that, after intensive training that lasted 14 months over two experiments, the participant retained the use of *yo* but not *ne*?

As an answer to the first question, we have already noted that the use of *ne* requires the speaker to establish an empathetic relation with the addressee in order to share information, and this kind of social interaction is typically missing, or highly reduced, in people with ASD. What about *yo*? In a broad sense, *yo* also requires the presence of the addressee, in the sense that the speaker is amplifying the speech act of the expression to convey to the addressee. In this regard, *yo* is not commonly employed if the speaker is only speaking to himself/herself without an addressee. The absence of *yo* in the natural speech of the participant with ASD indicates that any pragmatic marker that specifically requires the presence of the addressee may not be deployed.

To try to answer the second question — why is only *yo* retained after training? — let us again look at the proposed structure for *ne* and *yo*.

(65)



If this is correct, *yo* is not dependent on a syntactic representation of the addressee, so that its usage is primarily tied to the CP and its speech act. What the speaker must know is that *yo* amplifies the commitment to the truthfulness of the proposition (for assertions). For *ne*, the crucial relationship is the addressee in the representation, in the sense that *ne* can only be used when it is understood to be expressing a direct relation to the addressee. This is precisely what people with ASD have an issue with — the ability to socially interact appropriately with the addressee. There are a number of ways to capture this. One possible view would be that those with ASD simply lack the addressee representation of the SAP. I do not have any ASD data on speaker-oriented SFPs, but if they turn out to behave similarly to *ne*, one could, on this view, speculate that SAP as a whole is either missing or only functional in some bare minimum fashion in those with ASD. Let us call this the "SAP deficit hypothesis." I have no way to tell whether such a view is warranted. It has been observed that at least some people with ASD improve over time, so that in some cases, the major traits

that characterize ASD are no longer as noticeable. If it turns out that people with less noticeable ASD characteristics are able to correctly use *ne* as well as *yo*, then a possible view is that the SAP in young children with ASD is not as well formed as in those without ASD, but that with experience and maturity it does develop into an operative layer of syntax. Let us call this the "SAP maturation hypothesis."

How can we decide on the right view of the SAP relative to young children with ASD? Is the deficit hypothesis, which considers SAP to be entirely absent, the correct view; or is the correct view the maturation hypothesis, which says that the SAP is there to begin with, but is underdeveloped, and with time and experience it emerges as a functional layer of syntax? One possible way to decide between these two views is to observe the verbal behavior of adults with ASD to see if they are able to use *ne*. For a variety of reasons, it would be difficult to determine the answer, even if we had adult data, without also having longitudinal data that show what the verbal behavior of these adults was like as a child. If as a child, he/she did not use *ne* in any meaningful way, but began to acquire its usage in time and *ne* appears with meaningful frequency in the adult language, we can go with the maturation hypothesis. I will keep this question open for future research.[3]

7. Conclusion

In this chapter we looked at sentential particles, focusing primarily on Japanese, but also referencing the *hai*(*de*) sentential pragmatic marker in Romanian. We observed that SFPs in Japanese are root phenomena, their distribution reflecting Emonds's (1970) original conception of the root. This characterization puts SFPs in the same distribution as the politeness marker, and we saw places where the two interact. As pragmatic markers, SFPs have prominent expressive power, much more

so than comparable mental-state verbs. Though equally expressive, I argued that SFPs do not all occur in the same projection. Instead, I argued that there are two levels above the extended C-system: SAP and CommitP, following the work of Speas and Tenny (2003), Krifka (e.g., 2019b, 2020), Wiltschko (2017), and others. The SAP hosts the speaker and addressee projections, and the addressee-oriented *ne*, for example, heads the addressee projection and functions to pragmatically link the expression to the addressee. Below the SAP is CommitP, which hosts, for example, the certainty *yo*, which amplifies the assertion or the imperative speech act of the expression. One piece of evidence for this two-layer hypothesis is that *yo* and *ne* may co-occur, but only in the order *yo-ne*, with *ne* occurring structurally higher than *yo*. A particularly compelling support for the two-layer structure of SAP and CommitP came from the Romanian *hai*(*de*). The *hai*(*de*) form often inflects for person and number, and for person it is most commonly 2nd person, a sign that it is allocutive agreement that occurs on the head of the addressee projection, similar to what we saw in Basque in Chapter 2. While the *hai*(*de*) that agrees in 2nd person may originate in the head of the addressee projection, there is evidence that in some cases it starts lower, in what I have called the Commitment projection. When it does, it must raise to the addressee head in order to agree, and this movement excludes certain possibilities that *hai*(*de*) that occurs directly on the addressee head does not. We also saw sentential particles in both Japanese and Romanian that begin even lower than CommitP, in the extended C-system, in a layer comparable to Krifka's (2019b) Judgment Phrase. These particles belong to this lower structure for selectional purpose, but functionally they are part of the expressive component. We saw that each of these particles, in Japanese and Romanian, originates in the C-system but obligatorily raises into the SAP to be part of the expressive component of the

utterance. Finally, we looked at the speech of young children with Autistic Spectrum Disorder. In experiments reported in the literature, there is an asymmetry between *yo* and *ne*; an asymmetry that could be conceived as reflecting the two-layered projection of SAP and CommitP.

Chapter 4

Is the Judgment Phrase needed? A view from topicalization

1. Introduction

In Chapters 2 and 3, we saw that Emonds's (1970) original conception of the root couched in recent proposals by Speas and Tenny (2003), Krifka (2017, 2019b, 2020), and Wiltschko (2017) and Wiltschko and Heim (2016) correctly predicts the distribution of politeness marking and sentence final particles in Japanese. The reason for this is that Emonds's idea of the root was correct, but ironically, the data he gave, which are the result of applying what he called Root Transformations (RT), were not. Instead, we saw that the distribution of the politeness marking and the sentence final particles showed that Emonds's root identified the constructions in which the Speaker-Addressee Phrase (SAP) occurs, because politeness marking and sentence final particles in most cases depend on the occurrence of the SAP. Without the SAP, these linguistic elements cannot occur, and it is precisely those constructions excluded by Emonds's root definition in which these linguistic elements fail to appear. These questions remain: what is the nature of the RTs that Emonds proposed as empirical evidence for his conception of the root; and what defines their distribution if they do not reflect the notion of root as defined by Emonds? In this chapter, we will look in detail at one such RT: topicalization. As is well known, the occurrence of topicalization is broader than what is defined by root, and as we will see, the distribution varies from language to language. I will argue that an idea that Haegeman (2003, 2012) proposed for topicalization together with what I have called Strong

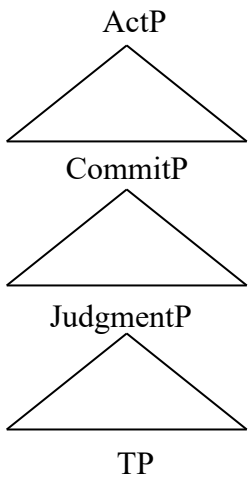
Uniformity (Miyagawa 2010, 2012a, 2017) predict the distribution of topicalization across different types of languages: English-type vs. Japanese/Spanish-type.

I will begin with a discussion of a recent approach to topicalization in German by Frey and Meinunger (2019), which adopts Krifka's proposal (2017, 2019b). Their study in many ways captures the essence of what I wish to propose for topicalization, albeit with differences that arise from looking across languages very different from German, and from the perspective of a proposal that not only incorporates Krifka's ideas, but also that of Speas and Tenny, and Wiltschko, as well as my own from earlier studies relevant to issues of topicalization. I will focus in particular on the proposal by Krifka (2020) to include Judgment Phrase into the kind of structure we have been looking at. Although I incorporate much of Krifka's ideas, I will refrain from adopting the idea of Judgment Phrase as a structural layer that always occurs along with the SAP, CommitP, and C-system. There are times when an element does project what I have called the Judgment Phrase, as in the case of certain sentential particles. But those are cases specific to those elements; in other cases, a Judgment Phrase need not occur. Judgment Phrase, and other elements that can occur in the same position, are all part of the extended C-system. As we will see, Topic Phrase is one such element as well.

2. Topicalization in German

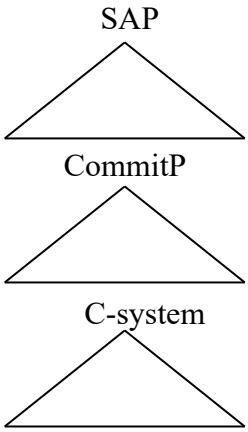
Frey and Meinunger (2019) give support for Krifka's (2017, 2019b) multi-layered structure.

(1)



Their arguments rest on the observation that there are topic constructions that require an illocutionary force layer (ActP), others that require JudgmentP, and finally, a topic construction that occurs lower in the structure than JudgmentP (in TP) so that it does not require any kind of special projection above the core proposition. I will adopt many of the ideas from their work, including the idea that ActP — what I am calling the SAP — is the locus of the illocutionary force of the expression, an idea earlier noted by Krifka (2014, 2015). Another idea I will adopt is that what corresponds to JudgmentP does not require any association with the illocutionary force, but rather what occurs in this layer is directed principally to the proposition. Finally, I will support the idea that there are topicalizations at different levels of the structure. Beyond these points, I will present a different perspective based on the Expressive structure I have proposed, which is grounded in a combination of Speas and Tenny (2003), Krifka (2017, 2019b, 2020), and Wiltschko (2017) (see also Corr 2016, Wiltschko and Heim 2016).

(2)



Instead of adopting JudgmentP, I assume that what Krifka proposed for this layer is in fact a part of the extended C-system and this extension can include judgment items such as some sentential particles that we looked at in Chapter 3. I will propose that the typical topic construction also involves an extension of the C-system, and will adopt the TopP analysis in Chomsky (1977), in which the Top head selects a CP, thus extending the basic CP in a fashion that later was expanded substantially by Rizzi (1997) to include other projections within an articulated C-system. Finally, I will assume that the SAP and the CommitP together comprise the Expressive component of the utterance, while the C-system comprises the proposition component of the utterance. If an item occurs in the extended C-system for some reason, for example, a selectional requirement, but it does not comprise a part of the proposition, the item moves out of the C-system into the Expressive component. We saw this with some sentential particles in Japanese and Romanian, which began as heads selecting CP — thus starting out as being in the extended C-system, then raising to the SAP to agree with either the addressee or the speaker representation because of their function in the expressive component. Thus, these items have a dual nature: they are initially a part of the C-system, but in function they are a part of the expressive component.

What about topicalization? Frey and Meinunger (2019) (henceforth F&M) argue that topicalization is associated with a judgment meaning: they note that topic "is a judge who conceives of a property as being prominently related to a certain object, which can be identified independently of the property" (p. 101). They further point out, "[i]n the case of an assertion involving topic marking with a proposition φ, the speaker intends that it is recorded in the Common Ground that he relates the open φ to the referent of the topic" (Ibid.). But this is not so clear. For example, a construction with a *wh*-phrase also involves a proposition φ, and the open φ is related to the *wh*-phrase, yet we would not consider a *wh*-question as belonging to the Judgment layer. Furthermore, we will see forms of topicalization that occur in TP, including a topic construction in German studied by F&M; by being inside the TP, it cannot be conceived as being a part of the JudgmentP. For these reasons, I will argue that the typical topic construction is an extension of the CP, as we find in Chomsky (1977) and Rizzi (1997), and furthermore, I will assume that it is part of the C-system throughout the derivation.

F&M consider four types of topicalization: (i) aboutness topic with the particle *jedenfalls*, (ii) German left-dislocation (to distinguish it from the familiar left dislocation in English), (iii) German hanging topic, and (iv) right dislocation.

Aboutness topic with the particle jedenfalls

(3) Heute wird Hans jedenfalls glücklicherweise helfen.

today will Hans for.one luckily help

German left-dislocation topic

(4) Den Hans$_1$ den$_1$ mag jeder t$_1$

the-ACC Hans ResP-ACC likes everyone

German hanging topic

(5) Hans, jeder mag ihn.

Hans everyone likes him

Right dislocation

(6) Maria hat ihn heute in der Stadt getroffen, den Chef.

Maria has him today in the city met the-ACC boss

The aboutness topic accompanied by the particle *jedenfalls* in (3) occurs in the middle field, above the position of sentential adverbials; only the aboutness topic occurs in this position (Frey 2004). German left-dislocation topic dislocates a DP from its original position, as shown in (4); the core clause contains a resumptive pronoun, which is a weak d-pronoun that is co-referential with the dislocated topic DP. The function of this construction is said to mark a sentence topic (e.g., Altmann 1981, Jacobs 2001, Grohmann 2003, Frey 2005). The German hanging topic illustrated in (5) has a topic phrase and a personal pronoun that is co-referential with the topic. Frey (2005) argues that this construction has the function of establishing a new discourse topic. Finally, right dislocation in (6), which is sometimes viewed as a topic marking construction (e.g., Frascarelli and Hinterhölzl 2007), is precisely as the label says — a dislocated phrase in the right edge, in the so-called post-field, with a pronominal element within the clause that is co-referential with it. Below, I will first discuss what

F&M call "root sensitivity," then summarize their analysis of the various topic constructions.

There are elements that can occur in the root environment, in the complement of a limited set of predicates such as *think*, and in what Haegeman (e.g., 2003, 2012) calls peripheral adverbial clauses. F&M call such elements "weakly root-sensitive," because an element in this set occurs in roots and in other limited environments that do not require it to be in the presence of illocutionary force. One example of a weakly root-sensitive item is the unstressed modal *ja* (e.g., Thurmair 1989, Coniglio 2011).

(7) Fritz kommt ja gleich.
Fritz comes MP soon

(8) Maria meint, dass Fritz ja gleich kommt.
Maria thinks that Fritz MP soon comes

(9) a. Maria ist aufgeregt, da Fritz ja gleich kommt.
Maria is nervous since Fritz MP soon comes
b. Maria ist aufgeregt, obwohl Fritz ja gleich kommt.
Maria is nervous although Fritz MP soon comes

Example (7) shows the occurrence of *ja* in the main clause, and in (8) we see that it can occur in the complement of *think*; other predicates that allow its complement to hold *ja* are other doxactic verbs, non-negated verbs of saying, and verbs of perception. Example (9) shows two instances of peripheral adverbial clauses, which are

considered as not being a part of the main clause semantically or syntactically, and we see that *ja* is also possible in these clauses.

In contrast, *ja* cannot occur in the complement of inherently negative verbs, factive verbs, or in what Haegeman calls central adverbial clauses, which are semantically and syntactically incorporated into the main clause. I will discuss this, as well as peripheral adverbial clauses, later in the chapter. Examples (10) and (11) illustrate a factive verb and a central adverbial clause, respectively.

(10) *Maria bedauert, dass Fritz ja gleich kommt.
Maria regrets that Fritz MP soon comes

(11) *Maria war aufgeregt, als Fritz ja kam.
Maria was nervous when Fritz MP came

According to F&M, *ja* as a modal element "presupposes a judgment... [in the sense that] the status of a proposition relative to the [Common Ground] is evaluated and it is expressed that the proposition is assumed to be in principle available" (p. 122). They then make the proposal that an element such as *ja* requires the judgment layer of the structure from Krifka's proposal, and the constructions that allow *ja* all have this layer, while those that do not require the judgment layer, such as the complement of factive predicates and central adverbial clauses, do not allow *ja* to occur. See Frey and Meinunger (2019) for an extensive discussion of this and related issues, including other works relevant to their analysis.

With the analysis of JudgmentP in place, F&M show that two types of topicalization in German, the aboutness topic with the particle *jadenfalls* and German

left dislocation, have the same distribution as *ja*, suggesting that these topicalizations occur in the JudgmentP. I will demonstrate this for the aboutness topic.

(12) Maria denkt, dass [Fritz jedenfalls] kommen wird.
Maria thinks that Fritz for.one come will
'Maria thinks that Fritz for one will come.'

(13) Während mich Fritz jedenfalls freundlich gegrüßt hat, ist
while me Fritz for.one friendly greeted has has
Maria grußlos vorbeigegangen.
Maria without.greeting passed.by

(14) *Maria leugnete, dass [Fritz jedenfalls] kommen wird.
Maria denied that Fritz for.one come will

(15) *Als Fritz jedenfalls freundlich auf mich zuging, habe ich mich gefreut.
when Fritz for.one friendly up me to.came have I REFL been.glad

Example (12) shows that the aboutness topic can occur in the complement of the doxactic verb 'think,' while (13) shows that it can occur in the 'while' peripheral adverbial clause. In (14) we see that the aboutness topic cannot occur in the complement of the factive verb 'deny,' and as we see in (15), it also fails to occur in the 'when' central adverbial clause. In this way, the aboutness topic with the particle *jadenfalls*, as well as German left dislocation, are topicalizations that are weakly root-sensitive.

In contrast to the aboutness topic with *jadenfalls* and German left dislocation, the German hanging topic is strongly root-sensitive.

(16) A: Wir sollten auch Otto einladen.
we should also Otto invite
B: *Ja, auch weil Max gemeint hat, der Otto, dass er dabei sein sollte.
yes also because Max thought has the Otto that he thereby be should

The German hanging topic (GHT) cannot appear in the complement of a doxatic verb, 'think,' as we see in this example; the same restriction holds for the complements of other verbs that allow weakly root-sensitive items. Thus, GHT is what F&M call strongly root-sensitive topicalization, which means that it is restricted to those clauses that are associated with illocutionary force; in our view, these would be Emonds's root contexts. See F&M for further discussion of the GHT, including some exceptions to the idea that its distribution is governed by Emonds's root definition.

Unlike the topicalizations we have discussed, right dislocation is not root sensitive in any way, so that it is able to occur in virtually any context that we have observed; this is illustrated below for the complement of an inherently negative verb.

(17) Max hat verneint, dass sie vorbeigekommen ist, die Chefin.
Max has denied that she by.passed is the boss-FM

Right dislocation occurs lower than the JudgmentP, which means the TP, thus it does not require that the JudgmentP be present. It is therefore free to occur in a wider range of environments than the other topicalization constructions.

2.1. Issues with Frey and Meinunger (2019)

F&M assume that JudgmentP, where the weakly root-sensitive topicalizations occur, selects TP, and that JudgmentP itself is dominated by CP (p. 123). They suggest that the JudgmentP is missing in complements that do not allow a weakly root-sensitive topicalization, such as that of inherently negative verbs like 'regret,' (Ibid.).

(18) a. Allows weakly root-sensitive topicalization (e.g., complement of 'think')

CP → JudgmentP → TP

b. Does not allow such topicalization (e.g., complement of 'regret')

CP → TP

There are a number of issues that come up for this analysis, and although none are lethal by any means, I will suggest that there is a different approach to topicalization that can address them all.

The analysis I will present adopts the earlier proposal in Chomsky (1977), in which a topic head selects a CP, in a fashion that later was substantially extended by Rizzi (1997) into an articulated C-system. I will argue that it is this structure that hosts what F&M call weakly root-sensitive topicalization constructions. Thus, these topicalizations occur above the core CP, instead of immediately above the TP as in F&M's proposal. We will see a number of advantages to adopting this approach. In particular, I will show, based on earlier works by a number of linguists, particularly Haegeman (2003, 2012), that the effects of weak root sensitivity can be derived without having to assume a JudgmentP. I will show this by extending Haegeman's

competition approach, incorporating ideas and observations from Jiménez-Fernández and Miyagawa (2014), Meinunger (2004), and Villalta (2008).

What about the topicalization, such as right dislocation, that F&M suggest occurs inside TP, thus is free to occur in a wide range of complements? I will support their idea that this topic construction indeed occurs in TP, and it is for this reason that this topicalization has a wider distribution. However, there is one additional point that I will observe. Certain topicalizations, such as the contrastive topic, may be restricted in one language along the lines of F&M's weakly root-sensitive topics, but in other languages are free to occur across a wide range of complements, since in these languages they are able to occur inside the TP. What this suggests is that topicalization is not dependent on the occurrence of a JudgmentP. If it were, then any topicalization that is "weakly root-sensitive" in one language would be expected to have this property across languages, but that is not what we find. I will suggest that an approach that does not assume the existence of JudgmentP as an independent layer of structure can capture these cross-linguistic facts if we assume Strong Uniformity (Miyagawa 2010, 2017).

3. Topicalization: Basic issues[1]

Many languages have a way to mark the topic in a sentence.

(19) **This book,** I really like.

(20) a. **As for this book,** I really like **it.**

b. **This book,** I really like **it.**

Example (19) is typically called the topic construction, similar to the aboutness topic construction in German, though without any marking like *jederfalls*. Example (20) is referred to as left dislocation, similar to the German left dislocation we saw earlier. In both cases some sort of topic phrase is placed at the head of the sentence. We will refer to both as topicalization.

In Chomsky (1977), it is noted that no rule could create a structure such as *as for this book* within the core sentence (CP); hence the topic position must be outside of this core portion of the structure. He proposes it to be S", which we will translate into the more modern designation TopP, which occurs above CP (S' in the original work).

(21) TopP → Top CP

Furthermore, as observed by Sag (1976), the topic construction can occur in an embedded structure.

(22) I informed everyone that [this book, they should read by tomorrow].

To accommodate this fact, Chomsky further proposes the following (again we updated the labels to reflect modern terminology).

(23) CP → { C TP / C TopP }

Along with accounting for embedded topics, this rule, in combination with (21), allows for topic recursion (Chomsky 1977), of which (24) is an example.

(24) As for John, as far as this book is concerned, he will definitely have to read it.

In principle there is no upper limit on the number of topics allowed, although in practice, sentential meaning and other factors intervene to restrict the number. Typically, there is just one topic, but two are not impossible, as (24) shows.

F&M's proposal has in common with Chomsky's the idea that, in the complement, the CP projection dominates the topic construction. Unlike F&M, Chomsky's proposal assumes that the topic construction occurs immediately above CP, by the Top head selecting CP. F&M propose that this kind of topicalization occurs in JudgmentP, and following Krifka, they assume that the topic occurs immediately above TP, not CP. In the remainder of the chapter I will assume the approach in Chomsky (1977), which has many commonalities to F&M's proposal, but with differences that can more easily accommodate the data that we will examine from Japanese, English, and Spanish.

While I adopt Chomsky's (1977) analysis of topicalization, there are alternatives. Higgins (1973) and Bowers (1976), for example, argue that the topic is in [Spec, CP], not in a higher projection TopP. Our proposal is not incompatible with this approach, since the idea (as detailed in sections 4 and 5) is that, while the topic

itself is in TopP, in many cases there is an operator in [Spec, CP] that links the topic above it to a lower position inside TP. Rochemont (1989) argues that the topic is in [Spec, TP], an idea that I will pursue not for English, but for languages such as Japanese and Spanish. More recent analyses postulate a topic projection, such as Rizzi's (1997) and Haegeman's (2012) cartographic analyses. The analysis in this chapter is compatible in spirit with these works, though not necessarily in detail. I will not assume that all topics occur in a projection dedicated to topics, as the cartographic approach assumes. Instead, I will adopt an approach in which discourse-configurational features — such as topic and focus — appear on C in certain languages and on T in other languages, and the position of the topic feature dictates where the topic may appear. This analysis does not exclude a special projection for topics, since I will argue that TopP is dedicated to aboutness topics across all languages, and in some languages, to the other topics as well. However, we will see that in other languages, contrastive and familiar topics may appear in a projection other than TopP.

4. Topics associated and not associated with movement

The English topic construction is associated with movement (Chomsky 1977), as shown by the fact that it is sensitive to islands.

(25) a. This book, I really like.

b. This book, I believe Mary will assign to all her students to read.

c. *This book, I hope that Mary will see the need to assign to all her students to read.

d. *This book, I wonder who will read.

In contrast, another form of topicalization, left dislocation, ignores islands.

(26) a. This book, I hope that Mary will see the need to assign **it** to all her students to read.

b. This book, I wonder who will read **it.**

c. As for this book, I wonder who will read **it.**

It is reasonable to assume, from the occurrence of the resumptive *it* and the insensitivity to islands, that there is no movement involved in left dislocation. Presumably, the topic phrase is externally merged at [Spec, TopP] and the resumptive *it* is interpreted as co-referential with it (or with the DP inside it, in the case of *as for* _____). This is not a trivial matter: *it* being a pronoun, it should be free to refer to some entity outside of the sentence instead of the sentence-internal topic, but that would lead to a topic that is not obviously connected to the content of the sentence, making it extremely difficult if not impossible to know how to interpret it as a topic.

On the other hand, we saw that the topic construction shows properties of movement, such as having a gap and being island sensitive. Nevertheless, Chomsky argues that the topic expression itself (*this book*) is externally merged, just as with left dislocation. The movement that occurs, according to Chomsky, is a form of *wh*-movement; the *wh*-phrase that moves to [Spec, CP] is subsequently deleted.

(27) [$_{TopP}$ This book [$_{CP}$ *wh*$_i$ [$_{TP}$ I really like *t*$_i$]]]

The deletion of the *wh*-phrase leads to an open sentence and a rule of predication applies to the interpretation of the topic construction. F&M define the meaning of topics in a similar way.

Chomsky (1977) develops a theory in which movement, as an operation, is independent of any particular construction. As had been shown earlier by Ross (1967), movement is sensitive to islands regardless of the construction in which it occurs, and has other global properties, such as leaving a gap and being sensitive to bridge/non-bridge constructions. Chomsky argues specifically that the movement that occurs in a wide range of constructions — including *wh*-questions, relative clauses, clefts, comparatives, and the topic construction — is the same operation: *wh*-movement. Of these, the topic construction is exceptional in that a *wh*-phrase never actually emerges in it. While there is no doubt that some movement takes place, there is a question as to whether it is in fact *wh*-movement.[2] If it is *wh*-movement, there is presumably a +*wh* feature at C to attract the *wh*-phrase to its specifier. This is the solution opted for by Chomsky, as in (27).

In a more modern approach to *wh*-movement, such as Cable's (2010), it is not the +*wh* feature that attracts the *wh*-phrase, but what Cable calls the Q feature; the *wh*-phrase has a matching Q feature attached to it and is pied-piped along with that feature. The Q feature occurs with *wh*-phrases, and in some languages, such as Japanese and Tlingit, also with indefinites; these are expressions that we would expect not to topicalize under normal circumstances.

Chomsky's (1977) goal was to show that movement was an operation independent of any construction. He happened to call the movement in question *wh*-movement simply because many of the constructions exhibit a *wh*-phrase. Today, we would unify these movements as A'-movement instead of *wh*-movement specifically.

A'-movement is associated with some feature on C that attracts an XP. For true *wh*-movement, the feature is Q, according to Cable (2010). For the topic construction, I will adopt the idea from a number of works (e.g., Rizzi 1997) that the relevant feature on C is the topic feature, a kind of δ-feature (discourse-configurational feature), which attracts an empty topic operator to the specifier of CP.

(28) $[_{TopP}$ This book $[_{CP}$ OP_i C_δ $[_{TP}$ I really like $t_i]]]$

In the next section, I will show that topicalization exhibits a number of effects, all falling under the general theme of Relativized Minimality (Rizzi 1990). As we will see, the minimality violations carry over to what Frey and Meinunger (2019) characterize as weakly root-sensitive, much of which Haegeman (2003, 2012) has already shown. This, in turn, suggests that we need not postulate a Judgment Phrase to account for weak root sensitivity.

5. Minimality and topicalization

We saw above that the topic construction is subject to island effects. In this section, we will look at other constructions that, like islands, block topicalization.

An observation made in the literature is that topicalization itself may create an island. Under normal circumstances, topicalization blocks *wh*-movement.

(29) a. *To whom did **this book** Mary give?

b. *When did **this book** everyone read?

c. *Where did **this book** Henry buy?

In these examples, topicalization disallows *wh*-movement across it.[3] Interestingly, the one exception appears to be *why*.

(30) ?Why did **this book** everyone buy at a store (instead of online)?

Presumably, *why* is not subject to the topic-island effect because it has the option of being directly merged into the [Spec, CP] where it takes scope (Bromberger 1987, 1992, Rizzi 1990, Ko 2005, etc.), thus it does not need to move from within the TP across the topic.

The same topic island can be observed in embedded environments, as in the following examples (cited in Haegeman 2012).

(31) a. *Who did you say that **to Sue** Bill introduced?

(Boeckx and Jeong 2004: 84)

b. *Which company did Bill warn you (that) **flights to Chicago** had canceled?

(Emonds 2004: 77)

c. *Which books did Becky say that **to Aaron** she will give?

(Koizumi 1995: 140)

d. *On which table did Lee say that **these books** she will put?

(Koizumi 1995: 140)

e. *How do you think that **this problem** John solved?

(Lasnik and Saito 1992: 96)

All of these examples involve topicalization in the complement clause together with *wh*-extraction. It is important to note that, *wh*-movement aside, the complement clause in these examples does allow topicalization (something we will see later is not always the case in English). I give examples below of topicalization with each of the predicates above (*say, warn, think*).

(32) a. Mary said that **this book** everyone must read by the next class.

b. John warned everyone that **this book** they must all read by the next class.

c. Joe thinks that **this book** everyone should read for their own good.

How can we account for this topic-island phenomenon? A straightforward solution is to consider it an instance of the violation of Relativized Minimality (Rizzi 1990), according to which an A'-movement (topic movement) blocks another A'-movement (*wh*-movement) from occurring across it.

(33) [$_{CP}$ *wh*-phrase$_i$ ... [$_{TopP}$ TOPIC [$_{CP}$ OP$_i$ C [$_{TP}$ I really like t_i t_j]]]]

To make this violation more precise, I will assume that Focus is involved in *wh*-questions (Rizzi 1997, Miyagawa 2010, etc.). In Strong Uniformity, Focus and Topic are both δ-features, thus they may enter into competition and induce a Relativized Minimality (RM) violation.[4]

Note that we can accommodate this phenomenon of topic island as a violation of RM because there are two movements involved, one to the lower CP (the topic operator), the other to the higher CP (*wh*-phrase).

Another minimality violation occurs with multiple topicalizations.

(34) a. To Sue, everyone will send a gift and a card on her birthday.

b. A gift and a card, everyone will send to Sue on her birthday.

c. *To Sue, a gift and a card, everyone will send on her birthday.

While each topic on its own is fine, combining them into a double topic construction leads to ungrammaticality. This is simply another instance of a minimality violation. Recall that it is possible to have multiple topics such as the following.

(35) As for John, as far as this book is concerned, he will definitely have to read it.

The important point to note is that in this example, the topicalizations involve left dislocation, which do not involve movement, hence we would not expect any minimality violation.

6. Central and peripheral adverbial clauses

We are now ready to respond to F&M's analysis, specifically to the idea of incorporating Judgment Phrase into the structure. Their observation is that topicalization with the particle *jedenfalls* and German left dislocation have the same distribution as the particle *ja* in failing to occur in central adverbial clauses, but are able to occur in peripheral adverbial clauses. I repeat the examples for the topicalization with *jedenfalls*.

(36) *Als Fritz jedenfalls freundlich auf mich zuging, habe ich mich gefreut.
when Fritz for.one friendly up me to.came have I REFL been.glad

(37) Maria ist aufgeregt, obwohl Fritz ja gleich kommt.
Maria is nervous although Fritz MP soon comes

The 'when' clause in (36) is a central adverbial clause, while the 'although' clause in (37) is a peripheral adverbial clause. According to F&M, a peripheral adverbial clause contains a JudgmentP, thus allowing topicalization with *jedenfalls*, while a central adverbial clause does not contain this layer of structure, thus disallowing this type of topicalization.

However, Haegeman (2003, 2012) notes that these two adverbial clauses differ in structure, in that the central adverbial clause involves movement while the

peripheral adverbial clause does not. I turn to her analysis below.

The following are taken from Haegeman (2012).

(38) *Central adverbial clauses* (e.g., Haegeman 2012)

a. When she began to write her regular column again, I thought she would be OK.

a'. *When **her regular column** she began to write again, I thought she would be OK.

a''. *I thought she would be OK when **her regular column** she began to write again.

b. While I was revising this paper last week, I thought of another analysis.

b'. *While **this paper** I was revising last week, I thought of another analysis.

b''. *I thought of another analysis while **this paper** I was revising last week.

c. I won't take time off until I have finished this handout.

c'. *I won't take time off until **this handout** I have finished.

c''. *Until **this handout** I have finished, I won't take time off.

As shown, the central adverbial clause, regardless of where it occurs, does not permit topicalization. This parallels topicalization with *jedenfalls*.

I will adopt an essential component from Haegeman (2006, 2010, 2012), whose analysis is based on competition. She observes that in these adverbial clauses, operator movement (of *when*) has taken place. Though there is no obvious gap, we can see evidence that *when* has undergone movement in examples like the following, in which it has ambiguous scope.

(39) John left when Sheila said he should leave.

When here may be pointing to the time when Sheila said the quoted material (the "high" reading), or to the time when John should leave (the "low" reading). Larson (1987, 1990) proposes the following *wh*-movement representations for high and low construal (see also Geis 1970 and Johnson 1988, among others, for relevant discussion).

(40) a. John left [$_{CP}$ when$_i$ [$_{IP}$ Sheila said [$_{CP}$ [$_{IP}$ he should leave]] t_i]]

b. John left [$_{CP}$ when$_i$ [$_{IP}$ Sheila said [$_{CP}$ [$_{IP}$ he should leave t_i]]]] (Larson 1987)

According to Haegeman (2006, 2010), the occurrence of the *wh*-operator *when* blocks a topic from occurring in the same position. I will make a slight adjustment to her analysis and collapse this effect with the topic-island effects we saw earlier. I assume the operator movement of *when* is *wh*-movement. As we saw earlier, *wh*-movement cannot take place from within a topicalized structure due to topic and focus being in competition, which induces a minimality violation.

(41) [$_{CP}$ *wh*-phrase$_j$ . . . [$_{TopP}$ TOPIC [$_{CP}$ OP$_i$ C [$_{TP}$ I really like t_i t_j]]]]

Unlike central adverbial clauses, what Haegeman (2012) calls peripheral adverbial clauses do allow topicalization. These are adjunct clauses that add a comment on the event of the main clause and do not constitute a core part of the main

clause. Haegeman cites the following examples.

(42) *Peripheral adverbial clauses* (e.g., Haegeman 2012)

a. I think we have more or less solved the problem for donkeys here, because **those we haven't got,** we know about. (*Guardian*, G2, February 18, 2003)

b. We don't look to his paintings for common place truths, though **truths** they contain none the less. (*Guardian*, G2, February 18, 2003: 8, col. 1)

c. His face not many admired, while **his character** still fewer felt they could praise. (Quirk et al. 1985: 1378)

d. While **other brilliant things** hardly anyone buys—I'd put my friend's first novel and sherry in this category. (*Observer*, December 6, 2009)

e. Sophie would put Len between two women who would have to bear his halitosis, while **Gillian** she buried mid-table among the also-rans. (Sebastian Faulks 2010: 40)

f. If **some precautions** they did indeed take, many other possible measures they neglected.

We saw a similar set of facts with German aboutness and left-dislocation topicalizations (F&M, 2019).

Haegeman (2012) argues that peripheral adverbial clauses occur higher in the structure (CP) of matrix clauses than central adverbial clauses (TP), something we also saw with German peripheral adverbial clauses in Chapter 1 (Frey and Meinunger 2019). From our perspective, a salient point is that peripheral adverbial clauses do not appear to involve any kind of operator movement. Thus, in the following, *while* and *if* only have high construal (with *Mary said*, not the complement clause).

(43) John was watching TV while Mary said that he should be studying.

(44) If Mary said that she will attend the meeting, I will also attend.

We thus would not expect any minimality violation in the peripheral adverbial construction.

In this way, what F&M observed as the weakly root-sensitive property of topicalization with *jedenfalls* and German left dislocation do not necessarily point to the existence of a Judgment Phrase. Instead, what they show can be collapsed together with other observations in which topicalization of this sort triggers minimality violations.

7. Topicalization and the root

Along with central and peripheral adverbial clauses, F&M observe that topicalizations with the particle *jedenfalls* and German left dislocation are limited to the complement of verbs such as the doxactic verb 'think', the verb of saying, and verbs of perception. Their proposal is that a Judgment Phrase is allowed in the complement of these verbs but not, for example, in the complement of inherently negative verbs. I repeat the examples below.

(45) Maria denkt, dass [Fritz jedenfalls] kommen wird.

Maria thinks that Fritz for.one come will

'Maria thinks that Fritz for one will come.'

(46) *Maria leugnete, dass [Fritz jedenfalls] kommen wird.

Maria denied that Fritz for.one come will

I will argue that this distinction, like that found with adverbial clauses, can follow from considerations of minimality along the lines of Haegeman (2006, 2012) with the extension based on Jiménez-Fernández and Miyagawa (2014), Meinunger (2004), and especially Villalta (2008).

While Chomsky (1977) does not indicate any restrictions on the occurrence of the topic phrase, Emonds (1970) observes that topicalization is a root transformation and should therefore be limited to root environments.

(47) *Root*

A root will mean either the highest S in a tree, an S immediately dominated by the highest S, or the reported S in indirect discourse. (Emonds 1970: 6)

(48) a. This book, everyone will most probably read without being told.

b. Because this book, everyone will most probably read without being told, you need not assign it.

c. John said, this book, everyone will most probably read without being told.

d. *I deny that this book, everyone will most probably read without being told.

These are similar to what we saw in German. We now want to see why there are variations among the complements of different verbs, such as *say* and *deny*. We should also note that, contrary to Emonds, Hooper and Thompson (1973) observe that

there are many more environments where "root" phenomena such as topicalization can occur. The counterexamples they presented were so numerous that the idea of root had to be set aside. I turn to their study below.

7.1. Hooper and Thompson (1973)

Emonds (2004), in response to criticism by Hooper and Thompson (1973), expands the notion of "the reported S in indirect discourse" to include what he calls "root-like indirect discourse embeddings" (or "RIDEs"), which he defines as finite complement clauses of a governing V or A. The following are examples of RIDEs from his work.

(49) a. Bill warned us that [$_{\text{RIDE}}$ **flights to Chicago** we should try to avoid].

b. John said that [$_{\text{RIDE}}$ **his mother** the children often helped].

The following are examples of non-RIDEs.

(50) a. *Bill warned us [**flights to Chicago** to try to avoid].

b. *Mary used another company since/until [**flights to Chicago** they could avoid].

c. *A warning that [**flights to Chicago** travelers should avoid] will soon be posted.

Sentence (50a) is an example of non-finite reported speech; in (50b) the embedded clause is an adjunct, so there is no governing head; and the embedded clause in (50c) is a complement of N, not V or A.

There is some overlap between the idea of RIDEs and the cases of ungrammatical topicalization that we gave earlier. For (50a), we saw earlier that infinitival clauses have a truncated structure and lack the topic projection. Sentence (50b) is reminiscent of Haegeman's (e.g., 2003, 2012) central adverbial clauses (section 5). As for the NP complement clause in (50c), although we have not discussed this, it has been independently shown that complex NPs do not allow topicalization in their relative clause or complement clause (e.g., Kuno 1973).

By Emonds's (1970, 2004) account of root transformations, it would seem that TopP is limited to the root environments, with the addition of RIDEs. Is this true? Hooper and Thompson (1973) demonstrate that root transformations such as topicalization occur in a wider array of constructions than what Emonds originally noted and RIDEs do not cover all of the additional cases.

Hooper and Thompson begin with the observation that the root transformations that Emonds listed involve emphasis of some sort; these root transformations include topicalization, left dislocation, VP preposing, preposed negative constituents, and V inversion for quotes and for directional PPs. In moving a phrase to the left edge, topicalization places some sort of emphasis on the information expressed by this phrase. The same can be said of the other root operations.

Based on this observation, Hooper and Thompson argue that the environments in which these operations can occur are those that are compatible with emphasis — namely, environments with the meaning of assertion. Asserted environments are those in which some expression is highlighted in order to draw attention to it. In contrast, in non-asserted environments, most typically clauses whose information is presupposed, placing emphasis on a phrase would be inappropriate; hence root transformations are incompatible with such environments.

To flesh out the asserted and non-asserted environments, Hooper and Thompson propose a classification of predicates whose complement is or is not compatible with assertion.

(51) Hooper and Thompson (1973: 473–474)

Non-factive			Factive	
A	B	C	D	E
say	suppose	be (un)likely	resent	realize
report	believe	be (im)possible	regret	learn
exclaim	think	deny	be surprised	know
etc.	etc.	etc.	etc.	etc.

According to Hooper and Thompson, the complement of a class A verb may comprise the main assertion of the sentence. For class B, the main verb does not always carry the meaning of assertion, which clears the way for the complement to express the main assertion. Class C verbs have the meaning of assertion and their complement is neither asserted nor presupposed. Class D verbs likewise express assertion and their complement is presupposed. Finally, class E verbs are called “semi-factive” and their complement is not always presupposed. How do root transformations, including topicalization, pattern with respect to this classification? They are possible in the complement clause of predicates whose complement can express assertion, namely, classes A, B, and E.[5]

(52) I exclaimed that this book, I will never read. (A)

(53) I think that this book, he read thoroughly. (B)

(54) I found out that this book, no one is willing to read for the assignment. (E)

In contrast, classes C and D do not allow root transformations in their complement clause.

(55) *It's likely that this book, everyone will read for the assignment. (C)

(56) *He was surprised that this book, I had not read. (D)

Interestingly, the same pattern of predicate sensitivity for embedded topicalization shows up in Japanese (Miyagawa 2012a, 2017; Jiménez-Fernández and Miyagawa 2014). As has been known since Kuno (1973, 1976), the occurrence of the topic phrase marked with -*wa* is highly restricted. For example, it cannot occur in a relative clause. (It is important that the -*wa* phrase is unstressed; stressing it turns the topic into a contrastive topic, which we will look at later.)

(57) *[Taroo-wa katta hon]-o misete kudasai.
Taro-TOP bought book-ACC show.me please
'Please show me the book that Taro bought.'

Miyagawa (2012a) and Jiménez-Fernández and Miyagawa (2014) show that the distribution of the topic -*wa* in complement clauses matches Hooper and Thompson's predicate classification. Before we give examples, one important thing to note is that in Japanese the complementizer itself helps distinguish classes A–E (Miyagawa

2012a). The complementizer *to* is for non-factive clauses, while the complementizer *koto* (or *no*) is for factive ones (Kuno 1973, McCawley 1978).

(58) Class A: *to, koto*

Class B: *to, koto*

Class C: *koto*

Class D: *koto*

Class E: *to*, *koto*

As we can see, the predicates in classes A, B, and E — those that Hooper and Thompson argue have complements that can have the meaning of assertion — allow the non-factive complementizer *to*. These predicates also allow *koto*, so the complement of these predicates may be factive as well as non-factive, but the non-factive *to* is the more common complementizer with these predicates. In contrast, the predicates in class C and D, which do not allow their complement to have the meaning of assertion, only allow the factive complementizer *koto*.

Following are examples of embedded topicalization for each predicate class.

Class A

(59) Hanako-wa [**sono hon-wa** kodomo-ga yonda to] it-ta.

Hanako-TOP that book-TOP child-NOM read C say-PST

'Hanako said that as for that book, her child read it.'

Class B

(60) Hanako-wa [**sono hon-wa** kodomo-ga yonda to] sinzitei-ru.

Hanako-TOP that book-TOP child-NOM read C believe-PRS

'Hanako believes that as for that book, her child read it.'

Class E

(61) Hanako-wa [**Taroo-wa** kanozyo-ga suki da to] kizui-ta.

Hanako-TOP Taro-TOP she-NOM like COP C realize-PST

'Hanako realized that as for Taro, he likes her.'

Class C

(62) *Hanako wa [**sono hon wa** kodomo ga yonda koto] o hiteisita.

Hanako TOP that book TOP child NOM read C ACC denied

'Hanako denied that as for that book, her child read it.'

Class D

(63) *Hanako-wa [**sono hon-wa** zibun-ga yonda koto]-o kookaisi-ta.

Hanako-TOP that book-TOP self-NOM read C -ACC regret-PST

'Hanako regretted that as for that book, she herself read it.'

As we can see, the complements of classes A, B, and E allow the topic -*wa* phrase, while the complements of classes C and D do not. This parallels what we saw for English topicalization.

We find the same pattern in Spanish, where topicalization is marked by word order. Here is an example with the class D predicate 'regret' (Jiménez-Fernández and Miyagawa 2014).

(64) ??Siento que **tu libro** no lo hayas terminado todavía.
regret.1SG that your book not Cl have.SUBJ.3SG finished yet
'I regret that you haven't finished your book yet.'

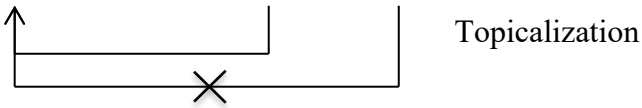
Let us interpret the observations from English, Japanese, and Spanish as follows: languages allow a topic projection for the complements of classes A, B, and E, but not for C and D.

(65) *Topic projection*
The topic projection TopP is allowed for the complement of classes A, B, and E, but not for the complement of classes C and D.

Why is there this difference between A, B, and E, on the one hand, and C and D on the other? Haegeman (e.g., 2006), following Hooper and Thompson, observes that class C and D predicates take complements whose meaning is presupposed, as opposed to being asserted. Presupposed environments are factive in nature and factives have been argued to involve operator movement from some position — such as a focus position — to [Spec, CP] (Melvold 1991, Hiraiwa 2010, Watanabe 1993,

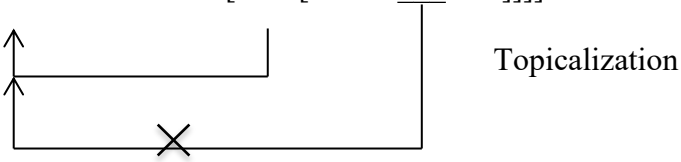
1996, among many others; see Munsat 1986 for relevant discussion). In Haegeman's (2006, 2010, 2012) analysis, this operator occupies the position that would otherwise be occupied by the topic, thus blocking topicalization by competition.

(66) $[_{CP}\ OP_i\ \ C_{event+\delta}\ \ldots\ [_{FP}\ t_i\ [_{TP}\ \ldots\ DP\ \ldots\ ]]]$



We can see that this analysis of operator movement opens up the possibility of accounting for the weak root-sensitivity of certain complements as an instance of a minimality violation. The only difference is that I assume that a topic occurs above CP and that it requires operator movement, which, as Haegeman notes, triggers a minimality violation.

(67) $[_{TopP}\ TOPIC\ \ [_{CP}\ OP_i\ \ C_{event+\delta}\ \ldots\ [_{FP}\ t_i\ [_{TP}\ \ldots\ ___\ \ldots\ ]]]]$



7.2. Focus operator and minimality

We saw that by incorporating the factive operator for the complement of verbs in C and D categories we are able to account for the impossibility of topicalization in these complements based on minimality, just as we did for the central/peripheral adverbial clauses. Both analyses are based on a series of important works by Haegeman. One issue, however, is that factivity does not always accurately portray the meaning of the complement of C and D verbs. A good example of this is *deny*. We saw that the complement of this verb does not allow topicalization of the sort we have

been dealing with in English, German, and Japanese. But the complement of *deny* is not factive in nature. To account for the complement of all predicates in C and D, regardless of whether they are factive or not, I will extend Haegeman's analysis by introducing an observation originally due to Meinunger (2004). To understand this extension of the analysis, we need to look at a Romance language.

In Spanish, A, B, and E complements, which are those that allow topicalization in English, are always in the indicative mood, while C and D complements are always in the subjunctive mood (Jiménez-Fernández and Miyagawa 2014). This was originally observed by Meinunger (2004) for Romance in general, and it is this insight that I will build our analysis on.

Class A: 'say', 'report', 'exclaim' (only indicative)

(68) Él nos informó que rechazaron/*rechazaran el artículo.
he us informed that rejected.IND.3PLl/rejected.SUBJ.3PL the paper
'He told us that they rejected the paper.'

Class B: 'suppose', 'believe', 'think' (only indicative)

(69) Él creyó que rechazaron/*rechazaran el artículo.
he believed that rejected.IND.3PL/rejected-SUBJ.3PL the paper
'He thought that they rejected the paper.'

Class E: 'realize', 'learn', 'know' (only indicative)

(70) Hemos sabido que los vuelos a Chicago han/*hayan sido
have.1PL learned that the flights to Chicago have.IND.3PL/have-SUBJ.3PL been
cancelados.
cancelled
'We have learned that the flights to Chicago have been cancelled.'

Class C: 'be (un)likely', 'be (im)possible', 'deny' (only subjunctive)

(71) Es probable que *rechazaron/rechazaran el artículo.
is likely that rejected.IND.3PL/rejected.SUBJ.3PL the paper
'It is likely that they rejected the paper.'

Class D: 'resent', 'regret', 'be surprised' (only subjunctive)

(72) Él siente que *rechazaron/rechazaran el artículo.
he regrets that rejected.IND.3PL/rejected.SUBJ.3PL the paper
'He regrets that they rejected the paper.'

Note that this is a dichotomous distribution: only indicative is acceptable with classes A, B, and E, and only subjunctive is acceptable with classes C and D. Below, we will associate the indicative with the presence of TopP and the subjunctive with its absence.

We saw earlier that the complementizer in Japanese varies between these two groups of predicate classes.

(73) Class A: *to, koto*

Class B: *to, koto*

Class E: *to*, *koto*

Class C: *koto*

Class D: *koto*

The complementizer *to* occurs with non-factive complements, which can have the meaning of assertion, while *koto* occurs with factive complements, which are presupposed, thus non-asserted. *To* can occur with A, B, and E — those predicates that have complements that allow topic -*wa* — while in C and D complements, only *koto* is allowed.

On the one hand, unlike with the Spanish moods, this is not a dichotomous distribution on its face: A, B, and E complements allow both complementizers *to* and *koto*. On the other hand, with *koto*, topic -*wa* is in fact not possible, even with A, B, and E predicates, indicating that TopP is absent. I give an example with a B predicate.

Class B

(74) *Hanako-wa [sono hon-wa kodomo-ga yonda **koto**]-o sinzitei-ru.

Hanako-TOP that book-TOP child-NOM read C -ACC believe-PRS

'Hanako believes that as for that book, her child read it.'

It turns out that on closer examination the situation in Japanese is not unlike the situation in Spanish. Whereas in Spanish, the one-to-one correspondence is between moods and predicates, in Japanese, it is between the complementizer and the availability of topicalization. In our analysis, the form of the complementizer will be

determined by the actual structure of the complement clause: *to* with TopP, *koto* with non-TopP.[6]

Let us now turn to Villalta's (2008) analysis of Spanish mood marking. The indicative mood is selected by the following types of predicates.

(75) *Indicative mood in Spanish*

epistemic predicates: e.g. *saber* 'know', *pensar* 'think', *creer* 'believe'

predicates of communication: e.g. *decir* 'say', *anunciar* 'announce'

predicates of certainty: e.g. *estar seguro* 'be sure', *estar convencido* 'be convinced'

commissives: e.g. *prometer* 'promise'

fiction verbs: e.g. *adivinar* 'guess', *comprender* 'understand'

predicates of perception: e.g. *notar* 'notice', *ver* 'see', *escuchar* 'hear'

The subjunctive mood is selected by the types of predicates in the example below:

(76) *Subjunctive mood in Spanish*

desire predicates: e.g. *querer* 'want', *preferir* 'prefer', *temer* 'fear'

emotive factive predicates: e.g. *lamentarse* 'regret', *alegrarse* 'be glad', *sorprenderse* be surprised'

modals: e.g. *es possible* 'it is possible', *es necesario* 'it is necessary'

predicates expressing doubt: e.g. *dudar* 'doubt'

directives: e.g. *ordenar* 'order', *aconsejar* 'advise', *sugerir* 'suggest'

causatives: e.g. *hacer* 'make', *conseguir* 'achieve'

Developing an idea starting with Heim's (1992) semantics for propositional-attitude predicates (see earlier work by Stalnaker 1984), Villalta (2008) argues that the complement in the subjunctive mood involves a proposition with alternative semantic values.[7] This meaning arises from the complement being associated with a focus operator (cf. Rooth 1985). The proposition in the subjunctive mood is compared to its contextual alternatives along a scale introduced by the matrix predicate. Let us briefly look at evidence for each of these points.[8]

If the subjunctive complement contains a focus operator, as Villalta argues, we would expect focus sensitivity. A predicate of desire such as 'want' takes the subjunctive in Spanish. Assuming that the same semantic effects hold for a language such as English, which does not distinguish indicative and subjunctive (except marginally), we observe the following. In a context where Victoria wants Sofia to bring a chocolate cake to the party, but it is likely that Sofia will bring something else instead, (a) is felicitous while (b) is not.

(77) a. Victoria wants Sofia to bring A CHOCOLATE CAKE.

b. Victoria wants SOFIA to bring a chocolate cake.

This kind of focus sensitivity parallels examples in which one sees an overt focus operator such as *only* (Rooth 1985, 1992). In contrast, with predicates that in Spanish select for the indicative mood, such as the propositional-attitude predicates 'know' and 'believe', focus-induced meaning differences are not so clear (Boër 1979). (I have changed the example slightly without any effect on the argument.)

(78) a. Tom knows/believes that Bob KISSED Alice.

b. Tom knows/believes that Bob kissed ALICE.

Let us assume that the focus operator occurs in [Spec, CP] of the subjunctive complement, having been attracted there from within the TP by the focus feature on C.

(79) . . . [$_{CP}$ OP$_i$ C$_{FOCUS}$ [$_{TP}$ ... t_i ...]]

Note that this is similar to the factive operator that Haegeman (e.g. 2006, 2010) assumed for the complements of C and D predicates. We extend Haegeman's analysis by assuming that this operator does not entail factive; instead it entails focus, leading to the semantics of alternatives. As we saw from Hooper and Thompson's (1973) predicate classification, of the two classes that do not allow root transformations in the complement, C selects for a non-factive complement and D for a factive complement. This shows that the key distinction is not factive/non-factive. Finally, this focus operator is part and parcel of the meaning of the complement; hence we would expect it to occur in CP uniformly across all languages.

The second part of Villalta's proposal is that the predicates that select the subjunctive mood are gradable predicates, and the gradable property is what the alternatives generated by the focus operator in the complement are compared with. A reliable test for gradability in the literature is 'enormously' (Doetjes 1997: 122, cited in Villalta 2008). We see an example of this below, where 'enormously' distinguishes a predicate of desire, which selects the subjunctive mood, from the epistemic predicate 'know', which selects the indicative mood.

(80) a. Marcela desea enormemente que Rafael venga.

Marcela desires enormously that Rafael come.SUBJ.3SG

'Marcela enormously wants Rafael to come.'

b. *Sofia sabe enormemente que no puede venir.

Sofia knows enormously that not can.IND.3SG come

'Sofia knows enormously that she cannot come.'

We now have the assumptions necessary to motivate a minimality analysis along the lines of Haegeman's work for topicalization. The predicates in the C and D classes select a complement which contains a focus operator that generates alternatives. In languages such as Spanish, this kind of complement is overtly marked with the subjunctive mood, and even when it is not so marked, as in English, the semantics remain the same. In Japanese, we saw that such a complement is marked by *koto*, commonly said to be a factive complement. However, we can now say that *koto* is a marker of a complement containing the focus operator that generates alternatives.

We can therefore conclude that the weak root-sensitivity involving certain verbs that block topicalization, such as *deny*, is a result of a minimality violation. In this way, we are able to derive both the central/peripheral adverbial clause difference and the diffence in the complement of various verbs relative to topicalization from minimality violations. This collapses what F&M called weak root-sensitivity to a more general phenomenon of minimality considerations found in a variety of topic constructions.

8. Variation across languages

Up to now, we have seen topicalization behaving similarly in English, German, Japanese, and Spanish. In this last section of the chapter I will look at topic types, language variation, and Strong Uniformity, with an eye to accounting for language variability in the distribution of topics. Observing these variations leads us to further question whether we need JudgmentP.

Bianchi and Frascarelli (2010), based on Frascarelli and Hinterhölzl (2007), propose three types of topics: aboutness, contrastive, and familiar.

(81) *Three types of topics (Frascarelli and Hinterhölzl 2007: 87–88)*

a. Aboutness topic: "what the sentence is about" (Reinhart 1981, Lambrecht 1994); in particular, a constituent which is "newly introduced, newly changed or newly returned to" (Givón 1983: 8), a constituent which is proposed as "a matter of standing and current interest or concern" (Strawson 1964);

b. Contrastive topic: an element that induces alternatives which have no impact on the focus value and creates oppositional pairs with respect to other topics (Kuno 1976; Büring 2003);

c. Familiar topic: a given or accessible (cf. Chafe 1987) constituent, which is typically destressed and realized in a pronominal form (Pesetsky 1987); when a familiar topic is textually given and d-linked with a pre-established aboutness topic, it is defined as a continuing topic (cf. Givón 1983).

Although these distinctions are not always easy to detect in languages such as English, in Japanese, the three are clearly marked in form (see related discussion by Sigurðsson (2019b) on Old and Modern Icelandic).

(82) *Three types of topics as seen in Japanese*

a. Aboutness topic: -*wa*

Hanako-wa piza-o tabe-ta.

Hanako-TOP pizza-ACC eat-PST

'As for Hanako, she ate pizza.'

b. Contrastive topic: -*WA*

Hanako-WA piza-o tabe-ta.

Hanako-TOP.CONTR pizza-ACC eat-PST

'HANAKO ate pizza (but not Jiro).'

c. Familiar topic: scrambling

Piza-o Hanako-ga tabe-ta.

pizza-ACC Hanako-NOM eat-PST

Aboutness topics are marked with the unstressed -*wa*, while Contrastive topics are marked with the stressed -*WA* (or with stress on the entire topic phrase) (Kuno 1973). Familiar topics are marked by being scrambled to the head of the sentence (Miyagawa 2010, 2017).[9]

Bianchi and Frascarelli (2010: 82) point out that the Aboutness topic is a main clause phenomenon (they call it "root" phenomenon), distinguishing it from the other topics. In Jiménez-Fernández and Miyagawa (2014), we argue, following Bianchi and Frascarelli, that the Aboutness topic behaves uniformly as a main clause phenomenon across all languages, while Contrastive and Familiar topics may vary in their distribution from language to language.

(83) *Distribution of topics*

(i) Aboutness topics uniformly occur in the C region (Bianchi and Frascarelli 2010: 82).

(ii) The position of Contrastive topics and Familiar topics depends on the type of language (Jiménez-Fernández and Miyagawa 2014).

We can interpret "in the C region" for Aboutness topics as the TopP projection. Aboutness topics across all languages must occur in [Spec, TopP]. We saw above that the TopP projection in complement clauses is restricted to A, B, and E predicates for a semantic reason related to focus, which triggers a minimality violation in these complements for topicalization. Assuming the universal nature of the semantic issue involved, we can presume that the restriction on the occurrence of the TopP is uniform across all languages unless some other factor comes into play to mediate the semantic requirement.

8.1. Strong Uniformity and topicalization

What about Contrastive and Familiar topics? To attempt to understand the variability we see across languages for these two types of topics, we turn to the notion of Strong Uniformity.

(84) *Uniformity* (Miyagawa 2010, 2017)

Every language shares the same set of grammatical features, and every language overtly manifests these features.

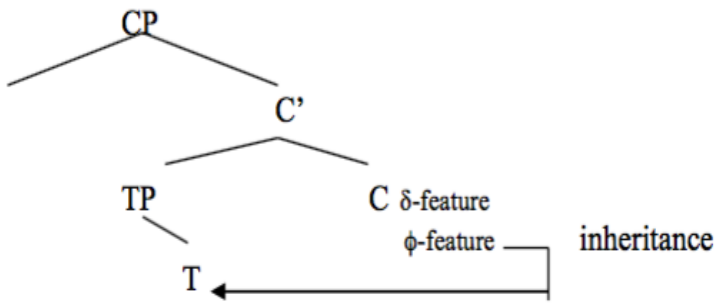
The "grammatical features" in Strong Uniformity include both ϕ-features and δ-features, what Kiss (1995) calls "discourse-configurational" features.

(85) ϕ-features

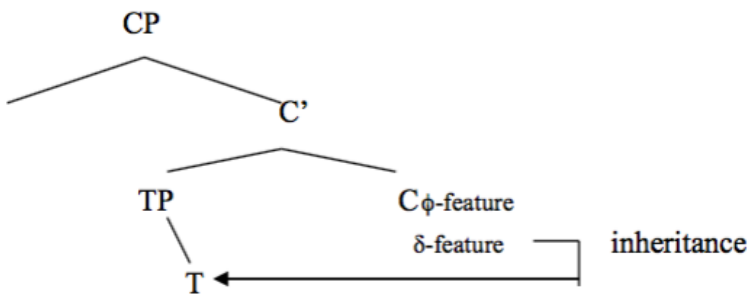
δ-features: topic, focus

The idea is that these two types of grammatical features are computationally equivalent, both serving to trigger operations within narrow syntax across languages. Furthermore, all grammatical features are assumed to originate at a phase head — C, for our purposes (Chomsky 2008, Richards 2007, Miyagawa 2010, etc.). One or more of these features that originate at C may be inherited by T. In Miyagawa (2010), I dealt with two kinds of languages that come out of the typology of grammatical feature placement: agreement-based languages and discourse-configurational languages.

(86) *Agreement-based language*



(87) *Discourse-configurational language*



In Miyagawa (2017), I explore two additional types of languages, one in which both features are inherited by T and one in which neither is, thus expanding the typology into four classes.

(88) *Some languages predicted by Strong Uniformity*

Category I:	C_{ϕ}, T_{δ}	Japanese
Category II:	C_{δ}, T_{ϕ}	English
Category III:	C, $T_{\phi/\delta}$	Spanish
Category IV:	$C_{\phi/\delta}$, T	Dinka

Setting aside Category IV (see Miyagawa 2017 for discussion of this category), we see that in Categories I and III (Japanese and Spanish), the δ-feature is inherited by T, while in Category II (English), it stays on C.[10] Remember with regard to the δ-feature of topic, these variations pertain only to Contrastive and Familiar topics; the Aboutness topic always occurs in TopP, thus it is not affected by any variation in the location of the Topic feature.

The typology above predicts that for a Class II language such as English, Contrastive and Familiar topics occur at TopP. This in turn predicts that in English, all three types of topics will have the same distribution as the TopP projection: in complement clauses, they will only occur with A, B, and E predicates, not C and D predicates. In F&M's terminology, these topics are weakly root-sensitive. This is precisely what we see (Jiménez-Fernández and Miyagawa 2014). Since in English it is difficult to distinguish Familiar topics from Aboutness topics, I give two examples each for the five verb classes: one of which is a generic topic, which may be either Aboutness or Familiar; and a second which is a Contrastive topic, indicated by a contrastive statement tagged on at the end of the sentence.

Class A

(89) a. Mary said that those books, she will read today.

b. Mary said that those books, she will read, but not these.

Class B

(90) a. Mary believes that those books, she could read today.

b. Mary believes that those books, she could read, but not these.

Class E

(91) a. Mary realized that those books, she could read today.

b. Mary realized that those books, she could read, but not these.

Class C

(92) a. ?*Mary denied that those books, she will read today.

b. *Mary denied that those books, she will read, but not these.

(93) a. *It is impossible that those books, John will read by the end of the week.

b. *It is impossible that those books, John read, but not these.

Class D

(94) a. *Mary resents that those books, John read while on vacation.

b. *Mary resents that those books, John read, but not these.

(95) a.?*I regret that those books, John read without consulting me.

b. *I regret that those books, John read, but not these.

Let us now turn to Japanese, which clearly distinguishes Aboutness, Contrastive, and Familiar topics. As we see below, while the Aboutness topic distribution is the same as in English, as we expect, there is a sharp contrast in the distribution of the Contrastive and Familiar topics. Unlike in English, these topics are fine in the complements of all predicate classes (Jiménez-Fernández and Miyagawa 2014).

Class A

(96) a. Hanako-wa [sono hon-wa kodomo-ga yonda to] it-ta.

Hanako-TOP that book-TOP child-NOM read C say-PST

'Hanako said that as for that book, her child read it.'

b. Hanako-wa [sono hon-WA kodomo-ga yonda to] it-ta.

Hanako-TOP that book-CONTR.TOP child-NOM read C say-PST

'Hanako said that that book, her child read (but not this book).'

c. Hanako-wa [sono hon-o kodomo-ga yonda to] it-ta.

Hanako-TOP that book-ACC child-NOM read C say-PST

'Hanako said that as for that book, her child read.'

Class B

(97) a. Hanako-wa [sono hon-wa kodomo-ga yonda to] sinzitei-ru.

Hanako-TOP that book-TOP child-NOM read C believe-PRT

'Hanako believes that as for that book, her child read it.'

b. Hanako-wa [sono hon-WA kodomo-ga yonda to] sinzitei-ru.

Hanako-TOP that book-CONTR.TOP child-NOM read C believe-PRT

'Hanako believes that that book, her child read (but not this book).'

c. Hanako-wa [sono hon-o kodomo-ga yonda to] sinzitei-ru.

Hanako-TOP that book-ACC child-NOM read C believe-PRT

'Hanako believes that as for that book, her child read.'

Class E

(98) a. Hanako-wa [Taroo-wa kanozyo-ga suki da to] kizui-ta.

Hanako-TOP Taro-TOP she-NOM like COP C realize-PST

'Hanako realized that as for Taro, he likes her.'

b. Hanako-wa [Taroo-WA kanozyo-ga suki da to] kizui-ta.

Hanako-TOP Taro-CONTR.TOP she-NOM like COP C realize-PST

'Hanako realized that Taro likes her (but not Jiro).'

c. Hanako-wa [Taroo-ga kanozyo-ga suki da to] kizui-ta.

Hanako-TOP Taro-NOM she-NOM like COP C realize-PST

'Hanako realized that Taro likes her.'

Class C

(99) a. *Hanako-wa [sono hon-wa kodomo-ga yonda koto]-o hiteisi-ta.

Hanako-TOP that book-TOP child-NOM read C -ACC deny-PST

'Hanako denied that as for that book, her child read it.'

b. Hanako-wa [sono hon-WA kodomo-ga yonda koto]-o hiteisi-ta.

Hanako-TOP that book-CONTR.TOP child-NOM read C -ACC deny-PST

'Hanako denied that that book, her child read, (but not this book).'

c. Hanako-wa [sono hon-o kodomo-ga yonda koto]-o hiteisi-ta.

Hanako-TOP that book-ACC child-NOM read C -ACC deny-PST

'Hanako denied that that book, her child read.'

Class D

(100) a. *Hanako-wa [sono hon-wa kodomo-ga yonda koto]-o kookaisita.
Hanako-TOP that book-TOP child-NOM read C -ACC regret-PST
'Hanako regretted that as for that book, her child read it.'

b. Hanako-wa [sono hon-WA kodomo-ga yonda koto]-o kookaisi-ta.
Hanako-TOP that book-CONTR.TOP child-NOM read C -ACC regret-PST
'Hanako regretted that that book, her child read, (but not this book).'

c. Hanako-wa [sono hon-o kodomo-ga yonda koto]-o kookaisi-ta.
Hanako-TOP that book-ACC child-NOM read C -ACC regret-PST
'Hanako regretted that that book, her child read.'

The grammaticality of (99b, c) and (100b, c) is precisely what we expect, since Japanese is a Category I language. In this type of language, the δ-feature is inherited by T, so that topicalization (for these two types of topics, Contrastive and Familiar) occurs within the TP. This is why, for example, scrambling (Familiar topicalization) may overcome weak crossover and create a new binder, which are hallmarks of A-movement. Familiar topicalization is A-movement because it targets a position within the TP instead of the CP (Saito 1992, Miyagawa 2010, etc.).

Finally, Spanish, a Category III language, behaves the same as Japanese with regard to Contrastive and Familiar topics (Jiménez-Fernández and Miyagawa 2014). This is what we expect, since the δ-feature lowers to T in both languages. In the following examples, we see that a topic which can be interpreted as either contrastive or familiar may occur in the complement of C and D predicates.

(101) a. Es probable que [**sólo alguna vez** haya
be.PRS.3SG probable that only some time have.PRS.3SG
conducido Juan ese coche].
driven Juan that car
'It's probable that Juan has only rarely driven that car.' (Class C)

b. Ángela estaba sorprendida de que [**los regalos** los
Angela be-PST.3SG surprised of that the presents Cl
hubieran dejado los Reyes Magos debajo del árbol].
have.PST.3PL left the Kings Magicians under of.the tree
'Angela was surprised that the three Wise Men had left the present under the Christmas tree.' (Class D)

The most fundamental take away from the discussion of Strong Uniformity and topicalization is that a topic construction such as the Contrastive topic may occur in the TopP position in some languages (English) but inside the TP in others (Japanese, Spanish). This clearly shows that topicalization of this sort is not dependent on the occurrence of some special structure such as JudgmentP. If it were, we would expect it to behave the same across languages.

9. Conclusion

In this chapter I developed the idea that there is a dedicated position for topics across all languages. This topic position, first proposed in Chomsky (1977), occurs above the CP, making it a part of the extended C-system. It occurs freely in the matrix clause, which is the reason why topicalization has traditionally been viewed as a main clause phenomenon, but it also occurs in the complement clause. However, there is a

restriction on the complement clauses in which it can occur: it is limited to the complement of what Hooper and Thompson (1973) called class A, B, and E predicates. I argued that a topic cannot occur in the complement of C and D predicates due to the semantics of these constructions: the complement is "subjunctive" and contains a focus operator that induces a semantics of alternatives. This operator triggers a minimality violation if a topic occurs, much like the minimality violation we see in a variety of constructions involving topicalization. This led us to set aside F&M's idea that the restrictions imposed on topicalization, such as topicalization with *jedenfalls*, is due to the dependence of this topicalization on a JudgmentP. Turning to language variation, while the Aboutness topic occurs in TopP across languages, Contrastive and Familiar topics vary in their position. In English, these two types of topics occur in the TopP region, thus are restricted in their distribution in the same way as the Aboutness topic. But in Japanese and Spanish, Contrastive and Familiar topics occur within TP. As a result, they are not subject to restrictions on TopP, making it possible for them to occur in the complement of all predicate classes. This contrast between English on the one hand, and Japanese and Spanish on the other, is predicted by Strong Uniformity. The analysis of topicalization in this chapter shares many features with the analysis by F&M, although my analysis diverges from theirs in some crucial ways. The most important difference is that in this analysis, JudgmentP does not come into play in topicalization. Given this, together with what we saw in Chapter 3, JudgmentP appears to not be necessary as a permanent part of the structure of utterances.

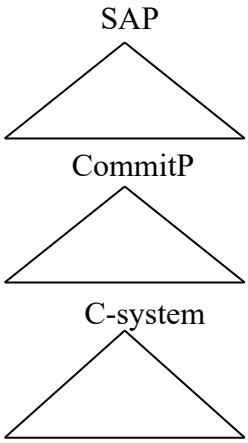
Chapter 5

Questions and the Commitment Phrase

1. Introduction

Based on Speas and Tenny (2003), Wiltschko (2017), Krifka (2019b, 2020), and others, I have proposed that an utterance has an expressive structure as shown, with "SAP" standing for Speaker-Addressee Phrase instead of Speas and Tenny's Speech Act Phrase.

(1)



The SAP contains representations of the speaker and the addressee, and the Commitment Phrase represents the commitment that the speaker makes to the addressee relative to the proposition. These two layers comprise the expressive component, which relates to the illocutionary force of the utterance. Below the SAP and the Commitment Phrase is the C-system that contains the proposition, which holds the truth-value. The use of the notion of commitment is a reflection of the social relationship between the participants, as opposed to the mentalist approach found in

Gricean pragmatics. The commitment layer expresses the idea that "in an illocutionary act the speaker takes on certain commitments; for example, in an assertion, the speaker takes on the liability that the asserted proposition is true [...]" (Krifka 2014: 65). See also Peirce (1934: 384), Searle (1969: 29, 1979: 12), Brandom (1983, 1994: ch. 3), Wright (1992), Alston (2000), MacFarlane (2003, 2005), Krifka (2015). Geurts (2019: 3) states, "commitment is a three-place relation between two individuals, [the speaker] and [the addressee], and a propositional content, p: [the speaker] is committed to [the addressee] to act on p [...]." We can understand this "act" as the speaker committing to the truthness of p for assertions. In the case of commissives, the speaker commits to making p true (see Bach and Harnish 1979). A directive commits the speaker to the goal of the addressee making p come true (Geurts 2019: 10). In this way, the expressive component does not insert itself into the proposition, and importantly, into the truth-value of the proposition, thus avoiding the problem noted for the performative analysis of Ross (1970), as we discussed in Chapter 1.

In this chapter, I will explore issues within this approach surrounding the expressive structure of questions and the nature of commitment within them. There are two main issues I will consider: (i) what is the expressive structure for questions; (ii) assuming that commitment is also relevant in questions, what exactly is being committed and by whom? This second issue relates to how the Commitment Phrase interacts with the C-system.

I will begin with the expressive structure of questions, and move onto the nature of the commitment being requested of the addressee. For the latter, I will explore in particular the notion of exhaustivity commonly required of the answer to *wh*-questions. Typically, the addressee is expected to commit to give all possible true

answers to the question. Where does this sense of exhaustivity come from? Is it a part of the commitment expected of the addressee? Or is it induced by pragmatics, such as Gricean's principles operative in conversation? We will see that in Japanese the notion of exhaustivity is in fact encoded in the Q-particle that clause-types interrogatives. The Q-particle may optionally be omitted. If it is not present, the notion of exhaustivity disappears, so that what the addressee needs to commit to is a non-exhaustive set of p's that comprises the answer. In this way, we can see that the notion of exhaustivity, and the lack thereof in certain instances, is encoded in the C-system and not in the expressive component. If this holds across languages, it would substantially simplify the expressive component in that there would be no need to specify different forms of commitment: one general, the other specifying non-exhaustivity. Commitment is commitment, and nothing more would need to be said. The optional omission of the Q-particle only occurs in the highest clause, and thus is a main clause phenomenon (MCP). We will explore this form of MCP as part of studying the effects of the Q-particle.

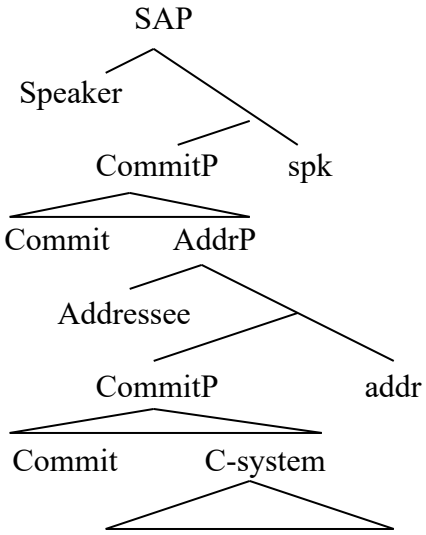
2. Expressive structure and questions

I will base my proposal for the expressive structure of questions on the idea that questions fall under directives, making the assumption that they are requests for information (e.g., Frege 1918). This is assumed widely in pragmatic theories of speech acts (e.g., Searle 1969, Bach and Harnish 1979). Geurts (2019), using commitments instead of the standard intentions, proposes that in questions, the speaker commits to the goal that the addressee should commit to p. In the case of a yes-no question, the addressee should commit either to p or to not p. In this chapter, we will explore *wh*-questions in detail. What is clear from this approach is that there

are two commitments: one by the speaker, who commits to the goal of getting the addressee to commit; the other by the addressee to commit to p.

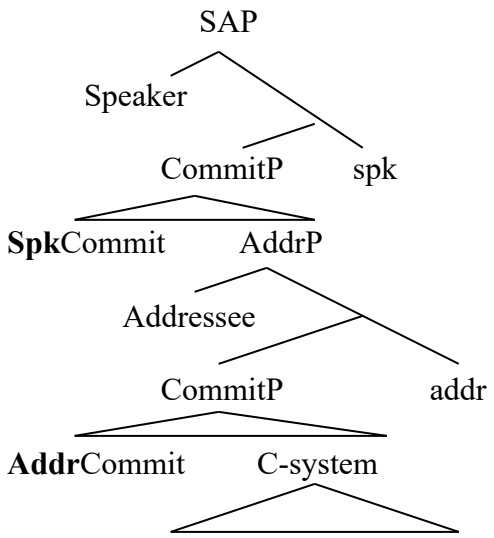
I propose that the expressive structure for questions is as follows, essentially giving structure to the idea in Geurts (2019).

(2)



As shown, there are two instances of commitment, as suggested by Geurts (2019). How can we tell whose commitment each represents? One way is to include information about which participant is making the commitment, something we see for the speaker commitment in Krifka (2019b), but not in Krifka (2020).

(3)



Below, we will look at data from Newari that provides empirical evidence for looking at commitments in this way.

2.1. Evidence: Newari

In Newari, a Tibeto-Burman language, verbs often carry suffixes that encode tense and the so-called conjunct-disjunct distinction (Hale 1980, DeLancey 1992, Hargreaves 2005).

(4) Verbal inflection in Newari (Hargreaves 2005)

Verb suffixes	Past	Nonpast
Conjunct	*ā*	*e*
Disjunct	*a*	*i*

These are illustrated below (see Zu 2017).

(5) a. wõ: [wa ana wan-**ã** dhakã:] dhãla

(s)he.ERG (s)he there go-PST.CONJ that said

'(S)he$_{i}$ said that (s)he$_{i/*j}$ went there.' (co-indexation)

b. wõ: [wa ana wan-**a** dhakã:] dhãla

(s)he. ERG (s)he there go-PST.DISJ that said

'(S)he$_{i}$ said that (s)he$_{*i/j}$ went there.' (disjoint reference)

In (5a), the subordinate verb is inflected for conjunct, which indicates co-reference between the subordinate subject and the matrix subject. The occurrence of the disjunct inflection in (5b) indicates disjunction between the two subjects.

The conjunct/disjunct marker may appear in the matrix clause.

(6) *Main declarative clauses in Newari*

a. ji ana wan- **ã** / wan-**e**

I there go-PST.CONJ / go-FUT.CONJ

'I went/will go there.' (Decl: subject = speaker ... conjunct)

b. cha ana wan-**a**[L SEP] / wan-**i**

you there go-PST.DISJ [L SEP]/ go-FUT.DISJ

'You went/will go there.' (Decl: subject = addressee ... disjunct)

c. wa ana wan-**a**[L SEP] / wan-**i**

(s)he there go-PST.DISJ [L SEP] / go-FUT.DISJ

'(S)he went/will go there.' (Decl: subject = 3rd ... disjunct)

In (6a), the matrix subject is 1st person and the verbal inflection encodes conjunct, which indicates the existence of a 1st person item higher in the structure. This would

be the speaker. In (6b, c), the subject is 2nd person and 3rd person respectively, and as expected, the verb carries the disjunct inflection.

Turning to questions, we get a different agreement pattern (Zu 2017).

(7) *Main interrogative clauses in Newari*

a. ji ana wan-**a** / wan-**i** lã

I there go-PST.DISJ / go-FUT.DISJ Q

'Did/Will I go there? (I don't remember.)' (Intr: subject = speaker ... disjunct)

b. cha ana wan-**ã** / wan-**e** lã

you there go-PST.CONJ / go-FUT.CONJ Q

'Did/Will you go there?' (Intr: subject = addressee ... conjunct)

c. wa ana wan-**a** / wan-**i** lã

(s)he there go-PST.DISJ / go-FUT.DISJ Q

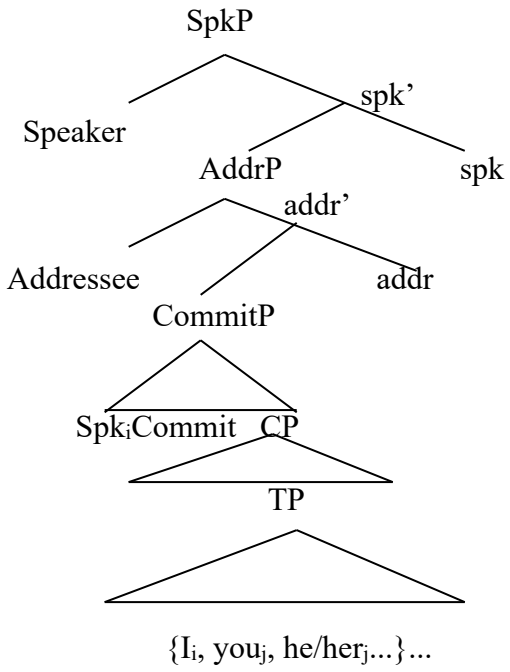
'Did/Will (s)he go there?' (Intr: subject = 3rd ... disjunct)

In these yes-no questions, when the subject is 1st person (7a), the disjunct inflection occurs, while in (7b), in which the subject is 2nd person, the conjunct inflection appears. Example (7c), with the 3rd person subject, has the disjunct inflection. That the conjunct inflection shows up when the subject is 2nd person indicates that in interrogatives the addressee representation is immediately above the subject. Zu (2017), following Speas and Tenny (2003), postulates that a layer called the "Seat of Knowledge," which represents a "sentient individual whose point of view is reflected in the sentence" (Speas and Tenny 2003: 326), occurs immediately below the SAP. The Seat of Knowledge is indexed with the speaker if the sentence is an assertion, indicating that the sentence represents the speaker's point of view, and with the

addressee if it is a question, because a question represents the addressee's point of view.

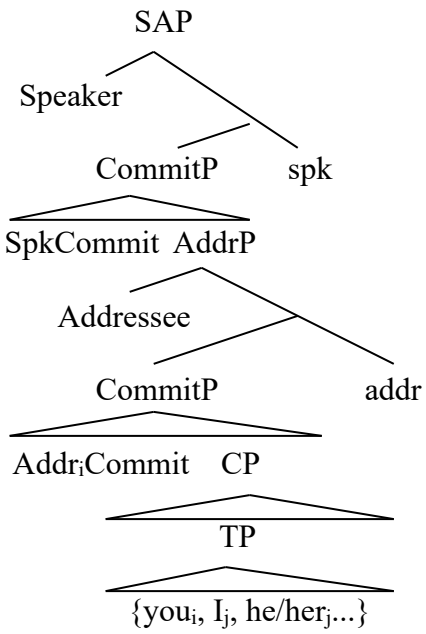
The expressive structure I am assuming has no place for the layer representing the Seat of Knowledge. In fact, we do not need to postulate such a layer in order to account for the pattern of conjunct/disjunct verbal inflection in the matrix clause. Assuming that the commitment comes with the participant that is making the commitment, the structure for a declarative expression would be the following.

(8)



As we can see, the closest element to the subject is Spk in the CommitP, and if the subject is 1st person, the conjunct inflection would occur on the verb to indicate that there is a first-person entity in the immediately higher structure. For questions, the pattern is different because of the different expressive structure for questions.

(9)



Here, the closest entity above the subject is Addr, so that if the subject is second person, the verb would have the conjunct inflection. Otherwise the verb would inflect for the disjunct inflection. There are a number of issues that remain, such as, what precisely does it mean for a commitment to be accompanied by the representation of the participant who is making this commitment? The inclusion of the participant information appears reasonable, especially in questions, where there are two commitments: one by the speaker, and the other by the addressee. Assuming that we can overcome these issues, the expressive layer based on the SAP and commitment(s) can deal with the Newari data without the need to postulate a layer such as Seat of Knowledge, which allows us to keep the expressive structure as simple as possible.

To recap, following Geurts (2019), I have proposed that interrogatives have an expressive structure with two Commitment Phrases: one for the speaker, the other for the addressee. This is to capture the fact that, in asking a question, the speaker commits to the goal of having the addressee commit to p; if it is a yes-no question, the addressee should commit to the proposition of p or the proposition of not p. In the

remainder of the chapter, we will look at the nature of the commitment that the addressee is being asked to commit to for *wh*-questions.

3. Labeling and the treetop

In the remainder of the chapter, we will look at a specific instance in which the expressive component interacts with the propositional content. We will look at questions in particular, and specifically, the phenomenon in Japanese of what is sometimes called "Q-particle drop." In Japanese, questions have a Q-particle to clause type an interrogative. It has been pointed out that the Q-particle may optionally be omitted (or "dropped") (Takahashi and Nakayama 1995, Ueyama 1992, Yoshida and Yoshida 1997).

(10) Dare-ga kuru (no)?
who-NOM come Q
'Who will come?'

The Q-particle can never be omitted in embedded contexts.

(11) Hanako-wa [dare-ga kuru *(ka)] sitteiru.
Hanako-TOP who-NOM come Q know
'Hanako knows who will come.'

This is a MCP, but unlike the root phenomena we looked at in prior chapters, such as politeness marking and sentential particles, this omission of the Q-particle is limited

to the main clause — the highest point in the utterance. The Q-particle cannot be omitted, for example, in the complement of the verb of saying.

(12) Hanako-wa [dare-ga kuru *(ka)] it-ta.
Hanako-TOP who-NOM come Q say-PRS
'Hanako said who will come.'

Miyagawa, Wu, and Koizumi (2019) (MWK) draw a parallel between the Q-particle and rich agreement in Romance. In Romance, rich agreement makes pro-drop possible, so that at the TP level no item needs to occur in the specifier of T (Taraldsen 1978, Rizzi 1982, Alexiadou and Anagnostopoulou 1998). In Japanese, the Q-particle, which occurs at C, makes it possible for the [Spec, CP] to be unfilled, just like pro-drop, which in turn makes Japanese a *wh*-in-situ language (Miyagawa 2001, 2017). Evidence for this function of the Q-particle comes from language change. While modern Japanese is a typical *wh*-in-situ language, in Old Japanese the *wh*-phrase overtly moved to the head of the sentence (Nomura 1993, Watanabe 2002). The following is taken from *Man'yoshu*, an anthology of poems compiled in eighth century CE; the number "1169" is the number of the poem in the anthology (Takagi 1957, 1962).

(13) Old Japanese
Idukuni-ka kimi-ga fune fate kutsa mutsubi-kemu. (1169)
which-KA you-NOM ship stop grass tie-PST
'Where did you anchor your ship?'

Without exception, a moved *wh*-phrase is accompanied by a focus particle, such as *ka* in this example. This overt movement began to disappear from the language beginning in the ninth century, apparently triggered by the separation of the *ka* particle from the *wh*-phrase (Miyagawa 2010). In Isobe's (1990) study of *wh*-questions in the *Tale of Genji*, a psychological novel by Lady Murasaki Shikibu in the tenth century, roughly one-third of the examples have *ka* on a *wh*-phrase at the head of the sentence, whereas in another third, the *wh*-phrase occurs in-situ by itself and *ka* appears at the end of the sentence, just as in modern Japanese. The remaining third are similar to those with clause-final *ka*, except that the final particle is a different focus particle *zo*. This last type is exemplified here.

(14) Old Japanese

Kono	nisi-naruie-ha		**nani-bito**-no	sumu-zo?
this	west-be	house-TOP	what-person-NOM	live-Q

'What person lives in this house to the west?'

In other words, once a particle such as *ka* or *zo* did not accompany the *wh*-phrase, but instead occurred on the interrogative C, the *wh*-phrase no longer moved and thus Japanese became a *wh*-in-situ language. In this way, the migration of the Q-particle to C made it possible for the [Spec, CP] to go unfilled, unlike in Old Japanese, parallel to pro-drop in Romance, which is made possible by rich agreement on T.

Why then is the Q-particle allowed to optionally "drop" in the main clause? MWK argue that this has to do with the labeling of the top node of the utterance.[1] The

Q-particle occurs on C in order to allow C to project and thus allow the clause to be labeled as CP. In subordinate clauses, this labeling must take place because there is further structure building on top of CP. However, MWK suggest the following for the main clause:

(15) *Root and labeling*

The root clause need not be labeled.

Their use of "root" is different from how we have used it; they intend this to point to the main clause at the very top of the utterance. The reason why the very top node need not be labeled is that there is no more (overt) structure building, hence there is no need for a label. Of course, there is further structure building in the form of the expressive structure, although this structure is covert. I will leave this issue open.

MWK argue that the top node of an utterance need not be labeled. Interestingly, Blümel (2017) argues that it must not be labeled, at least for declaratives. His argument rests on the V2 construction in Germanic, a root phenomenon. He focuses on the fact that what occurs before the verb in the second position is a fairly free and large set of XPs.

(16) a. [$_{DP}$ Maria] hat t_{DP} den Mann gestern gesehen.

Mary has the man yesterday seen

'Mary has seen the man yesterday.'

b. [$_{AdvP}$ gestern] hat Maria den Mann t_{AdvP} gesehen.

yesterday has Mary the man seen

c. [$_{VP}$ den Mann gesehen] hat Maria gestern t_{VP}.

the man seen has Mary yesterday

d. [$_{CP+fin}$ dass die Sonne scheint] hat Maria t_{CP} gesagt.

that the sun shines has Mary said

e. [$_{PP}$ über den Wolken] muss die Freiheit t_{PP} wohl grenzenlos sein.

above the clouds must the freedom PRT limitless be

'Freedom must be limitless above the clouds.'

f. [$_{AP}$ schön] ist Maria $t_{AP.}$

beautiful is Mary

'Mary is beautiful.'

Blümel's point is that the actual category (DP, VP, CP, ...) does not matter; what matters is that an XP is raised to the specifier at the highest point, which creates the set {XP, YP}, which, being identical in the level of projection, makes this a symmetric construction, which prohibits the node dominating it to be labeled (Chomsky 2013). Given that V2 is a root phenomenon, this idea of blocking labeling of a node only occurs at the highest point in the structure. See Blümel (2017) for other points regarding this interesting approach to V2 in Germanic.

Whether the label-less nature of the top node in an utterance is optional or obligatory, it leads to a kind of MCP that is severely restricted in distribution, much more so than the kinds of root phenomena we have observed.

In the remainder of the chapter, we will look in detail at Q-particle drop, with an eye to how this phenomenon sheds light on the interaction between the expressive component and the propositional component of questions.

4. Questions and exhaustivity

Wh-questions typically require an answer that gives the maximal information possible. This is the idea of exhaustivity (e.g., Karttunen 1977, Groenendijk and Stokhof 1982, 1984, Dayal 1996).

(17) What are you bringing to the picnic?

Under normal circumstances, the questioner expects the addressee to commit to listing all the dishes he or she is planning to bring to the picnic. However, it is not the case that the requirement to list all the possible answers always holds; there are contextual and linguistic means to suspend this requirement.

(18) a. Where can you buy the New York Times? (Groenendijk and Stokhof 1984, Engdhal 1986)

b. Who, for example, came to the party? (Karttunen 1977)

In (18a), the questioner may not want to know every store in the vicinity where one can buy the New York Times; mentioning just one place nearby may suffice. This is only true if you are simply looking to buy the Times; if you are a distributor for the newspaper and are exploring distributing the paper in a region, you would want to know every place where the paper is being sold to see what the competition is like, hence you would require the answer to list all the places that sell the Times. In (18b), the normal exhaustivity requirement is suspended by the insertion of *for example*, making it possible to respond with a partial answer instead of listing all the people who came to the party.

Various formulations for exhaustivity in questions are found in the literature (Baker 1968, Beck and Rullman 1999, Comorovski 1996, Dayal 1996, Engdahl 1986, Groenendijk and Stokhof 1982, 1984, Heim 1994, Karttunen 1977, among others). One intuitive way to think about exhaustivity in *wh*-questions and their answers is to consider it as a reflection of the Gricean maxim of quantity — be as informative as possible (Grice 1975, 1989). Grice's maxims are what the interlocutors believe to hold globally as they engage in verbal communication. It is so pervasive that there is no need to mark it linguistically; in fact, so much so that when the questioner wishes to suspend this requirement for a fully informative answer it must somehow be marked: by contextual implication, as in the New York Times scenario; or linguistically, by the use of phrases such as *for example*. This is the case in a language such as English. However, there is no reason why other languages would not mark exhaustivity for *wh*-questions as well. In fact, Miyagawa (2001) argued that the question particle (Q-particle) in the main clause in Japanese has this function. If this is correct, it shows that at least in some languages exhaustivity is overtly marked on the *wh*-question itself in the C-system. Therefore, it need not be considered a part of pragmatics; if it were, it would occur in the expressive component of the utterance instead. In this chapter, I will defend this analysis in Miyagawa (2001) using new data drawn from more recent works, some of which were intended as counterexamples to Miyagawa (2001). The new data helps to revise and extend the original observation. A particularly interesting set of counterarguments given to the analysis of the Q-particle as representing exhaustivity comes from examples of what are called "mention some" questions (Yoshida 2012). Later on in this chapter I will explore issues related to this form of question in detail .

In looking at various instantiations of exhaustivity, or the lack thereof, we observe an interaction between the expressive component and the propositional component. The presence of a Q-particle in the main clause signals an expectation for an exhaustive answer and its absence suspends this expectation. In this way, the addressee is asked to commit to either of these types of answers, with the commitment itself remaining unchanged. This has enormous consequences for how we view the expressive component: its basic structure, one for assertion/commissive and the other for directive, does not change with the speech act. It stays constant and any variations arise from the C-system, where propositions may be modified, qualified, and so forth.

5. Q-particle drop

The Question particle (Q-particle) *ka*/*no* clause-types both content and polarity questions.

(19) Dare-ga kuru no?
who-NOM come Q
'Who will come?'

(20) Hanako-wa kuru ka?
Hanako-TOP come Q
'Will Hanako come?'

The Q-particle *no* is typically used in the informal registry, while *ka* is used in formal as well as informal registries with some restrictions (Miyagawa 1987). In this section, I will focus on the Q-particle *no* in *wh*-questions.

As noted by Takahashi and Nakayama (1995), Ueyama (1992), and Yoshida and Yoshida (1997), in the informal registry it is possible to optionally omit the Q-particle. This is commonly referred to as Q-particle drop.

(21) Dare-ga kuru (no)?
who-NOM come Q
'Who will come?'

Miyagawa (2001) noted that there is a difference in meaning between *wh*-questions with and without the Q-particle. I suggested that the difference has to do with exhaustivity. The following is taken from that work, slightly changed as suggested in Yoshida (2012).

(22) Anata-wa pikunikku-ni nani-o mottekuru (no)?
you-TOP picnic-to what-ACC bring Q
'What will Hanako bring to the picnic?'

With the Q-particle in place, the questioner is expecting an answer that would exhaustively list the items that the addressee plans to bring to the picnic. In contrast, by omitting the Q-particle, the questioner is not expecting an exhaustive answer, but instead is giving a partial list of items that will satisfy as an answer, although it does not exclude giving an exhaustive answer. One would choose to ask the question in this way, without the Q-particle, in a variety of situations, such as if the questioner just wants a sense of the addressee's taste for picnic dishes, or if the questioner is

trying to avoid being too direct by not insisting on an exhaustive list (Yoshida 2012). On the basis of this observation, Miyagawa (2001) suggested the following.

(23) The Q-particle in root clauses marks expectation for an exhaustive answer.

From here on I will simply say, for the sake of brevity, that the Q-particle marks exhaustivity.

It is important to specify that this holds only at the root level. The Q-particle is always required in a subordinate clause, meaning that exhaustivity is implied here instead of being overtly marked.

(24) Taroo-wa [dare-ga kuru *(ka)] sitteiru.
Taro-TOP who-NOM come Q know
'Taro knows who will come.'

Because the Q-particle *ka* is mandatory in subordinate clauses, the indirect question could be marking exhaustivity, but it need not be interpreted as such. This is similar to what we see in English, which does not have an overt exhaustive marker in *wh*-questions; whether one intends to seek an exhaustive answer or not must be inferred from context, unless there is some overt marking such as *for example* to suspend the exhaustivity interpretation. What is important about Q-particle drop for main clauses is that the expectation of an exhaustive answer is marked in the question and it is not inferred in some pragmatic fashion. I assume this also to be the case with embedded questions, even though there is no Q-particle drop.

It is important to note that the Q-particle differs from so-called "exhaustive markers" in other languages. These include *all* in a certain dialect of English, *alles* in German, and *dou* in Mandarin (the following are taken from Xiang 2016: section 2.2).

(25) English *all* (Texas English)

a. Who **all** can teach Introduction to Linguistics?

b. Where **all** can we get coffee around here?

(26) German *alles*

a. Wer kann **alles** Einführung in die Sprachwissenschaft unterrichten?
who can all introduction into the linguistics teach
'Who all can teach Introduction to Linguistics?'

b. Wo kann ich hier **überall** Kaffee bekommen?
where can I here everywhere coffee get
'Where all can we get coffee around here?'

(27) Mandarin *dou*

a. **Dou** shui keyi jiao yuyanxue jichu?
DOU who can teach linguistics introduction
'Who all can teach Introduction to Linguistics?'

b. Zai fujin women **dou** keyi zai nali mai dao kafei?
at near we DOU can at where buy get coffee
'Where all can we get coffee around here?'

These exhaustive markers do not introduce exhaustivity as a new component of the meaning of the question; rather, they pick out the exhaustive meaning already present in the question and make it into the exclusive meaning of the question. This has the effect of excluding the partial answer as a possible response to the question. In other words, leaving out ***all***/***alles***/***dou*** does not necessarily lead to a question devoid of exhaustivity, since exhaustivity is part of the meaning of the question without being overtly marked. In contrast, the Q-particle in the main-clause environment does add the meaning of exhaustivity, so that omitting it takes away the requirement to list all the members of the set of possible answers that the question denotes.

5.1. Pair-list questions

Pair-list questions work the same way.

(28) Dare-ga nani-o kau (no)?
who-NOM what-ACC buy Q
'Who will buy what?'

With the Q-particle the presumption is that the answer will contain an exhaustive list of parings, but without it this could be a partial list (Yoshida 2012), including a single pair (Miyagawa 2001).[2]

Yoshida (2012), drawing on Dayal (1996), gives a particularly striking demonstration of the function of the Q-particle in pair-list questions. Dayal (1996: 105-106) gives the following question and two possible scenarios to go with it. The idea is that the left-most *wh*-phrase in a multiple *wh*-question must be answered exhaustively.[3]

(29) a. Which man is playing against which woman?

b. We're organizing singles tennis games between men and women. There are three men interested in playing against women, namely Bill, Mike and John. But there are four women interested in playing against men, namely Mary, Sue, Jane, and Sarah.

c. We're organizing singles tennis games between men and women. There are four men interested in playing against women, namely Harry, Bill, Mike and John. But there are three women interested in playing against men, namely Mary, Sue, and Sarah.

According to Dayal, the question in (29a), in which *which men* is the left-most *wh*-phrase, is only appropriate with the scenario in (29b), which allows the men to be exhaustively matched with a different woman. For the scenario in (29c), the left-most *wh*-phrase must be *which women*, since there are more men than women and only the women could be exhaustively matched with a different man.

As Yoshida (2012) points out, the same holds in Japanese. For the scenario in (29b), in which there are three men and four women, only the following, with "which men" as the left-most *wh*-phrase, is appropriate.

(30) Dono dansei-ga dono-zyosei-to tatakau no?

which man-NOM which woman-with match Q

'Which man is playing against which woman?'

To make this sentence compatible with the scenario in (29c), in which there are three women and four men, one can scramble the internal argument to the head of the sentence.

(31) Dono zyosei-to dono-dansei-ga tatakau no?
which woman-with which man-NOM match Q
Lit.: 'With which woman, which man is playing against?'

Because "with which woman" is now the left-most *wh*-phrase, it is the phrase that the question must answer exhaustively and it is compatible with the scenario in (29c).

In contrast to what we saw above, the following non-scrambled *wh*-question without the Q-particle is appropriate for both of the scenarios (Yoshida 2012).

(32) Dono dansei-ga dono-zyosei-to tatakau?
which man-NOM which woman-with match
'Which man is playing against which woman?'

The left-most *wh*-phrase is "which men," so one would typically expect this question to only be appropriate if the men in the context can be exhaustively matched, which is what we saw with the example containing the Q-particle in (30) above. However, because the Q-particle is omitted in example (32), the requirement of exhaustivity is suspended (see Yoshida 2012 for a slightly different explanation); there is no need to exhaustively pair men with women here, hence this question is appropriate even for the scenario in (29c). For example, based on this scenario, one could answer with the partial paring of Harry-Mary, Bill-Sue, and Mike-Sarah, and leave John off the list.

Yoshida (2012), in making this observation about Q-particle drop, defends an analysis in which the Q-particle does not mark exhaustivity, contrary to what Miyagawa (2001) argues. Instead, he draws on the nature of answerhood (Heim 1994, Beck and Rullman 1999) and the distinction between the answer being "fully informative" and "informative enough." The former is typically required by the presence of the Q-particle, while the latter may be allowed by a variety of means, including Q-particle drop, pragmatic context, or a phrase such as *for example*. We will return to his analysis later.

5.2. Q-particle and Question Under Discussion (QUD)

The omission of the Q-particle, which suspends exhaustivity, opens the door to other uses of *wh*-questions. Sudo and Uegaki (2019) give the following scenario, together with a *wh*-question.

(33) a. You and your co-author are giving a paper at a conference in a location neither of you have visited. After the first day, you ask your co-author the following question about dinner.

b. Tokorode kyoo yuuhan doko-de taberu (no)?
by.the.way today dinner where-in eat Q
'By the way, where are we going to have dinner today?'

Sudo and Uegaki note that this question with the Q-particle is felicitous if, for example, it was the job of the co-author to pick a place for dinner and you are now asking for the location of the dinner.

A more interesting point is what Sudo and Uegaki do not discuss about this example. We see this in a scenario in which you have not made a decision on the location of the dinner and you assume that your co-author has not either; in this scenario the Q-particle is infelicitous. Why is that? The presumption here is that you believe that your co-author has not decided where to eat, and you are also indicating that you have not decided either. Moreover, there is the assumption that both you and your co-author are unfamiliar with the local scene, so that there are no specific restaurants under consideration. Instead, the question implies some vague or imagined set of restaurants, and the intent is to invite the addressee to bring specificity by suggesting the kind of restaurant they may want to eat at. So the answer at the time of the question is a set of indeterminate member, rather like an imagined set of restaurants based on the assumption that there must be restaurants within easy reach. There is no way to exhaustively represent this imagined set of restaurants, so the Q-particle, which marks exhaustivity, must be left out. But how does leaving out the Q-particle help to ask this question? There is an additional point to be made here. In the earlier discussion of Q-particle drop I noted that, due to the suspension of exhaustivity, the addressee is only required to list some, and not necessarily all, of the members in the set of possible answers. Note that logically this could be as few as none; that is, omitting the Q-particle allows the addressee to not even give a direct answer to the question. This "null set" option is operative in the dinner plan scenario because it is not possible to pick out even a partial set of restaurants, owing to the fact that the set of restaurants is vague or imagined. In actual usage, this vague-set *wh*-question is inviting the addressee to enter into a discussion about where to eat, without assuming a specific set of restaurants to choose from.

A *wh*-question in which the meaning contains the denotation of a set with no specific members is unexpected under the classic analysis of *wh*-questions (Hamblin 1973, Karttunen 1977), which presumes that the meaning of the question is the set of possible (or true)[4] answers. By this account, without such a set, the *wh*-question would not have a defined meaning. What we see above is that this Hamblin/Karttunen formulation of the meaning of content questions tacitly assumes exhaustivity built into the meaning of content questions. This is because exhaustivity assumes that the members of the set are identifiable, such that each can constitute an answer to the question. This exhaustivity may be suspended by pragmatic or linguistic means, as we have seen, but the point is that in their formulation, exhaustivity is part and parcel of the meaning of content questions.

What we have seen with Q-particle drop is that exhaustivity need not be associated with the meaning of content questions. Once it is set aside, *wh*-questions that do not denote a set of all possible answers become possible. What is important is that the question has a denotation of some set, vague or imagined. A *wh*-question with a vague set is perfectly felicitous so long as the requirement of exhaustivity is suspended. Without exhaustivity, the question indicates that there is no need to list all the members of the set, rather only a subset, including the empty set. In actual usage, by keeping the answer empty, the questioner is inviting the listener to bring specificity to the membership of the set. In English, it is difficult to replicate this null-set denotation. The closest example is something like the following.

(34) Where would you like to eat?

However, this question in its most natural interpretation does indicate expectation that the addressee will answer with some felicitous response, which suggests that even here it is difficult to turn off the denoted set of possible answers associated with a question. This is most likely due to the fact that in its default state a *wh*-question in English contains the meaning of exhaustivity. A closer replication of the vague set question in Japanese is something like the following (due to Kai von Fintel, p.c.).

(35) Let's figure out where to eat.

This is not a direct question, so it does not anticipate an answer. Moreover, the predicate *let's figure out* suggests that no definite set of eating places is being assumed. Instead, the questioner is inviting the addressee to collaboratively come up with such a set. This is close to what we saw with the vague-set use of *wh*-questions without the Q-particle.

If exhaustivity is suspended and there is a possibility of a null set of p's, what exactly is the addressee being asked to commit to? As far as I can see, the commitment here is vacuous on the part of the addressee, so what precisely is the purpose of the question? I turn to this issue below.

5.2.1 Question Under Discussion (QUD)

Whenever we engage in conversation we have a series of goals and we have strategies by which to achieve these goals. We do this within a conversational context that is changing constantly as new assertions are added, which, if successfully navigated, add to the "common ground" (Stalnaker 1978; see, for example, Farkas and Bruce 2010 for extension of Stalnaker's work). When one asks a question it is put

at the top of "the stack" (in the sense of Farkas and Bruce 2010) as the "question under discussion" (QUD) (Roberts 1996). The next step is for the interlocutors to accept the question to answer, which in turn dictates (almost as an imperative in the sense of Lewis 1969) that the addressee cooperatively chooses from among the set of possible answers denoted by the question, which then goes into the common ground. Note that by this "flow" for questions there are two steps: first, the presentation of the question as being under discussion; and second, the commitment to answer it. In normal circumstances, these two steps are part and parcel of the act of asking a question, and would not be considered as separate parts of a conversational strategy to add to the common ground. But the vague-set question, made possible by the omission of the Q-particle, suggests that these two parts are indeed distinct steps in the conversational strategy for questions. The example is repeated below without the Q-particle.

(36) a. You and your co-author are giving a paper at a conference in a location neither of you have visited. After the first day, you ask your co-author the following question about dinner.

b. Tokorode kyoo yuuhan doko-de taberu?
by.the.way today dinner where-in eat
'By the way, where are we going to have dinner today?'

Given that neither of the interlocutors is familiar with the town, having visited for the first time, there is no identifiable set of possible answers (restaurants). Thus, the questioner is not necessarily expecting an answer about which restaurant to go to. Rather, the questioner is posing the question to register it as being under discussion,

which opens the way for both interlocutors to make suggestions as a way to expand the common ground. Thus, this question without the Q-particle is a pure form of QUD, without the added presumption that the interlocutors commit to answering the question by choosing from the set of possible answers.

From the discussion above, we can see that when exhaustivity is suspended and the set of possible answers is vague, the addressee's commitment is vacuous, so that there is no expectation on the part of the speaker for the addressee to answer. The utterance takes the form of a question, yet by virtue of the vague-set associated with the question, the addressee must understand that the intent of the speaker is something other than getting the addressee to commit to a specific set of p's. The intent here, as noted above, is simply to introduce the topic embodied in the utterance as a QUD.

6. Partial answer

In the most comprehensive study of the Q-particle to date, Yoshida (2012) suggests an alternative to viewing the Q-particle as a marker of exhaustivity. His arguments rest on the possibility of suspending a standard exhaustive answer even in the presence of the Q-particle. We saw these kinds of examples earlier in the chapter.

(37) Tatoeba dare-ga paatii-ni kita no?
for.example who-NOM party-to came Q
'Who, for example, came to the party?'

(38) New York Times-wa doko-de kaeru no?
NYT-TOP where-at buy.can Q
'Where can you buy New York Times?'

As already noted, the inclusion of *for example* signals that the questioner is indicating that the answer need not constitute a complete set of the people who came to the party (Karttunen 1977). In (38), the questioner just wants to know some location where the New York Times is available; an answer of just one location would do, although there may be multiple such locations (Groenendijk and Stokhof 1984, Engdhal 1986). In both of these cases, the Q-particle occurs naturally, despite the fact that the answer need not exhaustively list all the possible members of the set denoted by the question. To address the function of the Q-particle in the face of these kinds of "nonexhaustive" examples, Yoshida turns to an analysis of content questions in which a notion such as exhaustivity is thought to be built into the answer to the *wh*-question, and not the *wh*-question itself (Heim 1994, Dayal 1996, Beck and Rullmann 1999). What is the function of the Q-particle if it is not marking exhaustivity? Yoshida observes that a *wh*-question with and without *for example* differs in the nature of the answer, what he calls "fully informative" as opposed to "informative enough." A fully informative answer constitutes the standard answer to a *wh*-question, which is the answer that entails all the true answers to this question. In contrast, *for example* signals that the questioner requires an answer that entails only some of the true propositions in the proposition set denoted by the question. The same "fully informative/informative enough" distinction is seen in the New York Times scenario. If you are a distributor of the New York Times, you would require a fully informative answer that is composed of an exhaustive list of stores, but if you are just looking to purchase a copy of the Times, you just need to know as few as one location, and that would be informative enough.

I will discuss each of these mention-some cases to show that they need not be interpreted as counterarguments to characterizing the Q-particle as marking exhaustivity. In fact, considering the Q-particle as such reveals elements of these two kinds of mention-some questions that have not been noted in the literature.

6.1. *For example*

Xiang (2016) observes that *for example* is often ungrammatical in subordinate contexts.

(39) a. John knows who (*for example) came to the party.

b. John ate what (*for example) Mary bought.

This fact leads Xiang to conclude that *for example* is most appropriately treated as a "discourse expression outside the root denotation: it signals that the questioner is tolerant of partial answers" (Xiang 2016: section 2.3.1). In other words, *for example* indicates that the questioner is tolerant of partial answers and is a MCP, similar to style adverbs such as *frankly*, *truthfully*, and *honestly*, which are attitudinal adverbs that typically only occur in the main clause to indicate the speaker's attitude toward the proposition (Greenbaum 1969).

(40) a. I *frankly*/*truthfully*/*honestly* don't know the answer to that question.

b. *I regret that I *frankly*/*truthfully*/*honestly* don't know the answer to that question.

Just as these style adverbs function outside the root proposition, *for example* is outside the root denotation — the set of possible answers — of the question. This means that *for example* cannot be interpreted as part of the root denotation of a question, and encourages us to reexamine the actual meaning of the question with *for example*. It is generally assumed that *for example* constitutes a partial, nonexhaustive answer (see Xiang 2016 and references therein). But upon closer inspection, we see that *for example* assumes a list of items from which to draw the partial answer. A natural way to view this full list is the root denotation of the question, which is not disturbed by the presence of *for example*. In other words, a plausible analysis of *for example* is that there is an exhaustive list of possible answers and *for example* is simply indicating the questioner's attitude toward this list: specifically, that the questioner will tolerate an answer that only draws partially from this exhaustive list. How can we test this? It is not possible to test it in English, but the occurrence of the Q-particle in Japanese makes this test possible. By hypothesis, the occurrence of the Q-particle requires giving the exhaustive set of possible answers, while its omission does not impose the exhaustivity requirement on the answer. Note the following.

(41) Tatoeba, dare-ga paatii-ni kuru ??(no)?
for.example who-NOM party-to come Q
'Who, for example, is coming to the party?'

Although the judgment is delicate, native speakers I consulted agree that, with *for example,* the question without the Q-particle is degraded. A plausible explanation is that *for example* indicates that the questioner is tolerant of partial answers, but because the question itself already indicates nonexhaustivity by the omission of the Q-

particle, it is redundant to mark the tolerance for partial answer with *for example*. Having the Q-particle avoids this redundancy since the Q-particle arguably marks exhaustivity. From this perspective, the possibility of the partial answer with *for example* in a question that contains the Q-particle does not lead to the conclusion that the Q-particle is not a marker of exhaustivity. If anything, it is the exact opposite: the Q-particle marks exhaustivity and this avoids redundantly marking the tolerance for partial answers with *for example*.

To recap, a *wh*-question containing *for example* requires an answer that exhaustively lists the denotation of the set of possible answers and it is from this list that the addressee may pick a subset to return a partial answer.

6.2. Mention some

The other problem Yoshida (2012) raises for an analysis that considers the Q-particle marking exhaustivity is the "New York Times" example repeated below.

(42) New York Times-wa doko-de kaeru no?
NYT-TOP where buy.can Q
'Where can you buy New York Times?'

If you are simply looking to buy a copy of the Times, an answer with just one store in the vicinity will fulfill the need. Recall that Yoshida focuses on the answerhood of *wh*-questions and provides the option of fully informative or informative enough. Importantly, he considers that there are two fully informative answers to the New York Times question: (i) one that exhaustively lists all the stores where one can purchase the Times; (ii) the other with just one store, which would be an answer to

someone just looking to purchase a copy of the Times. This idea of two fully informative answers reflects similar observations by Beck and Rullman (1999), George (2011), and Fox (2013).

The “one store” response is a typical case of a mention-some answer. As will be noted below, the situation that makes the two options for fully informative answers possible is aided by the occurrence of the existential modal *can*. Yoshida’s point is that the availability of the “single store” answer as a fully informative answer with the Q-particle indicates that the Q-particle cannot be a marker of exhaustivity, because this answer does not exhaustively list all the stores that sell the Times.

One way to make the Q-particle as a marker of exhaustivity be consistent with the “one store” answer as being fully informative is to regard the set of possible answers to be pragmatically determined (Groenendijk and Stokhof 1984), or what Rooy (2004) calls “utility.” If the conversational goal (utility) is to find a place to purchase a copy of the Times, then a denotation set containing just one possible answer could constitute the meaning of the question; this could be exhaustively answered with the mention of just one store, so that the Q-particle as a marker of exhaustivity would be consistent with this mention-some answer.

The idea of a pragmatically determined context for questions allows us to maintain the idea of the Q-particle as a marker of exhaustivity, but it turns out that there is something more interesting that we can observe with mention-some questions and their answers, in contrast to the partial answers we saw above with *for example*. While a partial answer with *for example* could contain some (random) subset of the set denoted by the question, a true mention-some answer apparently requires an answer containing one member of the set; thus, it is more aptly called “mention-one” (Xiang 2016).

Xiang (2016: section 2.2) notes a prosodic difference between partial and exhaustive answers. While a partial answer has a rise-fall-rise prosody, marked below by "/", which marks uncertainty or incompleteness, an exhaustive answer is associated with a falling prosody ("\").

(43) Who went to the party? (Only John and Mary went to the party.)

a. John and Mary\

b. John did … / (I don't know who else did…)

c. #John did\

Only John and Mary went to the party, so (43a) constitutes a complete answer and can naturally carry a falling tone. In (43b), the addressee is unsure, only giving one person who went, and this uncertainty is marked by the rise-fall-rise pattern of a partial answer. The answer in (43c), which only gives John as the answer, but with a falling tone indicating exhaustivity, is infelicitous because it misleadingly suggests that the speaker believes only John went to the party.

A mention-some question is unique in that it allows a single-item answer in a world that contains more than one possible answer (example slightly changed from Xiang 2016, but with no change in the point being made).

(44) Who can chair this committee?

(Only John, Mary, and Sally can; it is a single-chair committee)

a. John can\

b. John, Mary, and/or Sally can\

The answer in (44b) is complete, so the association with the exhaustive prosody is expected. The answer in (44a) is, on the face of it, a partial answer; yet the exhaustive prosody is perfectly felicitous. This is puzzling, and even more so because, as seen below, listing two people instead of just one requires a partial answer prosody.

(45) John and/or Mary…/

So there is something unique about a "mention-one" question (Xiang 2016); although it does not list all the possible members of the set denoted by the question, it is allowed to have prosody reflecting a complete answer.

The mention-some/one question is the same in Japanese. With a Q-particle in place, the prosody we see with the possible answers below parallels that of English.

(46) Dare-ga kono-iinkai-no gityoo-ni nar-e-ru no?
who-NOM this-committee-GEN chair-DAT become-can-PRS Q
'Who can become the chair of this committee?
(Only Taro, Hanako, and Yukiko are candidates to become the chair)
a. Taroo \
b. Taroo-to/-ka Hanako…/
Taro-and/-or Hanako
c. Taroo-to/ka Hanako-to/ka Yukiko \
Taro-and/or Hanako-and/or Yukiko

Let us see what analyses are possible for mention-some/one vs. mention-all. The pragmatic approach (Groenendijk and Stokhof 1984, Rooy 2004) has a certain

intuitive plausibility, given that any question is asked in the context of some conversational goal in mind; yet there is no easy way for this approach to distinguish between mention-one, which counts as a complete answer prosodically, and what Xiang (2016) calls mention-intermediate (the (46b) answer above), which lists two out of the three possible answers and requires a partial-answer prosody.

Fox (2013) provides an analysis that attributes the ambiguity between mention-all and mention-some readings to structural variations within the question nucleus. Like Yoshida (2012), Fox assumes that both mention-some and mention-all answers are possibly maximally informative (what Yoshida calls fully informative) answers, depending on whether the question is interpreted as mention-some or mention-all. While the mention-all reading arises if a question has only one strongest true answer, mention some is characterized as follows.

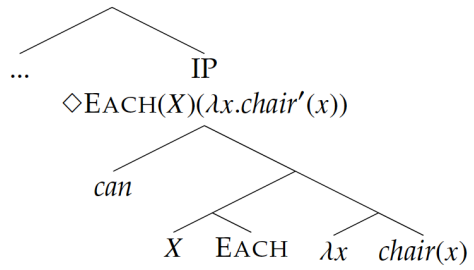
(47) *Fox's generalization of mention-some*

A question takes a mention-some reading only if it can have multiple maximally informative true answers.

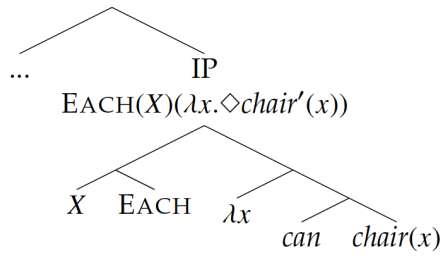
According to Fox, a true answer is maximally informative as long as it is not asymmetrically entailed by any of the true answers. This definition allows nonexhaustive answers to be possibly maximally informative. The technical execution of the two types of maximally informative answers involves the addition of a covert distributor *EACH* associated with the *wh*-trace *X*. In a question with an existential modal (*can*), *EACH* together with the *wh*-trace may scope above the modal, which results in what Fox calls "global distributivity," giving mention-all. Alternatively, they may scope under the modal, resulting in "local distributivity" that gives the

mention-some possibility. In the case of local distributivity, the lower scope of the distributor leads to a possibility of having multiple maximally informative true answers, each able to fulfill the requirement to return a maximally informative true answer.

(48) Global distributivity



Local distributivity



Although mention-some counts as a maximally informative answer, Fox (2013) assumes that it is nonexhaustive because it does not list all the possible true answers in the set denoted by the question.

Fox's (2013) approach laid the foundation for analyzing mention-all and mention-some in an equivalent fashion, with the variation proposed to be located in the question nucleus, thus a result of a grammatical operation. I will assume this general approach as we look at the Q-particle. In doing so, I will take into account an extension of Fox's approach suggested by Xiang (2016). This extension (Xiang 2016: chapter 2) predicts the observation that "mention-some" is always "mention-one," and that any mention-one answer possibly constitutes a good mention-some answer. She proposes two ways to account for the mention-all/mention-some ambiguity. One is based on the scope ambiguity of a higher-order *wh*-trace, and the other one is based on the optional presence of an operator which has the same meaning as the Mandarin

particle *dou*. I will focus on the first proposal, which has two assumptions: (i) instead of assuming scope ambiguity of distributivity as Fox does, she assumes that the *wh*-phrase binds a higher-order trace (of type <et, t>, like a generalized quantifier), which can take scope above or below the possibility modal (*can*); (ii) the local *wh*-trace is locally associated with a covert O-operator.

Calling it a covert O-operator, it has a meaning "close to the exclusive focus particle *only*: it affirms the prejacent and negates the alternatives that are not entailed by the prejacent."

(49) $O(p) = p \wedge \bigcap q \in Alt(p)[p \not\subseteq q \rightarrow \neg q]$

(p is true, and any alternative of p that is not entailed by p is false)

Xiang, like Fox, recognizes the occurrence of multiple possible answers for mention-some, thus the view is that the set of possible answers is not exhaustively given in the answer. She excludes all but one by the local exhaustive O-operator picking out one of the possible answers as the "only" answer that is felicitous.

6.2.1. Mention-one and singleton indefinites[5]

From the discussion so far, it is clear that mention-all and mention-one have a special status as answers that are complete in some essential sense. In this subsection, I will propose an analysis of this bifurcation of the complete answerhood. From Fox (2013), I will adopt the idea that mention-all and mention-one are both possibly maximally informative, and the difference between the two types of question-answers arises from some variation in the question nucleus. From Xiang (2016), I adopt the idea that even mention-one questions should abide by the uniqueness requirement that

is imposed on answers. What I wish to explore is a way to capture the insights in these earlier works as directly as possible, by taking advantage of an analysis developed in a different domain of quantification. As already noted, the Hamblin-Karttunen approach considers the meaning of a question to be the set of propositions that are possible/true answers to the question. This is commonly represented as involving existential quantification, where the extension of the restrictor of the existential quantification comprises the set of possible answers. Therefore, a potentially promising avenue to explore for mention-all/mention-one is to look at the study of existential quantification.

As it turns out, there is a phenomenon in existential quantification that parallels the mention-all/mention-one distinction. Indefinite expressions, which are associated with existential quantification, are linked to at least two different kinds of interpretations. On the one hand, indefinites have a run of the mill existential-quantificational interpretation; on the other hand, we have what are called specific indefinites, which typically have an interpretation with a single, specific referent.

(50) a. I have a friend in every class this semester.

b. I had dinner with a friend last night.

In (50a), *a friend* is an ordinary indefinite with a restrictor whose extension ranges over multiple instances of *friend*; in (50b), on the other hand, the indefinite refers to a single friend whose identity is assumed by the speaker, thus it is called a "specific indefinite."

There are studies that suggest that the ordinary indefinites and specific indefinites constitute different readings of the existential quantifier (e.g., Fodor and

Sag 1982, Cooper 1979, Barker 1998). In the earliest study that argues for two different kinds of readings of the existential expression, Fodor and Sag (1982) propose that indefinites are ambiguous between a quantificational interpretation and an indexical, referential interpretation.

In contrast, Schwartzchild (2002) argues that the meaning of the existential quantification is the same in both types of indefinites, and the difference between them arises from the nature of the extension of the restrictor. A restrictor of existential quantification contains bound variables, which themselves do not impose any limitation on the possible set of items that the quantifier quantifies over, beyond the meaning of the restrictor. However, the extension of the restrictor is typically bounded by either overt or covert means. The phrase *a doctor* by itself simply means any doctor ($\exists x$ [x a doctor]), but in the sentence *Is there a doctor in the house?*, the questioner is asking for any doctor who happens to be in, say, a theater at the time, thus restricting the extension of the restrictor just to that domain. What Schwartzchild (2002) suggests is that the extension may be arbitrarily small, right down to just one. He calls this just one option "singleton indefinite." This is what we see in the example we observed already: *I had dinner with a friend last night*. By the linguistic context, the extension is limited to one friend. The intuition Schwartzchild notes is that the existential quantification itself is just as operative in this example as in run of the mill indefinites, but the scope-taking of the quantification has effectively been neutralized, due to fact that there is just one member available as an extension of the restrictor. An important observation he makes is that this singleton indefinite cannot be just an indexical, referential interpretation, as originally suggested by Fodor and Sag (1982). Note, first, the following example from Schwartzchild (2002).

(51) Everyone at the party voted to watch a movie that Phil said was his favourite.

The indefinite phrase *a movie that Phil said was his favourite* may have a restrictor with multiple extension (Phil likes lots of movies) or it could be a singleton indefinite. This example per se does not argue against the proposal that the specific indefinite is just a referential expression. Now observe the following, again taken from Schwartzchild (2002).

(52) Every boy voted for a movie that his mother said was her favourite.

Assume that each mother has just one favorite movie, so that for each value of the bound pronoun *his*, the restrictor has a singleton extension. This means that a singleton indefinite need not refer to a single, definite item; rather, a singleton indefinite is an indefinite with a singleton restrictor relative to each relevant assigned value of the bound variable in the restrictor. In other words, the singleton indefinite is not an ordinary definite description, but an "ordinary" existential expression.

We have observed that mention-all and mention-one have the same property of being a complete answer, as shown by the prosody of the question, and they differ from mention-intermediate, which has partial answer prosody (Xiang 2016). Thus, there is something fundamental to "all" and "one," and this is precisely what we see from Schwartzchild's characterization of ordinary indefinites and singleton indefinites. We thus have the following.

(53) a. *Mention-all*

The existential quantifier has a restrictor whose extension covers all possible answers.

b. *Mention-one*

The existential quantifier has a restrictor whose extension is limited to one item — the singleton indefinite.

Recall that in Japanese, both of these types of questions contain the Q-particle. The example is repeated below.

(54) New York Times-wa doko-de kaeru no?

NYT-TOP where buy.can Q

'Where can you buy New York Times?'

This can be answered by a mention-all response, which contains all stores that sell the Times within some defined area, or just one store in a mention-one response. On the basis of the parallel with the two kinds of indefinites, as characterized by Schwartzchild, we can now state that the Q-particle is a marker of exhaustivity in both kinds of answers — it requires exhaustively listing the possible answers that are the extension of the set denoted by the question. In mention-all, the extension includes multiple possible answers, but in mention-one, there is just one such answer in the extension. This accounts for why mention-all and mention-one get the complete-answer prosody. It also makes the mention-one answer completely compatible with the uniqueness requirement: there is only one strong true answer, and no other options are available, as specified by the requirement that a question can only have one true

answer. Therefore, we can maintain Dayal's (1996) intuitive idea that a question is defined only when it has a unique strongest true answer; a strongest true answer is the true answer that entails all the true answers. In the case of mention-one, there is only one true answer because the restrictor has a singleton extension, and that becomes the strongest answer by default; there are no other true answers, so the notion that the strongest answer entails the other true answers applies vacuously.

7. The Q-particle, the 'why' question, and structure of the interrogative

In a footnote, Yoshida and Yoshida (1997) point out that the *naze* 'why' question does not easily allow omission of the Q-particle.

(55) Hanako-wa naze Bosuton-ni iku ??(no)?
Hanako-TOP why Boston-to go Q
'Why is Hanako going to Boston?'

I will argue that this prohibition against omitting the Q-particle in *naze* questions reflects a structural difference between questions with and without the Q-particle.

As far as I can tell, it is only with *naze* 'why' that Q-particle omission is disallowed.

(56) a. Dare-ga kuru (no)? *who*

who-NOM come Q

'Who will come?'

b. Kimi-wa nani-o tabeta (no) *what*

you-TOP what-ACC ate Q

'What did you eat?'

c. Hanako-wa itu kuru (no)? *when*

Hanako-TOP when come Q

'When will Hanako come?'

d. Kimi-wa dooyatte iku (no) *how*

you-TOP how go Q

'How are you going to go?'

e. Kimi-wa naze iku ??(no)? *why*

you-TOP how go Q

'Why are you going?'

As it turns out, there is a parallel phenomenon in English in which only the *why* question is degraded. The following examples are taken from Shlonsky and Soare (2011).

(57) I asked Bill a. whether to serve spiced aubergines for dinner.

b. who to serve.

c. what to serve the guests.

d. when to serve spiced aubergines.

e. how to serve spiced aubergines.

f. where to serve spiced aubegines.

g. ??why to serve spiced aubergines.

I will argue that these phenomena, one in Japanese and the other in English, are the same, both stemming from a structural deficiency associated with the *naze*/*why* question.

The difference between *why* and the other questions disappears in a tensed clause:

(58) I asked Bill a. whether I should serve spiced aubergines for dinner.

b. who I should serve.

c. what I should serve the guests.

d. when I should serve spiced aubergines.

e. how I should serve spiced aubergines.

f. where I should serve spiced aubergines.

g. why I should serve spiced aubergines.

Shlonsky and Soare argue that the failure of infinitival clauses to host *why* is due to the fact that an infinitival clause is a reduced clause (Hooper and Thompson 1973,

Haegeman 2006, 2010). They suggest the following "truncated" structure for infinitival clauses based on Rizzi's (1997, 2001) clausal structure.

(59) ~~ForceP > IntP > TopP > FocP >~~ WhP > Fin(ite)P

As shown, "WhP" may occur in an infinitival clause, but in Rizzi's analysis, this projection can only host non-*why wh*-phrases; *why* can only be hosted by IntP, which is associated with tensed clauses, but not with infinitival clauses. In a tensed clause, we can see that the location of the *wh*-phrases differ: *why* occurs in IntP, which is higher than WhP, which is where all the other *wh*-phrases naturally land. It is this difference in the location of *naze/why* that is the source of the difference between this *wh*-phrase and the others with regard to Q-drop.

My argument is based on the extension of the Labeling Algorithm (Chomsky 2013, 2015) proposed in MWK. MWK argue that in a language such as Japanese, items such as the Q-particle make it possible to project the head that they attach to (C), making it unnecessary to move the *wh*-phrase to [Spec, CP]. This is possible because the Q-particle has an agreement feature that matches the agreement feature on C. In English, no such item exists on C, which necessitates the movement of the *wh*-phrase to [Spec, CP].

As we have seen earlier, a particularly striking demonstration of the role of the Q-particle is found in the Japanese of 7th – 10th centuries. Japanese is a typical *wh*-in-situ language. However, in Old Japanese the *wh*-phrase overtly moved to the head of the sentence (Nomura 1993, Watanabe 2002). The following is taken from *Man'yoshu*, an anthology of poems compiled in eighth century CE; the number "1169" is the number of the poem in the anthology (Takagi 1957, 1962).

(60) Old Japanese

Idukuni-ka kimi-ga fune fate kutsa mutsubi-kemu. (1169)

which-KA you-NOM ship stop grass tie-PST

'Where did you anchor your ship?'

Without exception, a moved *wh*-phrase is accompanied by a focus particle, such as *ka* in this example. This overt movement began to disappear from the language beginning in the ninth century, apparently triggered by the separation of the *ka* particle from the *wh*-phrase (Miyagawa 2010). In Isobe's (1990) study of *wh*-questions in the *Tale of Genji*, a psychological novel by Lady Murasaki Shikibu in the tenth century, roughly one-third of the examples have *ka* on a *wh*-phrase at the head of the sentence, whereas in another third, the *wh*-phrase occurs in-situ by itself and *ka* appears at the end of the sentence, just as in modern Japanese. The remaining third are similar to those with clause-final *ka*, except that the final particle is a different focus particle *zo*. The last type is exemplified here.

(61) Old Japanese

Kono nisi-naruie-ha **nani-bito**-no sumu-zo?

this west-be house-TOP what-person-NOM live-Q

'What person lives in this house to the west?'

Once a particle such as *ka* or *zo* does not accompany the *wh*-phrase but instead occurs on the interrogative C, the *wh*-phrase no longer moves, and thus Japanese became a *wh*-in-situ language.

In Old Japanese of the *Man'yooshuu* era, the wh-phrase moved to [Spec, CP]; this could be due to movement triggered by the WH feature, or it may be triggered by focus agreement that is operative as suggested for *wh*-constructions in general by Rizzi (1997). MWK argue that this movement is necessitated by the fact that C in Old Japanese could not project by itself, due to a lack of an appropriate item that attaches to it (see MWK for a detailed explanation). How does the occurrence of the Q-particle (or the Focus particle) make it possible for the interrogative construction to occur free of *wh*-movement? In Miyagawa (2001), I suggested that the occurrence of the Q/Focus particle on the C_Q/Foc fulfills the EPP requirement of the C head. It does so because the particle has the same feature, Q (or FOC), as the head, C. MWK (2020) essentially updated this analysis by arguing that once the Q-particle (or Focus-particle) began to occur on C, this particle enabled projection of C, and the *wh*-phrase no longer needed to move to [Spec, CP].

If the Q-particle is needed for labeling, why can it be optionally omitted in the root clause? According to MWK, this has to do with the nature of the root clause — there is nothing that needs to merge on top of it. The "root" in the following really means the main clause.

(62) *Root and labeling*

The root clause need not be labeled.

As we saw, the Q-particle must occur in subordinate clauses; this is because the subordinate clause by definition undergoes further structure building, so labeling cannot be omitted. Along with the Q-particle, the topic marker -*wa* may be omitted, but only in root clauses (Kuno 1973, Saito 1985).

(63) Watakusi-wa iku.
I-TOP go
'I will go.'

(64) Sensei-wa [watakusi-*(wa) iku to] omotteiru.
teacher-TOP I-TOP go C think
'The teacher thinks that I will go.'

Let us now return to the issue of why the *naze* question resists Q-drop. The answer is structural (contrary to Sudo and Uegaki 2019), just as we saw for the impossibility of *why* in the English infinitival questions. Recall that in Rizzi's (1997, 2001) analysis, *why* occurs higher than the other *wh*-phrases, the former in IntP, the latter in WhP.

(65) ForceP > IntP > TopP > FocP > WhP > Fin(ite)P

In this structure, "WhP" would be CP. If this is the root projection, then by the notion of "root and labeling" given above, this would-be CP projection need not be labeled. Now, in Rizzi's analysis, *wh*-phrases move overtly to these positions in the articulated

CP region. In a language such as modern Japanese, *wh*-phrases do not move in syntax. However, following the general approach first proposed by Huang (1982), even in *wh*-in-situ languages such as Chinese and modern Japanese, the *wh*-phrase moves; this is why we see, for example, *wh*-island effects even in modern Japanese (Watanabe 1992). Hence, the kind of articulated CP structure that Rizzi has proposed is relevant even for modern Japanese.

So, in modern Japanese, *wh*-phrases move at LF even though they are in-situ in overt syntax. Under this assumption, Q-drop is allowed but only for *wh*-phrases that occur in "WhP," which are all *wh*-phrases except *naze*. This is because the "WhP" projection is CP and as a root clause it need not be labeled. However, *naze* occurs higher (at LF); to make this higher projection available for *naze*, there must be structure building beyond the basic CP. Further, to make the merge possible to build such a structure, this CP must have labeling. This is why *naze* requires the Q-particle, which induces C to project and label the "CP" node. Without the Q-particle, the "CP" node would not be labeled, and no further structure building is possible.

8. Concluding remarks

In this chapter we looked at an instance of the expressive component interacting with the propositional component of an utterance, specifically, interrogatives. I considered two issues: (i) what is the expressive structure of questions?; (ii) assuming that commitment is also relevant in questions, what exactly is being committed and by whom? I argued, based on Geurts (2019), that in questions, there are two commitments: one by the speaker, the other by the addressee. The speaker commits to the goal of having the addressee commit to p, while the addressee commits to (some sort of) p. The issue I looked at in detail for the latter is the source of exhaustivity in

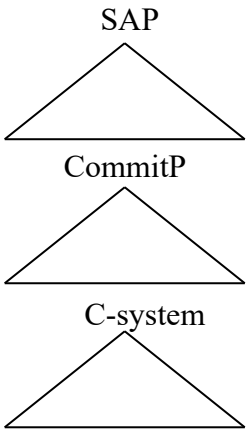
questions. Is exhaustivity coded in the addressee commitment, so that every time one asks a question the addressee is expected to commit to exhaustively answering it? By looking at Q-particle drop in Japanese, I argued that this exhaustivity is not part of the expressive structure, but instead it is overtly marked in the C-system. The Q-particle marks exhaustivity, and when it is optionally omitted, the question no longer has the expectation that the addressee should give an exhaustive answer. This indicates that the commitment in the expressive component stays the same across utterances — it is not the case that there is one commitment for exhaustivity and another for nonexhaustivity. Rather, such differences are overtly marked in the C-system as part of the propositional component of the utterance.

Chapter 6

Concluding thoughts: The uniqueness of human language

In this monograph, I proposed and defended the following structure for utterances.

(1)



The SAP, or the Speaker-Addressee Phrase, is the same as Krifka's (2020) ActP in designating the locus of illocutionary force, with the only difference being that the SAP contains a representation of the participants — the speaker and the addressee. I adopted from Krifka's work the Commitment Phrase, which is the syntactic layer that connects the illocutionary act to the proposition. The lowest layer, the C-system, contains the proposition of the utterance and it subsumes Krifka's Judgment Phrase. Together with the Commitment Phrase, the SAP comprises the expressive component of the utterance that allows the performance of the illocutionary act. As such, this component occurs in the treetops — in the root environment defined by Emonds

(1970). The C-system contains the proposition, such that any element that contributes to the truth-value of the proposition occurs in this layer of the structure.

We observed evidence for the SAP, and particularly the existence of the participant representations, by looking at a variety of linguistic phenomena in a number of languages. A striking piece of evidence came from allocutive agreement, in which second-person agreement shows up where there is no second-person entity in the sentence. We saw this from Basque, and we extended the analysis to the Japanese politeness marking, which, despite the fact that it does not take a second-person form, has distribution and function similar to the Basque allocutive agreement, hence I considered it as allocutive agreement. What we saw was that in Japanese, the allocutive agreement has strict limitations on its occurrence: it can only occur in the environments Emonds (1970) identified as the root. The structure proposed in (1) predicts this because the allocutive agreement depends on the addressee representation in the SAP for valuation, and the SAP, being the locus of the illocutionary force of the utterance, only occurs in root contexts.

Sentential particles in Japanese and Romanian also provided evidence for the structure in (1). We saw sentential particles that occur directly on the addressee head, while others occur on the head of the Commitment Phrase. We also observed sentential particles that select the head of CP, which signals that these sentential particles must externally merge with the CP, forming an extended C-system. Although these particles begin in the C-layer, they obligatorily move out of this layer into the SAP, as indicated in Romanian by second person agreement, for example, because it has moved to the addressee head. The fact that a sentential particle that begins in the C-layer for selection must move out of this layer into the SAP is a reflection of the boundary between SAP-CommitP on the one hand and the C-system

on the other. The C-system is reserved for the proposition and all the elements that contribute to its truth-value, while SAP-CommitP is dedicated to the performance of the speech act, thus the illocutionary force of the utterance. What is in the SAP-CommitP, or the expressive component as I called these two layers of structure, does not contribute to the truth-value of the utterance. A sentential particle does not play a role in the truth-value, hence, if it must initially occur in the C-system, it necessarily must exit it and move into the expressive component.

The structure I proposed in (1) is a simplification of the structure that Krifka proposes in that the Judgment Phrase, a syntactic layer he proposes between the Commitment Phrase and the proposition, is not included. The idea is to clearly demarcate the structure between the component dedicated to the performance of the speech act and the component that embodies the proposition of the utterance. Judgment Phrase may contain elements that belong to either of these components, something the structure in (1) does not allow. I looked closely at the analysis of topicalization in German, which Frey and Meinunger (2019) present as evidence for the existence of a Judgment Phrase. We saw that data from English, Japanese, and Spanish suggest that there is another way to view the effects that Frey and Meinunger observed — that these effects may be subsumed under the more general effect of minimality that we see in topicalization across languages.

The idea of commitment is straightforward for assertions, directives, and commissives. What about interrogatives? Following assumptions common in pragmatic studies, and particularly ideas from Geurts (2019), I suggested that (1) with some extensions can also accommodate utterances involving questions. An issue that arises for questions under this approach involving commitment is: in what ways does commitment interact with the propositional component of the utterance? I focused

mainly on the exhaustivity typically required of answers to *wh*-questions, showing that both it and cases where the exhaustivity requirement is suspended are independent of the commitment that the speaker requires of the addressee. In particular, I showed that in Japanese, the requirement for exhaustivity is overtly marked in the utterance in the form of the question particle. This suggests that exhaustivity is not pragmatically induced, but rather is part of the syntactic/semantic representation of the utterance. An important point for the proposed structure is that commitment stays uniformly as commitment, without any need to modify it from utterance to utterance.

I would like to close this monograph by reflecting on an issue pertaining to human language that separates it from other systems in nature used for communication. It is commonly assumed that human language is unique among these systems. Following are two expressions of the uniqueness of human language.

> *The lower animals differ from man solely in his almost infinitely larger power of associating together the most diversified sounds and ideas; and this obviously depends on the high development of his mental powers.*
>
> (Charles Darwin, 1871: 86, *The Descent of Man*)

> *It is also worth bearing in mind that the language faculty does appear to be a unique human possession. Other organisms have their own systems of communication, but these have properties radically different from human language, and human language is far more than a system of communication*.
>
> (Chomsky, 1988: 37-38, *Language and Problems of Knowledge*)

Darwin sees our ability to associate sounds to ideas of enormous complexity as bearing witness to the uniqueness of human language, while Chomsky describes language as far more than a tool for communication, which in its own way points as Darwin did to the capacity for enormously complex ideas beyond anything we see in other systems. Both of these points of view pertain to the C-system, the propositional component, where the richness and the complexity of human language reside. This, no doubt, is true. There is nothing else in nature that displays a system for creating and representing such immensely intricate ideas — ideas that can frame reality, even normalize it, and empower others, or even cause harm to them. But is that the only feature of human language that endows uniqueness to it among the systems found in nature? If we reflect on the structure in (1), there is a second element that contributes to this uniqueness. The SAP is the locus of illocutionary force, and as its most straightforward function, it embodies the act of communication by the speaker to the addressee. What allows language to be much greater than just a system of communication, as Chomsky emphasizes, is the Commitment Phrase. This mediates the act of communication with the propositional component that possesses, in Darwin's words, "almost infinitely larger power" to create ideas of immense complexity. It is this indirect link between the act of communication and the propositional component that frees up the language to unleash its unique capacity by allowing any possible propositional content created by this capacity to occur with just a handful of speech acts. Without the Commitment Phrase as an intermediary, our system would likely resemble that of the Vervet monkeys, which consists of signals that relate the act to convey alarm with only a handful of "meanings" — leopard, snake, or eagle. This does not reflect the richness of ideas to which Darwin refers, in

part due to less mental capacity, as he notes, but also because the system of the Vervet monkeys itself does not allow such richness, owning to the limitations of its design. Accordingly, as both Chomsky and Darwin note, the most striking capacity of language, which makes it unique, is its powerful propositional component. However, it is the Commitment Phrase that makes it possible to externalize the myriad forms of complex thought by associating them with a handful of speech acts, thereby making it possible to externally exhibit the uniquely human capacity of language.

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Notes

Preface

1. The act of communication by the monkeys and apes differs fundamentally from the act of communication by humans. While humans communicate in order to change the mental state of the addressee, monkeys and apes, with possibly the chimpanzees as an exception, do not have this intent. Rather, their intent is simply to change the behavior of the listener (Seyfarth and Cheney 2003).

Chapter 1

1. Thanks to an anonymous reviewer for drawing my attention to Frey and Meinunger (2019).
2. The *because* construction is given by Hooper and Thompson (1973) as a counterexample to Emonds's definition of root, but I believe that it fits into the second environment, so I will use it as a demonstration of Emonds's root.
3. See Lewis (1972) for a fundamentally different approach from Austin or Lakoff.
4. Searle (1975) does recognize that the interrogative form, *Do you have the ability to...*, contrasts with, *Can you...,* in not being associated with indirect request. He suggests that

"[...] certain forms will tend to become conventionally established as the standard idiomatic forms for indirect speech acts. While keeping their literal meanings, they will acquire conventional uses as, e.g., polite forms of requests" (Searle 1975: 76).

5. In most dialects of Basque that have the allocutive agreement, the agreement is limited to 2nd person singular colloquial masculine and feminine. This is similar to Japanese, where the allocutive (*-des-/-mas-*) is limited to just one register of speech, in Japanese, only the formal. For detail treatment of agreement in Basque, see, for example, Arregi and Nevins (2012) and Laka (1993).
6. See Heycock (2006) for a critique of H&T's work.
7. I thank an anonymous reviewer for suggesting that I include a discussion of Giorgi (2010).
8. There is a fourth environment, not included in Emonds's original definition, that apparently also can host at least some "root" phenomena. This is the environment of nonrestrictive relative clauses (Miyagawa 2017; see also Frey and Meinunger 2019). I will not deal with this additional environment in this monograph, instead I will stick to the original definition that Emonds gave.

Chapter 2

1. An anonymous reviewer wonders what precisely is the nature of *-mas-* selecting the Q-particle. The point is not that *-mas-* subcategorizes for *ka*, but simply that *ka* needs to be selected by a head, and *-mas-*, once it is raised to C, happens to be a head that locally c-commands it.
2. In most dialects of Basque that have the allocutive agreement, the agreement is limited to 2nd person singular colloquial masculine and feminine. This is similar to Japanese, where the allocutive (*-des-/-mas-*) is limited to just one register of speech, notably only the formal. For a detailed treatment of agreement in Basque, see, for example, Arregi and Nevins (2012) and Laka (1993).
3. A point of caution here is that Batua Basque is not a dialect, like Souletin, but is a unified form created by the *Real Academia de la Lengua Vasca*, *Euskaltzaindia*. It was deemed necessary because there was no common written form of the language, and none of the eight dialects was deemed as the standard (de Rijk 2008). Batua borrows heavily from the Guipuzcoan dialect, which does allow interrogatives with allocutive agreement (de Rijk 2008: 810), and the question particle *al* (same as Batua) occurs sentence-medially (de Rijk 2008: 163). Thus, Zu's point about Batua allowing interrogatives with allocutives due to the sentence-medial placement of the question particle is given credence by the Guipuzcoan dialect from which Batua has taken this property of the interrogative construction. I am grateful to an anonymous reviewer for noting this point about Batua and Guipuzcoan.
4. See Wiltschko (2014, 2017), Wiltschko and Heim (2016), and Corr (2016) for important related discussion on structures associated with the participants.
5. Yamada (2019a) attempts to deal with the Q-licensing data in Miyagawa (1987) through semantics and pragmatics, a point I will consider later in the chapter.
6. Yamada (2019a: 216-217) criticizes this feature raising as a form of "look ahead," something we do not wish to have in grammar. While I agree that look ahead is an inappropriate way to characterize any syntactic operation, this particular operation is not an instance of look ahead. The raising is

strictly optional: if it occurs, the allocutive ϕ-feature gets its valuation and is interpreted appropriately at the top of the structure; if it does not, neither the valuation nor appropriate interpretation takes place and the derivation crashes. Calling this look ahead would be the same as calling raising of DPs look ahead: a subject DP in an infinitival clause raises to the higher position to receive Case; if it does not raise, it does not get the Case and the derivation crashes.

7. There were three others who simply judged both as ungrammatical, and another three who judged both as grammatical. I set aside these speakers.
8. An anonymous reviewer asks about the status of the non–*mas*- subordinate clause and its relation to the main verb *say*, namely, how is it interpreted as a selected clause if it does not reconstruct? One possibility is to treat this kind of verb as (optionally) a non-bridge verb, so that the subordinate clause is not selected by the main verb unless there is -*mas*- in the subordinate clause.
9. The morphology of the SH is *o… ni nar*- where *o*- as the honorific marker is prefixed to the verb (Suzuki 1988, Ivana and Sakai 2007); this is followed by the particle *ni* and the "light verb" *nar*- (e.g., Harada 1976, Hasegawa 2006, Bobaljik and Yatsushiro 2006). Structurally, Kishimoto argues that the honorific head H is embedded under this light verb and the honorific marker, which attaches to V (*home*-H 'praise-H'), is pronounced in reverse as *o-home*. Kishimoto draws a parallel with such reversals that we see, for example, with the English tense, in which 'PAST + *walk*' is pronounced as *walked*. Finally, the [+honorific] feature on H(onorific) head and the same feature on the argument DP in [Spec,vP] enters into agreement, thereby accounting for the subject honorification property. As shown, this subject-SH agreement takes place within vP and not at the TP level, a point consistent with Saito's (2009) proposal that agreements involving the subject (for example, the subject-oriented reflexive *zibun*) take place in vP in Japanese.
10. This subsection was inspired by questions asked at a talk I gave at Tohoku University on January 23, 2020.
11. I thank Deepak Alok for assistance with this section on Magahi.

Chapter 3

1. An interesting possibility for (42) is that the addressee head raises above SpkP in questions, and this is why we see *ne* above the speaker SFP. This would mean that the SAP is syntactically marked for questions, by something like Aux inversion to clause type it as interrogative. I will not pursue this line of possibility in this monograph.
2. See Heim et al. (2016) and Yang and Wiltschko (2016) for a discussion of Northern Mandarin *ha*, which appears to be similar to Japanese *ne* and Romanian *hai*.
3. A phenomenon in English that is related to the asymmetry we find in the Japanese SFPs is that it has been observed that children with ASD tend to refer to themselves as *you* and the addressee as *I* (Tager-Fulsberg 1994). This is noted as evidence that these children have a pragmatic difficulty in understanding shifting reference between the speaker and the addressee. One way to interpret this is that these children do not have a well-developed SAP, so that first- and second-person pronouns are often not correctly associated with the appropriate projections of the SAP.

Chapter 4

1. Much of the remainder of the chapter, save the conclusion, is taken from Miyagawa (2017), except for the references to the works by F&M and Krifka. I am grateful to *Gengo Kenkyu* (Linguistics Research) for giving me permission to reproduce this part of the article that appeared in that journal.
2. See Koster (1978) for an alternative view that does not necessitate postulating movement for these constructions.
3. There are counterexamples in the literature to the claim that topicalization blocks *wh*-movement; the following is from Radford (2009: 327; quoted in Haegeman 2012).

(i) A university is the kind of place in which, that kind of behavior, we cannot tolerate.

This is a relative clause, a fact that may — or may not — contribute to overcoming the topic island. I will leave this issue open.
There are further exceptions noted in the literature. The following are cited in Haegeman (2012) as cases of a topic being extracted across a *wh*-phrase.

(ii) ?This book, to whom should we give?

(Pesetsky 1989: 13, (39b), attributed to A.Watanabe)

(iii) ?These prices, what can anyone do about?

(Langendoen 1979: 429, Pesetsky 1989: 13, (39b), via A. Watanabe)

As shown by the question mark, speakers do not find these entirely natural. Perhaps we are dealing with a left-dislocation construction where the resumptive *it* is unpronounced. I will not attempt a more detailed analysis of these exceptions in this article.

4. See Section 8 for a full explanation of Strong Uniformity.
5. See Heycock (2006) for extensive discussion of Hooper and Thompson's work, including a number of counterexamples.
6. There are specific predicates in Spanish that do allow both indicative and subjunctive complements (Villalta 2008). The predicate *sentir* as an emotive factive predicate ('be sorry') selects a complement in the subjunctive mood, while as a predicate of perception ('sense'/'have the impression') it selects for an indicative complement.
7. See von Fintel (1999) for a view of *want* that contrasts with Heim (1992).
8. For comments on Villalta's work, see Portner and Rubinstein (2012) and Oikonomou (2016). See in particular Portner (2018) for some criticism. The semantic approach suggested here based on Villalta may hold promise for accounting for the wide range of judgments regarding topicalization in the subordinate environment. For example, in contrast to the ungrammatical example Emonds (1970) gave using *deny*, the following, pointed out to me by Peter Culicover, is more readily acceptable.

   (i) I categorically deny that to Mary, the federal government will give a sizable refund.

   There are a number of factors involved here, including the use of the adverb *categorically*, which may be helping to overcome the need for a predicate with a gradable meaning and a complement that matches it with focus-generated alternatives. I will leave this for future work.
9. See Miyagawa (2010) for an argument that scrambling is an instance of topicalization. Not all instances of scrambling are for topicalization, as in the case of a *wh*-phrase which has scrambled to the head of the sentence. This would be more like focus movement. Thanks to an anonymous reviewer for this point.
10. This typology has a more fine-grained version that distinguishes between the δ-features Topic and Focus. In Spanish, the Topic δ-feature is inherited by T, as shown, but the Focus δ-feature actually stays on C (see Miyagawa 2017).

Chapter 5

1. See Chomsky (2013, 2015) for an explanation of the role of labeling in linguistic theory. I will not attempt to recreate the arguments here.
2. In Miyagawa (2001), it is stated that the most salient interpretation for a multiple *wh*-question without the Q-particle is the single-pair interpretation. However, Yoshida (2012) correctly notes that it is possible to answer such a question with a list of pairs that is nonexhaustive. Sudo and Uegaki (2019) also observe that it is possible to have a pair-list meaning without the Q-particle, although they do not notice the difference that Yoshida (2012) observes between examples with and without the Q-particle.
3. In contrast to Dayal, Xiang (2016: section 5.2, 2019) argues that multi-*wh* questions with pair-list readings do not presuppose domain exhaustivity.
4. The revision that Karttunen (1977) argues for, from Hamblin's "possible" to his "true" answers, has to do with the veridicality of certain predicates that take a subordinate clause. *Tell* is non-veridical when it selects a declarative subordinate clause, but may be veridical when selecting an indirect question.

(i) a. John told us that Mary left.
    b. John told us who left.

In (a), *tell* is non-veridical, while in (b), the most natural interpretation is that it is veridical, and this must come from the subordinate question, which has as its denotation the set of true answers. In this paper, I will continue to use the original Hamblin characterization of "possible answers," being neutral to whether the answers are true or not. Contrary to Karttunen (1977), Spector and Egré (2015) argue that declarative-embedding *tell* also admits a veridical reading

5. I owe Kai von Fintel for suggesting that I consider a possible parallel between mention-one and singleton indefinites.