## On the Syntax-Morphology Divide: Towards a Unified Analysis of Causatives. The Case of Hungarian and Japanese

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A Thesis in
The Department
of
Classics, Modern languages and Linguistics

Presented in Partial fulfillment of the Requirements for the Degree of Master of Arts (Individualized Program) at Concordia University Montréal, Québec, Canada

 $May\ 2024$ 

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## CONCORDIA UNIVERSITY School of Graduate studies

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## Abstract

On the Syntax-Morphology Divide: Towards a Unified Analysis of Causatives.

The Case of Hungarian and Japanese

#### Amber Kalapos

This thesis argues for a unified syntactic analysis of causatives. Previous literature has taken contrasts between Hungarian and Japanese morphological causatives as evidence that Hungarian causatives are derived in the lexicon via arity operations, while their Japanese counterparts are derived in the syntax via Merge and Agree. It is shown that the contrasts between Hungarian and Japanese causatives can be accounted for within the syntax, without needing to posit a separate computational component in the lexicon. Specifically, I argue that the locus of variation has to do with the size of the complements taken by Hungarian and Japanese causatives. Following Pylkkänen (2008)'s causative typology, I assume that Hungarian causatives embed little-v (i.e. they are 'verb-selecting' in Pylkkänen's terminology), while Japanese causatives embed Voice (i.e. they are 'Voice-selecting'). Furthermore, I demonstrate that the syntactic analysis I propose accommodates empirical evidence that cannot be accounted for under a lexicalist analysis.

# Acknowledgments

Completing this master's thesis in linguistics has been a challenging and rewarding journey, and I would like to express my deepest gratitude to those who supported me along the way.

First and foremost, I would like to thank my principal supervisor, Dr. Dana Isaac, for her feedback, guidance, and patience. I am incredibly grateful for her time, dedication, and insight that helped shape my work. I could not have done it without her. To my other two supervisors, Alan Bale and Mark Hale, thank you for taking the time to guide me. In particular, I am grateful Alan for his advice on writing.

I would also like to extend my heartfelt thanks to my Hungarian consultants (my family) who participated in my research: Irene Kalapos, Magdi Fiser, Jozsi Fiser, Tommy Fiser, and Albert Berta. Their endless patience and willingness to share their knowledge, answer my questions, and provide grammatical judgments was crucial to the success of this thesis. I am also grateful to Hisako Noguchi. I thank her for her extremely helpful discussions of Japanese and for providing her own judgments. Without her, much of the analysis and discussion of Japanese herein would have been impossible, and the dissertation as a whole would have been much the poorer. I deeply regret if I have neglected to mention anyone.

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# List of Abbreviations

Acc Accusative

Agr Agreement

Aux Auxiliary

Comp Complementizer

Caus Causative affix

Dat Dative

**Def** Definite

Fut Future

Gen Genitive

Neg Negation

Nom Nominative

Pass Passive

**Perf** Perfective

**Pl** Plural

 $\mathbf{Prt}$  Participial

pres Present

 $\mathbf{Sg}$  Singular

Subj Subject

 $\mathbf{Top} \ \mathrm{Topic}$ 

Trans Transitive

Indef Indefinite

 ${\bf Inst} \ \ {\bf Instrumental}$ 

Intrans Intransitive

# Chapter 1

## Introduction

### 1.1 The Problem

This thesis focuses on causatives, i.e. linguistic expressions that refer to a complex situation involving two component events (Comrie 1989: 165-166; Song 2014: 256-259): (i) a causing event, in which the causer does or initiates some action or process; and (ii) a caused event, in which the causee carries out an action, or undergoes a change of state as a result of the causer's action. In (1b) for example, the causing event is encoded by the light verb made. The causer Maxim, introduced by the causative verb, is responsible for initiating the second event, that is, 'Frank's calculating of the accounts', whose subject is the causee. In the absence of made, the verb is non-causative, as shown in (1a)

- (1) a. Frank calculated the accounts.
  - b. Maxim made Frank calculate the accounts.

Typically, the use of a 'supporting' verb such as *make*, along with the presence of an additional (external) argument, are the surface indicators of causation in English or other languages like Spanish and the rest of Romance languages. However, the presence of an independent causative marker is not the only indication of productive causation. Many languages express causation morphologically. Take the Japanese (2b) and Hungarian causatives (3b) as an example.

- (2) a. Hanako-wa ik-ta. (Japanese) Hanako-TOP go-PAST 'Hanako went.'
  - b. Taroo-ga Hanako-o ik-**ase**-ta. Taroo-NOM Hanako-ACC go-CAUS-PAST

- (3) a. Lázló énekel-t (Hungarian) Lázló.NOM sing-3SG.INDEF.PAST 'Lázló sang.'
  - b. Béla énekel-tet-te Lázlót. Béla.NOM sing-CAUS-.3SG.DEF.PAST Lázló-ACC 'Béla made Lázló sing.'

In both Japanese and Hungarian, causation is encoded via a causative morpheme attached to the base verb, -(s) as in the case of the former, and -(t)At in the case of the latter. The resulting verb + Cause complex is a single phonological word, and is equivalent in meaning to a periphrastic causative like 'make calculate'—that is, it conveys both causative meaning and the action being caused. As with the periphrastic causative, morphological causatives include the addition of a causer argument. Note that the logical subject of the base verb is demoted and case-marked as direct object (or, in other instances, an oblique).

Although there is consensus in the literature that periphrastic causatives are derived in the syntax, there is a long standing debate as to whether productive morphological causatives are derived in the syntax or the lexicon. Japanese was one of the first languages with morphological causatives to receive serious attention in the syntactic literature (Dubinsky 1994; Hara 1999; Harley 2008; Kuno 1975; Kuroda 1965; Miyagawa 1984; Oshima 1979; Shibatani 1973; Terada 1990, among others). One of the criteria that has been used to establish whether a morphological causative is built in the syntax is to assess whether the respective causative is mono-clausal or biclausal. According to this view, if a causative is composed by a pre-syntactic process or operation (i.e. in the lexicon), it follows that it would enter the syntax as a primitive, that is, it would be the head of a single verbal projection, and would thereby project a single clause. However, if the causative were composed in the syntax, it would involve two verbal structures (one projected by the causing verb and another one projected by the verb expressing the caused event), and would, accordingly, be bi-clausal. Put simply, mono-clausality is taken to indicate that the causative is the result of a lexical operation, whereas bi-clausality is assumed to be the result of a syntactic derivation. While Japanese morphological causatives like (2b) display certain mono-clausal properties, in particular they act as a single domain for tense, case-marking, and negative polarity, according to other tests—compatibility with agent-oriented adverbials

<sup>&</sup>lt;sup>1</sup>The capital A represents a low, unrounded vowel, which is realized as e (front) or a (back).

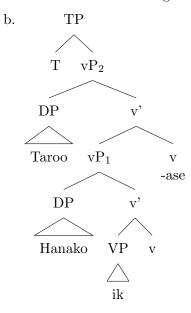
(Shibatani 1973), subject-oriented anaphors (Oshima 1979), subject-control adjuncts (Dubinsky 1994; Terada 1990, among others), and interaction with Binding Condition B (Miyagawa 1984), disjunction (Kuroda 2003), and scope of negation (Hara 1999)—indicate that Japanese causative have bi-clausal properties, in particular, the presence of two external arguments; a causer and causee.

On the basis of these bi-clausal properties, Miyagawa (1998), and later Harley (2008), proposed a syntactic account of Japanese morphological causatives. In their analysis, the causative affix -(s)ase heads its own verbal projection  $vP_2$ , taking the caused event, which is a fully articulated verb phrase  $vP_1$ , as a complement. This stacked vP analysis, illustrated in (4b), straightforwardly accounts for the bi-clausal properties of Japanese morphological causatives (with respect to binding, control, negative scope, and disjunction): the presence of two verbal projections,  $vP_1$  and  $vP_2$ , allows for disjunction and scope ambiguities (for negation); the two  $vP_3$  are phase heads (Chomsky 2001) yielding two distinct binding domains; and they introduce two external argument positions for the causer and causee in their specifiers. These properties will be discussed in more detail in §2.4.1

(4) a. Taroo-ga Hanako-o ik-**ase**-ta.

Taroo-NOM Hanako-ACC go-CAUS-PAST

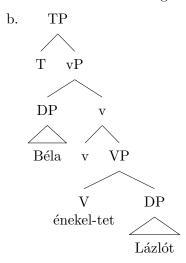
'Taroo made Hanako go.' (Harley 2008: 22)



The fact that Japanese morphological causatives form a single domain for tense and casemarking also falls out from the structure in (4b). The inflectional architecture responsible for introducing tense and also assigning nominative case must be built atop the complex predicate structure, resulting in one instantiation of tense and a single position for nominative case assignment.

However, not all morphological causatives are alike. Unlike Japanese causatives, which show bi-clausal properties, Horvath and Siloni (2010; 2011) claim that Hungarian morphological causatives are mono-clausal. On the basis of this mono-clausality—which they determine using the same tests that were used for Japanese, i.e. binding, negative scope, ellipsis, and agent-oriented adverbs—Horvath and Siloni (2010; 2011) argue that, while Japanese morphological causatives are composed in the syntax, Hungarian morphological causatives are derived through a computational operation in the lexicon. In other words, the morphologically complex verb énekeltette is merged in the syntax as a single lexical verb and it projects a single vP, as in (5b).

(5) a. Béla énekel-**tet**-te Lázlót. Béla.NOM sing-CAUS-3SG.DEF.PAST Lázló-ACC 'Béla made Lázló sing.'



The picture that emerges is that morphological causatives are likely not a uniform phenomenon across languages, and that (at least) two types can be distinguished: the Japanese type, which shows bi-clausal properties and is derived in the syntax, and the Hungarian type, which displays mono-clausal properties, and is derived in the lexicon.

In this thesis, I will challenge Horvath and Siloni (2010; 2011)'s claim that the monoclausal divergent properties of Hungarian morphological causatives cannot be accounted for in the syntax and necessitate a lexicon derivation. Instead, I will argue that both Japanese and Hungarian morphological causatives can be derived in the syntax if one assumes a verbal architecture that is articulated enough (as in Harley 2008; Kratzer 1996; Pylkkänen 2002; 2008; Legate 2014). Importantly, a syntactic analysis of morphological causatives has the benefit of capturing both morphological and periphrastic causatives without positing a separate derivational engine located within the lexicon.

In addition to shedding light on Hungarian causative constructions, this thesis continues the program begun by Pylkkänen (2002; 2008) towards a unified syntactic analysis of causatives. In particular, this project will validate the assumption that the various functions often attributed to 'little v' should be separated and treated as properties of independent heads (as in Pylkkänen 2002; 2008 and Legate 2014 a.o.). Last, but not least, this study will contribute to the debate on whether morphological generalizations can be accounted for in terms of purely syntactic operations like Merge and Agree, and will inform the theory about what kind of syntactic assumptions one should adopt in order to accommodate morphology within the syntax.

## 1.2 The Chapters

The rest of this dissertation is organized as follows. Chapter 2 will outline the theoretical background regarding the debate between lexical and syntactic analysis of morphological phenomena. In addition, I will discuss some of the previous literature on Hungarian morphological causatives. I will summarize the arguments Horvath and Siloni (2010; 2011) use to motivate a lexical analysis of Hungarian morphological causatives.

I will also introduce Bartos (2011)'s critiques of Horvath and Siloni (2010; 2011) and present his syntactic analysis of Hungarian morphological causatives. I argue that Bartos (2011)'s syntactic analysis assumes a structure for Hungarian morphological causatives that is more or less identical to the structure proposed by Harley (2008) for Japanese -(s)ase causatives. Consequently, he is unable to account for the contrasts between Japanese and Hungarian morphological causatives without disregarding the established analysis for Japanese causatives, or altering his own analysis.

In Chapter 3, I will develop a syntactic analysis for Hungarian morphological causatives that accounts for the contrasts outlined by Horvath and Siloni (2010; 2011). Following the typology introduced by Pylkkänen (2008), I will claim that Hungarian morphological causatives correspond to a Verb-selecting structure and Japanese to a Voice-selecting one. In other words, the similarities between the two languages can be accounted for by the fact that, in both cases, the causative morpheme selects for a verbal, rather than clausal, complement, while the differences between them follow from the size of this embedded verbal complement. Going further, I argue that there is micro-variation within Hungarian morphological causatives. Note that in Hungarian morphological causatives the causee surfaces with accusative, as in (6a) or

instrumental case, as in (6b).

- (6) a. köhög-tet-tem a gyerek-t cough-CAUS-PAST.1SG the child-INST/child-ACC 'I made the child cough.'
  - b. köhög-tet-tem a gyerek-kel. cough-CAUS-PAST.1SG the child-INST/child-ACC 'I had the child cough.'

I argue that instrumental-causee and accusative-causee constructions correspond to distinct Verb-selecting structures. To motivate this analysis, I show that instrumental-causee and accusative-causee exhibit structural asymmetries with respect to distribution, syntactic optionality, verbal agreement, animacy restrictions, and interpretation. To account for these asymmetries, I propose that instrumentally case-marked causees are merged as adjuncts adjoined to the vP, while accusative causees are introduced within the vP, specifically, in Spec vP.

With the syntactic analysis in place, Chapter 4 accounts for some of the more complicated data presented in Horvath and Siloni (2011). Horvath and Siloni (2011) claims that Hungarian morphological causatives fail to causativize raising and control predicates, while their Japanese counterparts can. They argue that, in particular, the contrast regarding the (in)ability of morphological causatives to embed raising verbs is best accounted for under a lexical account because it can be explained with reference to argument structure. That is, the lexical causativization operation requires that the input verb have an external argument, therefore, raising verbs, which lack an external argument, fail to causativize. I demonstrate that the data utilized by Horvath and Siloni (2011) to illustrate differences between Hungarian and Japanese causatives do not pertain to raising and control predicates, but rather to restructuring predicates. I will offer an explanation of how Hungarian and Japanese morphological causatives interact with restructuring and non-restructuring (control) predicates. My contention is that, assuming a restructuring analysis in line with Cinque (2004; 2006) and Grano (2015), the inability of the Hungarian causative to embed restructuring verbs falls out from the assumption that they are Verb-selecting. Importantly, contra to the claims of Horvath and Siloni (2011), Hungarian and Japanese morphological causatives show no contrast with respect to their ability to embed raising and control verbs. Both permit the causativization of control verbs and fail to embed raising predicates; I will provide an explanation for each of the behaviours.

## Chapter 2

# Background

## 2.1 Lexicon vs. Syntax

Most theories generally agree on the role of the syntax: it is the component responsible for the possibilities (and impossibilities) of how 'words' or morphemes are combined into phrases. On the other hand, conceptions of the lexicon are much more contested. It is minimally defined as the list of atomic elements (including their conceptual content) that act as inputs for the computational component of the grammar. This repository contains items that are idiosyncratic in that they possess some property that does not follow from the grammatical rules of the given language (Di Sciullo and Williams 1987).

However, the content of these entries and precise abilities of the lexicon depend on how linguists analyze phenomena that occur at the boundary or interface between the lexicon and the syntax. If the operations of the syntax may be reasonably adjusted to account for the phenomena in question, then the syntax becomes more complex. However, the interface phenomena may be attributed to the lexicon, in which case the lexicon gains additional power and the syntax becomes leaner. Accordingly, the analysis of interface phenomena has direct implications for conceptions of the grammatical components. In the case of the syntax-lexicon interface, the issues most in contention are morphological complexity and argument structure. Notably, morphological causatives are an amalgamation of these two issues; a phenomena where morphological combination coincides with changes in argument structure, specifically the addition of a new argument (i.e. the causer) and the 'demotion' of an existing argument (i.e. the causee).

The main point of contention is whether morphological processes like affixation (and any

corresponding changes in valency), occur in the syntax or in a separate generative component, usually identified as the lexicon. The syntactic approach argues that word formation takes place in the syntax utilizing the same operations that compose words into phrases. Distributed Morphology (Halle et al. 1993) and Nanosyntax (Starke 2009) take this approach. Alternatively, lexicalist approaches posit two major assumptions: (i) that complex words are derived in the lexicon by processes distinct from those used in the syntax (the Lexicalist Hypothesis) (Chomsky et al. 1970); and (ii) that these complex words enter the syntax as atoms whose internal components cannot be targeted by syntactic rules (the Lexical Integrity Principle);(Di Sciullo and Williams 1987, Bresnan and Mchombo 1995).

To complicate matters, each of these tenets has a strong and weak version. The strong Lexicalist Hypothesis claims that *all* morphology occurs in the generative lexicon, while its weak variant makes a distinction between derivational morphology, which is composed in the lexicon, and inflectional morphology (case, agreement, and verbal infection) which occurs in the syntax. The strong Lexical Integrity Principle assumes that 'word parts' are completely inaccessible to the syntax. The weak version permits the syntax to analyze word internal structure, but prohibits it from "performing word building operations such as compounding, derivation and inflection (if the latter is considered to be a word building operation), or the deletion operations such as the gapping of parts of words" (Le Roux 1988: 7).

## 2.2 Lexicalist Accounts of Morphological Causatives

Early work on argument structure i.e. the number and nature of the arguments that a predicate may combine with (Fillmore 1967; R. S. Jackendoff 1972; Stowell 1981) hypothesized that arguments are related to their verbs by a set of thematic ( $\theta$ -)roles: these include Agent, Experiencer, Theme, Goal, among others. It was thought that the meaning of the verb would determine which  $\theta$ -roles it assigned. However, the degree to which argument structure was predictable from the meaning of the verb was unclear. For instance, eat and devour are near synonymous verbs of consumption, differing only in that devour specifies the manner of consumption as particularly vigorous. Despite these meaning similarities eat (7a) can occur without an object, while devour (7b) cannot. Similarly, it was noted early on by Chomsky (1965) and further formalized by Grimshaw (1979), that the syntactic realization of arguments was not entirely predictable from a predicate's lexical semantics. For example, assume (8) and pretend (9) have similar semantic

meanings, and while both can take CP complements, assume can take a DP complement, while pretend cannot. (examples (8) and (9) are taken from Pesetsky 1991: 2)

- (7) a. Mary ate (the apple).
  - b. Mary devoured \*(the apple).
- (8) a. I'll assume [ $_{CP}$  that he is intelligent].
  - b. I'll assume [DP] his intelligence.
- (9) a. I'll pretend [CP] that he is intelligent].
  - b. \*I'll pretend [ $_{DP}$  his intelligence].

On the basis of (7), (8), (9) and similar examples, it was claimed that, since argument structure was not predictable from meaning of the verb, it was idiosyncratic and therefore must be specified in the lexical entry, as illustrated in (10). Since argument structure information was represented in the lexicon, morphological processes that affect argument structure could be captured by positing a productive operation that manipulates the lexical entry's  $\theta$ -grid.

#### (10) Lexical Entry for eat:

PHON: eat
SYN: [\_\_ (NP)]
SEM: [Agent, Theme]

+ conceptual meaning of eat.

Naturally, modern lexicalist literature differs in how they formalize the computational lexicon, but here I will focus on the framework outlined by Reinhart (2016), since it is Reinhart (2016)'s Theta System which underlies Horvath and Siloni's (2010; 2011) lexical account of Hungarian morphological causatives.

## 2.3 Reinhart (2016)

Reinhart's Theta System (the lexicon) contains mapping procedures that determine which arguments merge externally and which internally; and a set of valency changing operations that act upon an entry's  $\theta$ -grid.

Reinhart (2016) argues that  $\theta$ -roles are not primitives (Agent, Theme, Goal, etc.), but are composed of two binary features: [c] 'cause change' and [m] 'mental state'. [c] encodes whether the participant is responsible for causing the event depicted by the verb, while [m] specifies whether the participant's mental state is relevant to the event in question. The feature

composition of an argument specifies that argument's role in the event (i.e. its  $\theta$ -role) and the nine possible clusters are shown in table 2.1. (Table is taken from Reinhart 2016: 94)

Table 2.1: Reinhart (2016)'s  $\theta$ -clusters

Cluster	r Traditional Label	
[+c+m]	Agent	
[+c-m]	Instrument	
[-c+m]	Experiencer	
[-c-m]	Theme	
[+c]	Cause	
[+m]	Sentient	
[-c]	Goal/Benefactor	
[-m]	Subject Matter/Target of Emotion	
[]		

Since Agents are responsible for causing an event and their mental state is relevant to said event, they correspond to the feature bundle [+c+m]. Themes, on the other hand, have the feature cluster [-c-m], as they are neither responsible for bringing about the event, nor is their mental state relevant. Experiencers correspond to the cluster [-c+m] (or [+m]), because although they do not cause the event, their mental state is relevant to it. Instruments are [+c-m], as they cause an event, but lack a mental state. Moreover,  $\theta$ -clusters may be unspecified or even null; this allows arguments to vary in which role they might realize. For example, a verb like *open* selects [+c] 'Cause', which is unspecified for mental state. As a result, it can be realized as an inanimate Cause argument (a natural force), an Instrument, or an Agent.

Valency operations then operate upon these theta clusters.  $\theta$ -clusters can be added to, or deleted from, an entry's  $\theta$ -grid, and existing  $\theta$ -clusters can be altered by reevaluating their feature(s). For example, Reinhart (2016) analyzes the causative/inchoatative alternation as the result of a decausativization operation applied to a transitive verb with an underspecified [+c] external argument. In (11), the external argument of *open* has it's [+c] feature reduced, removing it from the  $\theta$ -grid entirely.

(11) Decausativization: [+c] reduction: open 
$$<$$
[+c], [-c-m]  $> \to$  open  $<$ [-c-m]  $> \to$ 

While the framework outlined in Reinhart (2016) does not touch upon morphological causatives directly, it provides a theoretical architecture that could derive them.

## 2.4 Previous Literature on Hungarian Morphological Causatives

### 2.4.1 Horvath and Siloni (2010; 2011)

Horvath and Siloni (2010; 2011) integrated Hungarian morphological causatives into Reinhart (2016)'s Theta System. They formalized the lexical causativization operation as follows:

### (12) Causativization in the lexicon:

 $V<\alpha> \rightarrow CAUS-V<[+c+m], \alpha'>$ , where  $\alpha$  includes a role specified as external; if this role includes a [+c] feature, the feature is revaluated to [-c] (otherwise  $\alpha$  equals  $\alpha'$ ). (Horvath and Siloni 2011: 692)

 $\alpha$  is the notation for a variable ranging over argument structures, while V< $\alpha$  > is the argument structure of a specific verb, V. The notation on the right side of the arrow shows the result of the causativization operation: the addition of causative meaning to the verb (CAUS-V); the introduction of the causer ([+c+m] 'Agent') argument; and the modification of the entry's original external argument (reevaluation of the [+c] feature to [-c]). The restriction 'where  $\alpha$  includes a role specified as external' specifies that the input verb must have an external argument. To illustrate, take the transitive verb olvas 'read' (13).

(13) read 
$$<[+c+m],[-c-m]> \to CAUS$$
-read  $<[+c+m],[-c+m],[-c-m]>$  (Horvath and Siloni 2011: 679)

Prior to causativization, its  $\theta$ -grid includes an Agent, the reader, and a theme, the object being read: notated as <[+c+m], [-c-m] >. The application of the causativization rule yields a new theta grid: <[+c+m], [-c+m], [-c-m] >. In this new grid, the (former) Agent argument [+c+m] had its [+c] feature revalued to [-c]. This modified entry then enters the syntax as a primitive, that is, as the head of a single verbal projection.

To motivate their lexical derivation, Horvath and Siloni (2010) argue that, unlike Japanese morphological causatives, which display bi-clausal properties, Hungarian morphological causatives are mono-clausal with respect to binding, negative scope, VP-ellipsis, and agent-oriented adverbials. In Horvath and Siloni (2011), they reformulate their terminology to refer to predicates rather than clauses. That is, they argue that in Japanese morphological causatives the base verb and the causative morpheme behave as two separate predicates, while in Hungarian they act as a single predicate.

To further strengthen their argument, Horvath and Siloni (2010; 2011) note that, contrary to their Japanese counterparts, Hungarian morphological causatives are unable to causativize

certain syntactically composed predicate constructions, specifically, coordinated and raising predicates. If, in Hungarian, causativization were a lexical operation, it would follow that the causativization operation would not have access to syntactic structures, and that therefore the causativization operation would fail. Horvath and Siloni (2010; 2011) take this as further evidence for the lexical derivation of Hungarian morphological causatives. In what follows, I will review each of these arguments in more detail.

#### 2.4.1.1 Binding

Under Reinhart and Reuland (1993)'s formulation of Condition B, a pronoun cannot be bound by an argument introduced by the same predicate that introduced the pronoun (a 'co-argument' in Reinhart and Reuland's parlance). To illustrate, in (14), the subject *Rebecca* and the object pronoun *her* are both introduced by the embedded verb *haunted*. If the pronoun of the embedded clause is co-indexed with *Rebecca* the result is ungrammatical; however, if the pronoun is co-indexed with *Ms. Danvers*, the subject of the separate matrix predicate *know*, the result is grammatical.

### (14) Ms. Danvers<sub>i</sub> knew that Rebecca<sub>j</sub> haunted her<sub>i/\*j</sub>

In the case of morphological causatives, binding patterns can diagnose whether the Causative + Verb complex forms a single predicate (indicating lexical origin according to Horvath and Siloni (2010; 2011) or behaves as two separate predicates (suggesting a syntactic derivation in Horvath and Siloni (2010; 2011)'s view). If two predicates can be detected, it follows that the causative affix and base verb would have separate argument structures, permitting the causer, introduced by the causative verb, to establish a binding relation with any pronominal arguments of the base verb. If, on the other hand, the causativzed verb is a single predicate, it would possess a single argument structure, prohibiting the causer from binding any pronominal arguments. Horvath and Siloni (2010; 2011) show that, with respect to binding patterns, Japanese morphological causatives behave as two separate predicates, while Hungarian morphological causatives pattern as a single predicate. In the Japanese example (15), the causer Toru successfully binds the object pronoun kare 'him' introduced by the embedded verb syookais 'introduce'. Note that Condition B effects still hold between the two arguments of syookais 'introduce'; the subject kitahara cannot bind kare 'him'.

(15) Toru<sub>i</sub>-wa [Kitahara<sub>j</sub>-ni kare<sub>i/\*j</sub>-o syookai-s]-ase-ta. (Japanese) Toru-TOP Kitahara-DAT he-ACC introduction-do-CAUS-PAST

'Toru made Kitahara introduce him.'

(Horvath and Siloni 2011: 667)

In contrast, the Hungarian causative in (16) does not permit the causer Kati to bind the pronominal argument  $\tilde{o}t$  'her'.

(16) \*Kati<sub>1</sub> le-fotóz-tat-ta őt $_{*i/*j}$  Mari-val $_{j}$ . (Hungarian) Kati.NOM down-photograph-CAUS-PAST.DEF she.ACC Mari-INST 'Kati made Mari photograph her.' (Horvath and Siloni 2011: 667)

Since Japanese morphological causatives behave as two predicates, while Hungarian morphological causatives behave as one, Horvath and Siloni (2010; 2011) take this as evidence of a syntactic derivation for Japanese and a lexical one for Hungarian.

## 2.4.1.2 Negation

In constructions with multiple predicates, as in (17), negation can modify both verbs. For example, in (17a) the matrix predicate *think* is negated, and in (17b) the embedded verb *love* is. However, in single predicate structures only one negative interpretation is available.

- (17) a. Mrs. de Winter does not think Maxim loves Rebecca.
  - b. Mrs. de Winter thinks Maxim does not love Rebecca.

If either of the two components of the morphological causative can be negated, it follows that they are two separate predicates. This is the case for Japanese morphological causatives, seen in (18).

- (18) a. Toru-wa Yoko-o ik-ase-nakat-ta. (Japanese)
  Toru-TOP Yoko-ACC go-CAUS-NEG-PAST
  'Toru did not make Yoko go.'
  - b. Toru-wa Yoko-o ik-anaku-ase-ta.
    Toru-TOP Yoko-ACC go-NEG-CAUS-PAST
    'Toru make Yoko not go.'

(Horvath and Siloni 2011: 661)

The negative affix can attach to the causative morpheme (18a), where it negates the causation (and by this, the whole complex event), or it can attach to the base verb, as in (18b), in which case, it negates only the embedded event i.e. 'Yoko's going'. However, in Hungarian morphological causatives only the entire causation event can be negated; the base event, the 'kid's singing', cannot be independently negated.

(19) Nem énekel-tet-tem a gyerek-ek-et. (Hungarian) not sing-CAUS-PAST.1SG the kids-PL-ACC

- (i) 'I didn't make the kids sing.'
- (ii) Narrow scope impossible: 'I made the kids not sing' (Horvath and Siloni 2011: 665)

Horvath and Siloni (2010; 2011) take this as evidence that Japanese morphological causatives include two separate predicates, while their Hungarian counterparts include only one, and thereby that Japanese causatives are derived in the syntax, while Hungarian ones are derived in the lexicon.

#### 2.4.1.3 VP-Ellipsis

Certain elliptical constructions permit the omission of entire verb phrases; the unpronounced VP is nevertheless understood from the context, as in (20). Importantly, in cases where a construction contains multiple VPs, VP-ellipsis yields multiple interpretations depending on whether the higher or lower VP is targeted. For example, the elided material in (21) can either be interpreted as a string that includes both the matrix and embedded VP, in other words, what Mrs. de Winter did was 'make Maxim feel guilty', or as the embedded VP, in which case what Mrs. de Winter did was 'feel guilty'.

- (20) Ms. Danvers lied and Maxim did < lie > too.
- (21) Ms. Danvers said Maxim felt guilty and Mrs. de Winter did too.
  - (i) Ms. Danvers said Maxim felt guilty and Mrs. de Winter said Maxim felt guilty too.
  - (ii) Ms. Danvers said Maxim felt guilty and Mrs. de Winter felt guilty too.

Horvath and Siloni (2010; 2011) observed that when VP-ellipsis is applied to Japanese morphological causatives, they display the same ambiguity as the example in (21), indicating that the causative morpheme and the base verb are separate predicates.

- (22) Yoko-wa [musuko-ni [huku-o ki]-sase]-ru to Junko mo so yoko-TOP son-DAT clothes-ACC wear-CAUS-NONPAST and Junko also so si-ta. (Japanese)
  do-PAST
  - (i) 'Yoko made her son wear clothes, and Junko made her son wear clothes too.'
  - (ii) 'Yoko make her son wear clothes, and Junko wore clothes too.'

(Horvath and Siloni 2011: 666)

In (22) the elided segment has multiple readings: the interpretation in (i) where *Junko* is causing her son to wear clothes; and the interpretation in (ii) where *Junko* is wearing clothes. Hungarian morphological causatives, in contrast, are unambiguous.

- (23) fel-olvas-tat-t-am Mari-val egy vers-et, mert János is az-t up-read-CAUS-PAST.1SG Mari-INST a poem-ACC because János.NOM too that-ACC csinálta. (Hungarian)
  - (i) 'I made Mari read out a poem because János made Mari read out a poem too.'
  - (ii) \*I made Mari read out a poem because János read out a poem too.'

(Horvath and Siloni 2011: 666)

In (23) the elided material can only be understood as the whole causation event. The reading corresponding to the base verb, i.e. reading out a poem, is ungrammatical, indicating that, unlike Japanese morphological causatives, Hungarian morphological causatives contain a single VP and are therefore a single predicate.

#### 2.4.1.4 Agent-oriented Adverbs

Horvath and Siloni (2010; 2011) note that in constructions with multiple Agents, introducing an agent-oriented adverbial will yield ambiguity. As is the case in (24), where *foolishly* can can be interpreted as specifying that *Mrs. de Winter* was foolish to watch or else that *Jack* was foolish to commit blackmail.

(24) Mrs. de Winter watched Jack blackmail Maxim foolishly. (ambiguous: Mrs. de Winter or Jack was foolish)

They argue that if morphological causatives are composed of two predicates, then agentoriented adverbs should be able to modify both the subject of the causative verb, the causer,
and the subject of the base verb, the causee. Since each  $\theta$ -role can only be instantiated once
per  $\theta$ -grid, it must be the case that the causative morpheme and the base verb have their own
argument structures and there are separate predicates. In (24), the agent-oriented adverbials
tyuuchona 'without hesitation' and kuyorokonde 'with pleasure' can modify either the subject
of the causative or the subject of the base verb.

(25) Sono bengosi-wa tyuuchonaku/yorokonde John-ni keiyakusyo-ni sain the lawyer-TOP without.hesitation/with.pleasure John-DAT contract-DAT sign s-ase-ta. (Japanese) do-CAUS-PAST

'The lawyer made John sign the contract without hesitation/with pleasure.'

(ambiguous: The lawyer or John were without hesitation/with pleasure)

(Horvath and Siloni 2011: 669)

Once again, Hungarian morphological causatives show a contrast. In (26a), the agentoriented adverbs  $k\acute{e}sz\acute{e}ggel$  'readily' and  $haboz\acute{a}s$   $n\acute{e}lk\ddot{u}l$  'without hesitation' unambiguously modify the causer argument; the interpretation where the adverb modifies the causee is not acceptable.

a. Az ügyvéd (26)készég-gel/habozás (Hungarian) nélkül the lawyer.NOM readiness-INST/hesitation without alá-ír-at-ta János-sal a szerződés-t. under-write-CAUS-PAST.DEF János-INST the contract-ACC Unambigious: 'the lawyer readily/without hesitation made János sign the contract.' b. ?Az ügyvéd alá-ír-at-ta János-sal the lawyer.Nom under-write-Caus-past.def János-Inst nélkül a szerződés-t. készég-gel/habozás readiness-INST/hesitation without the contract-ACC Unambigious: 'the lawyer readily/without hesitation made János sign the contract.'

Horvath and Siloni (2010) note that varying the position of the adverb in order to force the interpretation where the adverb modifies the subject of the base verb, as in (26b), only degrades the example's grammaticality; the adverb still unambiguously modifies the Causer.

(Horvath and Siloni 2011: 669-70)

#### 2.4.1.5 Causativization of Control Predicates

In addition to these standard predicate detection diagnostics, Horvath and Siloni (2011) observe that, while Japanese morphological causatives can causativize subject control verbs, like mi 'try' in (27), Hungarian morphological causatives cannot. As shown in (28), the Hungarian subject control verbs  $(meg-)pr\acute{o}b\acute{a}l$  'try' and (el-)kezd 'begin' cannot form -(t)At causatives.

- (27) Mary-wa John-ni [PRO hon-o yonde] mi-sase-ta. (Japanese)
  Mary-TOP John-DAT book-ACC read try-CAUS-PAST

  'Mary made John try to read a book.' (Horvath and Siloni 2011: 670)
- (28) a. \*A tanár meg-próbál-tat-ott Mari-val [PRO el-énekel-ni egy the teacher.NOM PERF-try-CAUS-PAST.3SG Mari-INST away-sing-INF a népdal-t]. (Hungarian) folksong-ACC 'The teacher made Mari try to sing a folksong.'
  - b. \*A tanár el-kezd-et-te Mari-t [PRO zongoráz-ni].
     The teacher.NOM PERF-begin-CAUS-PAST.DEF Mari-ACC play.the.piano.INF
     'The teacher made Mari begin to play the piano.' (Horvath and Siloni 2011: 670)

The failure of Hungarian morphological causatives to embed subject control verbs is further complicated by the fact that they can causativize object control verbs. In (29) the object control verb meg-tanít 'teach' can undergo morphological causativization.

(29) János meg-tanít-tat-ta velem a fiá-t [PRO autó-t János.NOM PERF-teach-CAUS-PAST.DEF (me)-INST-1SG the son.his-ACC car-ACC vezet-ni]. (Hungarian) drive-INF

'János made me teach his son to drive.' (Horv

(Horvath and Siloni 2011: 671)

Horvath and Siloni (2011) argue that the failure of subject control verbs to causativize can be explained as a consequence of the lexical causativization operation. When the external argument of the input verb is demoted to an object or oblique (through the reevaluation of its [+c] feature to [-c]), it loses the ability to act as controller; specifically, it loses what they refer to as the 'subject control specification' (Horvath and Siloni 2011: 671). Consequently, the demoted subject, A Tanár/'the teacher' for the examples in (28), cannot establish a control relation with the PRO located within the infinitive clause and the derivation crashes. Similarly, since Japanese morphological causatives are derived in the syntax, subject controllers are not demoted and are available to control the embedded PRO. On the other hand, the input verb's internal arguments are not altered by the causativization operation. Therefore, the 'control specifications' of the object controllers are unaffected and control relations can be established as usual.

#### 2.4.1.6 Causativization of Coordinated Predicates

Horvath and Siloni (2010; 2011) argue that if a causative is formed in the syntax, it should be possible (barring external factors) for the causative affix to attach to a pair of coordinated verbs. However, if a causative is formed in the lexicon, causativizing coordinated predicates would fail, since coordination is exclusive to the syntax and lexicon would not have access to a coordinate structure. Horvath and Siloni (2010; 2011), using data from Kuroda (2003), show that Japanese morphological causatives can attach to coordinate structures. The Japanese example in (30) permits the causativization of the disjuncted verbs *soozisuru* 'clean' and *haraw* 'pay'.

(30) Hanako-ga [[Masao-ni uit-o soozisuru]-ka [heya-dai-o (Japanese) Hanako-NOM Maso-DAT house-ACC clean-or room-rent-ACC haraw]]-aseru kotoni si-ta.
pay-CAUS that to.do-PAST
'Hanako decided to make Masao clean the house or pay room rent.'

(Kuroda 2003: 455)

Hungarian, on the other hand, has no direct equivalent for this construction. In (31a), causativization of coordinated verbs olvas 'read' and énekel 'sing', either by disjunction or

conjunction, is not grammatical. To salvage the construction, the causative morpheme must attach to each of the coordinated verbs, as in (31b).

- (31) a. \*Mari olvas- es/vagy énekel-tet-te az osztály-t. (Hungarian)
  Mari.NOM read and/or sing-CAUS-PAST.DEF the class-ACC
  'Mari made the class read and/or sing.'
  - b. Mari olvas-tat-ta és/vagy énekel-tet-te az osztály-t.
    Mari.NOM read-CAUS-PAST.DEF and/or sing-CAUS-PAST.DEF the class-ACC
    'Mari made the class read and/or sing.' (Horvath and Siloni 2011: 673)

However, Horvath and Siloni (2011) note that verbal inflection likewise fails to attach to coordinated verbs. In (32a), it is not possible for the inflectional morpheme ott to attach to the second conjunct and still take scope over both  $l\acute{a}t$  'see' and hall 'hear'. Instead, verbal inflection must attach to each conjunct in order for the construction to be grammatical (32b).

- (32) a. \*Mari [lát és hall]-ott valami-t. (Hungarian)
  Mari.NOM see- and hear-PAST something-ACC
  - b. Mari [lát-ott és hall-ott] valami-t.
     Mari.NOM see-PAST and hear-PAST something-ACC
     'Mari saw and heard something.' (Horvath and Siloni 2011: 673-4)

Horvath and Siloni (2011) acknowledge that, since the structure  $[V_1 \text{ and } V_2]$ -T is not grammatical in Hungarian, there is no expectation that a causative should be able to take coordinated predicates as a complement, since the suspended verbal inflection morpheme could be responsible for the ungrammaticality. Note that Horvath and Siloni (2010; 2011) assume a weak lexicalist account where inflectional morphology, such as the tense-agreement affixes in (32), is a syntactic phenomena. Accordingly, failure of the causative morpheme to take coordinated structures is not unequivocal evidence for the lexical origin of the causative construction since in can be explained by a general property of Hungarian.

#### 2.4.1.7 Causativization of Raising Predicates

Horvath and Siloni (2010; 2011) note one final contrast between Japanese and Hungarian morphological causatives; they differ in their ability to causativize subject raising verbs. Subject raising verbs, such as *appear* in (33a), possess a minimal argument structure, taking only a clause as an internal argument. When the clausal argument is infinitive, as in (33b), the raising verb may surface with a subject, in this case, *Manderley*. The surface subject of raising verbs has been famously analysed in Rosenbaum (1965) as the external argument of the verb in the infinitive clause, that has been 'raised' into the matrix clause in order to receive case.

- (33) a. It appears [that Manderley is destroyed].
  - b. It/Manderley<sub>i</sub> appears  $[t_i \text{ to be destroyed}]$

Horvath and Siloni (2010; 2011) argue that if morphological causatives are derived in the syntax, it should be possible for the causative morpheme to embed raising predicates, since the external argument of the infinitive verb would be able to raise into the raising verb's clause to receive case. As expected, Japanese morphological causatives can embed raising constructions, illustrated by the aspectual raising verb *owar* 'finish' in (34), indicating that they are derived in the syntax.

(34) Anata-wa watasi-ni hon-o kaki-owat-ta. (Japanese)
You-TOP I-DAT book-ACC write-finish-CAUS-PAST

'You made me finish writing the book.' (Horvath and Siloni 2011: 674)

Hungarian, on the other hand, does not allow for the -(t)At causative to attach to subject raising verbs. In (35), causativization of the raising verb (el)kezd 'start' results in ungrammaticality.

(35) \*Kati (el-)kezd-et-ett énekel-ni Mari-val (Hungarian)
Kati.NOM PERF-start-CAUS-PAST.3SG sing-INF Mari-INST

'Katie make Mari start to sing.' (Horvath and Siloni 2011: 675)

They argue that, while this failure does not follow from a syntactic account, it has a straightforward solution under a lexical account. Lexical causation fundamentally involves the addition of a causer external argument and the demotion of the subject of the input verb, i.e. the causee. However, in (35), the causee is not an argument of the raising verb; it is not present in its  $\theta$ -grid and therefore cannot be targeted by the causativization operation. Put simply, causativization fails because in Hungarian raising constructions the subject raising verb lacks an external argument for the valency operation to alter. This explanation predicts that unaccusative verbs will likewise fail to undergo morphological causativization. Horvath and Siloni (2011) show that this predication is borne out: the unaccusative variants of the causative/inchoative alternation fail to causativize, shown in (36). (The Hungarian data in (36) is taken from Horvath and Siloni 2011: 686)

#### (36) Unaccusative

a. fel-ébr-ed up-wake-UNACC 'wake up'

b. meg-erős-öd-(ik) PERF-strong-UNACC 'strengthen' Causative of unaccusative

\*fel-ébr-ed-(t)et up-wake-UNACC-CAUS

Intended: 'make X wake up'

\*meg-erős-öd-(t)et PERF-strong-UNACC-CAUS

Intended: 'make X strengthen'

To sum up, Japanese and Hungarian morphological causatives display a number of contrasts. With respect to binding, negation, VP-ellipsis, and agent-oriented adverbials, Hungarian morphological causatives behave as single predicates, while Japanese morphological causatives behave as two. This fact makes Hungarian morphological causatives amenable to a lexical account, according to Horvath and Siloni (2010; 2011) since they would be composed in the lexicon and then inserted into the syntax as a single predicate. To strengthen their argument, they present two additional contrasts, unlike Japanese morphological causatives, their Hungarian counterparts are unable to causativize control or raising predicates. They argue that these failures do not have a clear explanation under a syntactic analysis, but fall out if Hungarian morphological causatives are derived in the lexicon. In the next section, I will summarize Bartos (2011)'s response to the arguments put forward by Horvath and Siloni (2010; 2011).

#### 2.4.2 Bartos (2011)

Responding to Horvath and Siloni (2010; 2011), Bartos (2011) argues that their account has problems in its argumentation, empirical data, and ultimately, in the conclusions it draws. Bartos (2011) accepts that Hungarian morphological causatives are mono-clausal (or behave as single predicates in the parlance of Horvath and Siloni (2011)), but rejects a lexical analysis, on the basis that, despite this 'mono-clausality', Hungarian morphological causatives are bieventive. That is, Hungarian causatives contain two linguistically accessible events; a causing and caused event. Bartos (2011) argues that binding, negation, and VP-ellipsis test for clausality, but do not serve as evidence that Hungarian morphological causatives are mono-eventive. To support a bi-eventive analysis of Hungarian morphological causatives, he presents evidence

<sup>&</sup>lt;sup>1</sup>Bartos (2011) notes in a footnote that Horvath and Siloni (2011) (unlike Horvath and Siloni (2010)) does not explicitly state that Hungarian causatives contain a single event, instead only making reference to 'a single predicate' without mention of event domains. Nonetheless, they assume a neo-Davidsonian semantic representation of Hungarian causatives that depicts a mono-eventive structure (see Horvath and Siloni 2011: (42b) for an example).

that (i) both the causer and causee can control the participial subjects; and (ii) the caused event can be modified by certain adverbs.

According to Bartos (2011), typically only subjects are accessible controllers for participles (analyzed as an adjunct small clause with a PRO subject). In the Japanese transitive construction (37a), only the subject *Taroo* can control the participle *nure-te* 'wet'; the interpretation where the participle refers to the object *Hanako* is unavailable. In other words, the interpretation of (37a) in which it is *Hanako* that is getting wet is excluded. Notably, Japanese morphological causatives allow both the causer and causee to act as controllers. In (37b), the participle *auruite* 'walking' can either apply to the causer *Taroo*, in which case, we get the interpretation that *Taroo* was walking while making *Hanako* go, or apply to the causee *Hanako*, in which case, *Hanako* was made to go and she did so by walking.

- (37) a. Taroo-wa **nure-te** Hanako-o hi-(y)asi-ta. (Japanese)
  Taro-TOP wet-PRT Hanako-ACC cool-TRANS-PAST
  (unambiguous: 'Taro getting wet cooled Hanako.')
  - b. Taroo-wa aurui-te Hanako-o ik-ase-ta.
    Taro-TOP walk-PRT Hanako-ACC go-CAUS-PAST
    'Taro made Hanako go, walking.'
    (ambigious: Taro or Hanako was walking)

The contrast in (37) has been used by Harley (2008) and Horvath and Siloni (2010; 2011: 660-1) as evidence that Japanese morphological causatives possess two external arguments. However, Bartos (2011) notes that Horvath and Siloni (2010; 2011) fail to observe the same behaviour in Hungarian morphological causatives. While Hungarian does not permit objects to control participles, as shown by the lack of ambiguity in (38a), Hungarian morphological causatives allow both the causer *Laci* and causee *Mari* to control the participial *föld-ön fek-ve* 'lying on the ground' (38b).

(Harley 2008: 30)

(38) a. Laci **a föld-ön fek-ve** rug-dos-t-a Mari-t. (Hungarian)
Laci.NOM the ground-on lie-PRT kick-FREQ-PAST.3SG.DEF Mari-ACC

'Laci was kicking Mari lying on the ground.'

(unambigious: laci, not Mari, was lying on the ground)

b. Laci a föld-ön fek-ve énekel-tet-t-e Mari-t.
Laci.NOM the ground-on lie-PRT sing-CAUS-PAST-3SG.DEF Mari-ACC
'Laci made Mari sing lying on the floor.'

(ambiguous: Lacy or Mari was lying on the ground) (Bartos 2011: 8)

This is unexpected under Horvath and Siloni (2010; 2011)'s lexicalist analysis which presumes that the subject of the input verb is demoted to an object, thereby losing its ability to control participles. However, Bartos (2011) argues that, if one assumes a syntactic bi-eventive analysis where each event introduces its own subject, the data in (38) would follow.

As for adverbial modification, although so-called 'high' adverbials (i.e. adverbs that attach to projections within the clausal domain) exclusively modify the causing event—in (39) holnap 'tomorrow' cannot refer the event of singing—'low' adverbials (i.e. adverbs that attach within the verbal domain) modify both the causing and caused event. The example in (40) is ambiguous: the 'low' (frequency) adverb kétszer 'twice' can modify the causing event, in which case the causing is what occurred twice, or it can modify the embedded event, in which case it is the writing that happened twice.

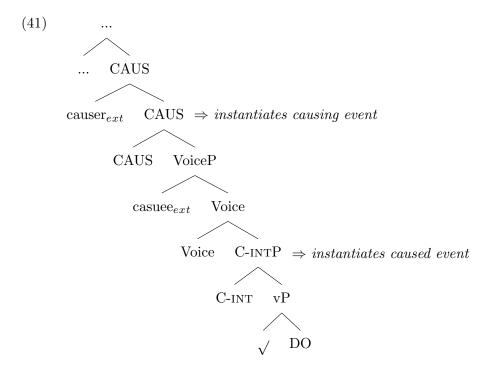
- (39) holnap énekel-tet. (Hungarian)
  tomorrow sing-CAUS

  'will [make sing] tomorrow; NOT: 'make [sing tomorrow]'. (Bartos 2011: 25)
- (40) A tanár **két-szer** ír-at-t-a le Laci-val a the teacher.nom two-times write-CAUS-PAST.3SG.DEF down Laci-INST the vers-et. (Hungarian) poem-ACC 'The teacher made Laci write down the poem twice.'

  (ambiguous: 'twice made/caused Laci to write' or 'twice wrote') (Bartos 2011: 11)

The data in (40) poses an additional problem for Horvath and Siloni (2010; 2011)'s lexicalist analysis. That the Verb+Caus complex shows evidence of syntactic decomposition contradicts lexicalist assumption that the output of the lexical causativization operation is inserted into the syntax as a primitive, that is, as a 'single predicate'.

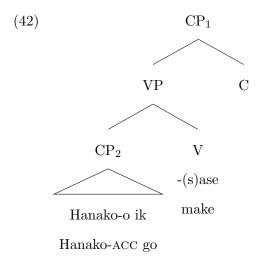
In the second part of the paper, Bartos (2011) sketches the basic outline for a syntactic analysis for Hungarian morphological causatives in line with Marantz (1997)'s anti-lexicalist models.



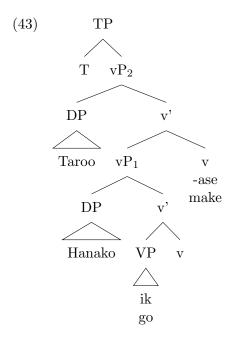
He encodes two event domains in the syntactic structure: (i) the Cause projection which selects for (ii) an embedded event, a VoiceP, as its complement. Mono-clausal properties follow from the structure in (41) as further clausal architecture (TP, NegP, etc) is merged atop this verbal structure yielding a single clause domain. Note that Bartos (2011) assumes an additional verbal projection responsible for encoding eventuality and agentivity: C(ausation)-INT(ernal) (see Bartos 2009 for some discussion on the motivation for this functional head).

While Bartos (2011) poses issues for Horvath and Siloni (2010; 2011)-type lexicalist account, it does not rule out a lexical analysis completely. Rather, he demonstrates that, not only is a syntactic account viable, it captures more of the relevant data. However, there are issues with the syntactic analysis presented above.

The analysis outlined in Bartos (2011) assumes a structure for Hungarian morphological causatives that is more or less identical to the stacked VP structure proposed by Harley (2008) for Japanese -(s)ase causatives, whereby the causative morpheme selects for a VP that introduces an external argument (the causer). Consequently, in order to account for the contrasts between Hungarian and Japanese causatives, Bartos (2011) assumes that Japanese -(s)ase causatives take a CP-sized (as opposed to a VP-sized) complement. A simplified structure is illustrated in (42).



However, as mentioned previously, Japanese causatives pattern as mono-clausal with respect to certain tests, specifically, those involving tense, case-marking, and negative polarity item (NPI) licensing. Harley (2008)'s analysis (shown in 43) is able to account for the ways in which causatives are monoclausal (with respect to tense, case-marking, and NPI licensing) and bi-clausal with respect to scope, adverbial control, binding, and disjunction by assuming that Japanese causative selects for a reduced clause, that is, a VP rather than a CP or TP. The absence of a TP within the complement of the causative morpheme accounts for why Japanese causatives act a single domain for tense, case-marking, and negative polarity: there is only one TP available to instantiate tense, to assign nominative case, and to license NPIs. In contrast, the tests that indicate that Japanese causative have bi-clausal properties (involving scope, adverbial control, binding, and disjunction) are sensitive to the verbal domain, not the TP domain, and will therefore diagnose Japanese causatives as bi-clausal.



Accordingly, full bi-clausal analysis of Japanese causatives is unable to account for their 'mono-clausal' properties without additional explanation. However, if Bartos (2011) were to alter his analysis of Japanese to be in line with the analysis in Harley (2008), he would be unable to account for the contrasts between Japanese and Hungarian morphological causatives (outlined in (2.4.1.1)-(2.4.1.7)) without altering his own analysis for Hungarian causatives.

In what follows, I will propose an alternative syntactic account that will account for the contrasts between Japanese and Hungarian morphological causatives. Following the typology set forth in Pylkkänen (2002; 2008), which makes use of the functional split of VoiceP and vP, I argue that Japanese causatives select for a VoiceP (Voice-selecting in Pylkkänen 2008's typology and equivalent to the analysis proposed in Harley 2008,), while their Hungarian causatives select for a vP (Verb-selecting in Pylkkänen 2008's terminology). In the next chapter, I will articulate, and provide evidence for, a Verb-selecting analysis of Hungarian morphological causatives. I will show that the contrasts outlined by Horvath and Siloni (2010; 2011) can be explained if one assumes that Hungarian causatives select for smaller vP-sized complement, while Japanese causatives take a larger VoiceP complement.

## Chapter 3

# **Proposal**

## 3.1 Introduction

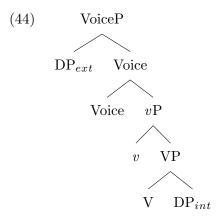
In this chapter I propose that the contrasts between Japanese and Hungarian morphological causatives are the result of differences in the size of the verbal substructure that each causative embeds. That is, I argue that Hungarian and Japanese morphological causatives select for different complements. In order to capture the subtle differences in the size of these complements, I assume, in line with Pylkkänen (2008) and Legate (2014), that the verbal domain contains (at least) two functional projections, the higher being VoiceP, and the lower being vP. Following Harley (2008), and utilizing the causative typology outlined by Pylkkänen (2008), I argue that Japanese morphological causatives are Voice-selecting, that is, they select for a VoiceP as their complement. Hungarian morphological causatives, in contrast, are Verb-selecting, that is, they select for a vP-sized verbal substructure. Since the embedded event of Hungarian morphological causatives lacks a VoiceP, the projection responsible for introducing the external argument, the embedded event of a Verb-selecting causative lacks an external argument, and consequently, the cause must be introduced in some other position. I propose that Hungarian morphological causatives untilize two strategies for introducing causees: (i) as an adjunct attached to the causative head, in which case the causee is realized with instrumental case; and (ii) as a non-agent argument, introduced in Spec vP, in which case, the causee receives accusative case.

The structure of the chapter is as follows. Section 3.2 will include a brief background on the functional projections within the verbal domain, VoiceP and vP. I will also present Pylkkänen (2008)'s causative typology, which makes use of this development. In section 3.3, I will motivate the claim that Hungarian morphological causatives are Verb-selecting. Here I will

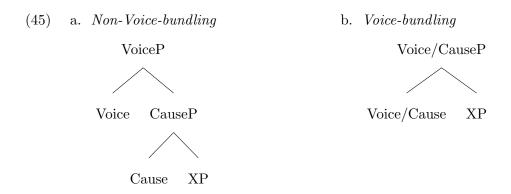
also demonstrate that the contrasts between Japanese and Hungarian morphological causatives with respect to binding, negation, vP-ellipsis, and agent-oriented adverbs fall out if we assume that Hungarian morphological causatives are Verb-selecting and their Japanese counterparts are Voice-selecting. Section 3.4 will cover the causee. I will show that there are structural asymmetries between instrumental and accusative causees, motivating an analysis where there are two possible introduction sites; thereby giving-rise to the case-alternation we see. I argue that instrumentally case-marked causees are merged as adjuncts to the vP, while accusative causees are introduced within the vP, specifically, in Spec vP. To conclude the section, I will show how the asymmetries between instrumental and accusative causees follow from my analysis.

## 3.2 Causative Typology

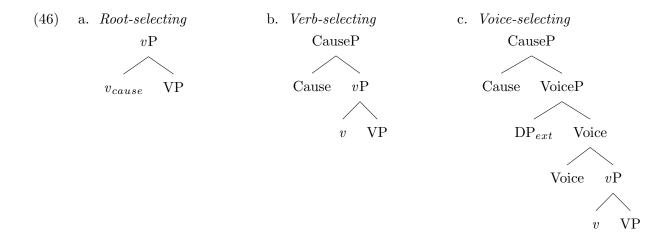
Beginning in the 1990's, proposals proliferated (Larson 1988, Hale and Keyser 1993, Chomsky 2014, Kratzer 1996) arguing for the existence of an additional projection within the verbal domain. Various properties (and names: VP, vP, and VoiceP) were attributed to this projection. Primarily, it was responsible for introducing the external argument, but it was also claimed to serve as a verbalizer, to check accusative or ergative case, to establish a phase boundary, and to introduce eventuality, (internal) causation, and/or agentive semantics. Later proposals (Pylkkänen 2002; 2008, Legate 2014, among others), continuing the expansion of the verbal domain, argued that the higher verbal projection should be split into at least two projections, VoiceP and vP. Here I make the same assumption. Following Pylkkänen (2002; 2008), Legate (2014), and others, I assume that VoiceP, the higher of the two projections, is responsible for introducing the external argument, establishing a phase boundary (or a cyclic domain), and is the locus of object agreement and clausal voice (e.g. active vs. passive). The vP, on the other hand, is responsible for checking accusative case and introducing eventive, stative, and (internal) causative semantics. Additionally, v is claimed to have a verbalizing function when combined with a nonverbal stem. However, I remain agnostic regarding whether all verbs are created by the combination of v with a category-neutral root as in (Marantz 1981). This expanded verbal structure is shown below in (44).



With these developments, various kinds of valency morphology could be captured as different instantiations of the structure in (44). In an influential proposal, Pylkkänen (2002; 2008) argued that variation in the domain of causativization can be reduced to two parameters: Voice-bundling and selection. The first parameter distinguishes between non-Voice-bundling causatives (e.g. Japanese and Finnish), where Voice and Cause are represented by distinct syntactic projection, as in (45a), and Voice-bundling causatives (e.g. English) where the functions of Voice and Cause are unified under a single projection, shown in (45b) (see Harley 2017 for cross-linguistic evidence in favour of this parameter).

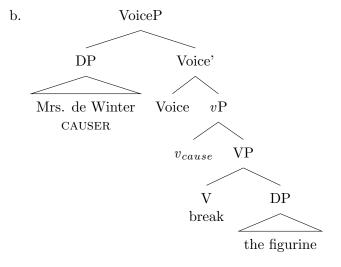


However, for our purposes, the second parameter is more significant. In terms of complement selection, causatives are divided into three principal types: Root-selecting (46a), Verb-selecting (46b), and Phase-selecting (46c) (henceforth Voice-selecting).



For Root-selecting causatives, the structure assigned to lexical causatives, causative meaning is encoded via a causative variant of the functional head v, rather than by a causative projection, as is the case for Verb- and Voice-selecting causatives. The English lexical causative break in (47a) would correspond to the structure in (47b). In this type of causative construction, the 'causer' is realized as an Agent, that performs an action expressed by the the verb (or in cases where  $v_{cause}$  is spelled out, by the composition of the root and causative morpheme). Root-selecting causatives have the same structure as a standard transitive agentive verb, denoting a single event; capturing the intuition that lexical causatives are a single (idiosyncratic) verb.

(47) a. Mrs. de Winter broke the figurine.

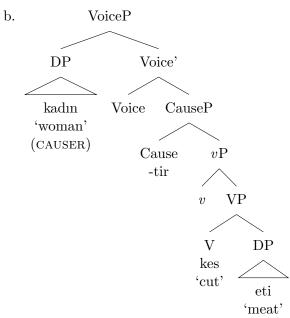


Amongst productive causative constructions, Pylkkänen (2008) distinguishes between Verbselecting and Voice-selecting causatives. Aptly named, Verb-selecting causatives, exemplified by
the Tukish -DIr causative in (48a), select for a vP-sized complement. This structure is shown in
(48b). The causer is introduced in the specifier of a VoiceP located atop the causative projection,
while the causative head is spelled out by the causative morpheme -tir. The embedded event

is a vP taken as a complement to the causative projection.

(48) a. Kadın et-i kes-tir-di. (Turkish) woman meat-ACC cut-CAUS-PAST

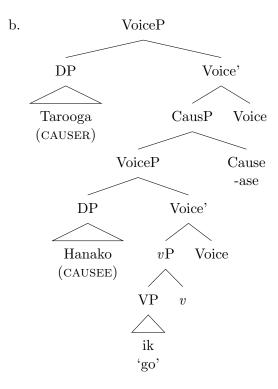
'The woman had the meat cut/had (someone) cut the meat.' (Key 2013: 185)



In contrast, Voice-selecting causatives, exemplified by the Japanese morphological causative in (49a), select for a VoiceP as their complement. Voice-selecting are structurally identical to Verb-selecting causatives, expect for the size their complement; in (49b) the causative head embeds the entire verbal domain shown in (44) i.e. a VoiceP. Consequently, the locus of variation between the two types revolves around the size and properties of the verbal substructure embedded by the causative morpheme.

(49) a. Taroo-ga Hanako-o ik-ase-ta. (Japanese)
Taroo-NOM Hanako-ACC go-CAUS-PAST

'Taroo made Hanako go.' (Harley 2008: 22)



Verb- and Voice-selecting causatives are not only distinguished by the size of the complement selected, but by the properties of the causee, i.e. the participant who initiates the caused event. The causee in a Voice-selecting causative is an external argument introduced in the specifier of the VoiceP located atop the causative projection; the causee will therefore pattern as a subject with respect to agentivity-sensitive diagnostics like agent-oriented adverbials. In contrast, the verbal substructure embedded by Verb-selecting causatives lacks the projection responsible for introducing external arguments (i.e. VoiceP). As such the causee will pattern against subjects with respect to agentivity diagnostics. In addition, since Voice-selecting causatives contain two Voice phrases, the higher one introducing the causer, the lower the causee, certain clausality tests diagnose Voice-selecting causatives as bi-clausal and Verb-selecting causatives as monoclausal. In what follows, I will show that well-established tests used to distinguish between Verb-selecting and Voice-selecting causatives—agent-oriented adverbs, binding, negation—diagnose Hungarian morphological causatives (both the accusative-causee and instrumental-causee variants) as Verb-selecting and Japanese morphological causatives as Voice-selecting.

<sup>&</sup>lt;sup>1</sup>Baker (1985) observed an additional distinction between Verb- and Voice-selecting causatives with respect to the ability to embed passive morphology. Assuming that Voice Active and Voice Passives are different syntactic realizations of the same head, he notes that since Voice-selecting causatives take a VoiceP as a complement, they should be able to embed a passive affix, whereas Verb-selecting casatives should not. However, this test is not applicable in Hungarian as the language lacks a passive affix, and according to Dezsy (1988) lacks a Voice-altering passive operation altogether

# 3.3 Hungarian Causatives

#### 3.3.1 Agent-oriented Modification

A commonly used test to diagnose the subject-hood of the causee in a causative construction is agent-oriented modification (Horvath and Siloni 2011; Jung 2014; Key 2013; Myler and Mali 2021; Pylkkänen 2008). Agent-denoting subjects can be associated with elements that imply volition such as adverbs like willingly and phrases like on purpose. Recall that Horvath and Siloni (2010; 2011) demonstrate that Japanese and Hungarian morphological causatives show a contrast with respect to whether the causee, i.e. the understood subject of the embedded event, can be modified by agent-oriented adverbials: Japanese causatives permit modification of the causee, while their Hungarian counterparts do not. Horvath and Siloni (2011) take this as evidence that Hungarian morphological causatives are a single predicate, licensing a single subject i.e. the causer. Moreover, according to Horvath and Siloni (2010; 2011), since Hungarian morphological causatives are composed of a single predicate, this suggest that the V + CAUS components are combined in the lexicon, not in the syntax. However, with Pylkkänen (2008)'s typology, this contrast with respect to adverbial modification falls out by assuming that Japanese causatives instantiate a Voice-selecting structure, while Hungarian causatives instantiate a Verb-selecting structure.

Pylkkänen (2008) uses data from Bantu languages to illustrate that Verb-selecting and Voice-selecting causatives exhibit a contrast with respect to whether the causee can be modified by agent-oriented adverbials. The causative in Venda, which Pylkkänen (2008) identifies as Voice-selecting, allows agentive modification to scope within the embedded event.<sup>2</sup> In (50a), the adverbial nga dzangalelo 'with enthusiasm' modifies to the causee Katonga. Recall that Japanese causatives exhibit the same ambiguity: in (50b), both the causer Sono bengosi 'the lawyer' and the dative causee John are an acceptable controller for the adverbs tyuuchonaku 'without hesitation' and yorokonde 'with pleasure'.

(50) a. Muuhambadzi o-reng-is-a Katonga modoro nga dzangalelo. (Venda) salesman 3SG.PAST-buy-CAUS-FV Katonga car with enthusiasm 'The salesman made Katonga buy the car eagerly.'

(ambiguous: The salesman or Katonga were eager) (Pylkkänen 2008: 119)

<sup>&</sup>lt;sup>2</sup>In addition to permitting agent-oriented modification, Venda causatives allow high applicative morphology to intervene between the causative morpheme and the root.

b. Sono bengosi-wa tyuuchonaku/yorokonde John-ni (Japanese)
the lawyer-TOP without.hesitation/with.pleasure John-DAT
keiyakusyo-ni sain s-ase-ta.
contract-DAT sign do-CAUS-PAST
'The lawyer made John sign the contract without hesitation/with pleasure.'
(ambiguous: The lawyer or John were without hesitation/with pleasure)
(Horvath and Siloni 2011: 669)

These contrast with the Verb-selecting Bemba causatives, which do not allow agentive adverbials to scope within the embedded event. In (51), the adverb ukwiitemenwa 'willingly' can only modify the the causer, the interpretation where the adverbial refers the the causee umuana 'the boy' is unavailable. As expected, Hungarian causatives behave the same; the adverbs  $k\acute{e}sz\acute{e}ggel$  'readily' and  $haboz\acute{a}s$   $n\acute{e}lk\ddot{u}l$  'without hesitation' cannot modify either the instrumental causee, in (52a), or the accusative causee, in (52b).

- (51) Naa-butwiish-ya umuana ukwiitemenwa. (Bemba)
  1SG.PAST-run-CAUS boy willingly
  Unambiguous: 'I willingly made the boy run.' (Pylkkänen 2008: 115)
- (52) a. Az ügyvéd készég-gel/habozás nélkül (Hungarian) the lawyer.NOM readiness-INST/hesitation without alá-ír-at-ta János-sal a szerződés-t. under-write-CAUS-PAST.DEF János-INST the contract-ACC Unambiguous: 'the lawyer readily/without hesitation made János sign the contract.'

  (Horvath and Siloni 2011: 669)
  - b. A tanár készég-gel/habozás nélkül énekel-tet-te Laci-t. the teacher readiness-INST/hesitation without sing-CAUS-PAST.3SG.DEF Laci-ACC Unambiguous: 'The teacher readily/without hesitation made Laci sing.'

Notably, agent-oriented adverbials fail to scope within the embedded event of the Bemba causative, despite the fact that the embedded event is available for modification by non-agentive manner adverbs, illustrated in (53) and (54). Recall, that this is also the case for the Hungarian causative. As noted by Bartos (2011), although agent-oriented adverbials fail to modify the embedded event, so-called 'low' adverbials (manner, frequency, etc.) can modify both the causative and the embedded verb, shown in (54). Note that the case-marking of the causee has no effect; both instrumental- and accusative-causee constructions exhibit ambiguous interpretations, seen in (54a) and (54b), respectively.

(53) Naa-butwiish-ya Mwape ulubilo. (Bemba)
1SG.PAST-run-CAUSE Mwape fast
Unambiguous: 'I made Mwape quickly run.' (Pylkkänen 2008: 115)

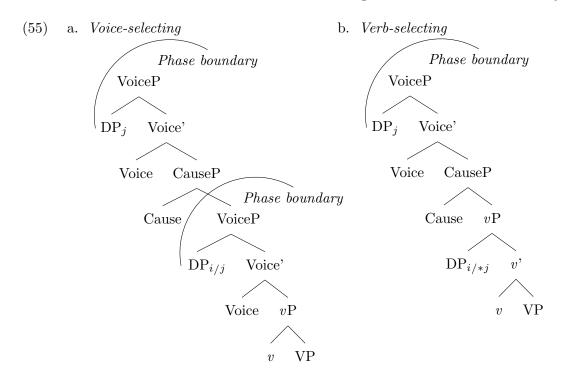
(54)a. A tanár két-szer le Laci-val (Hungarian) ír-at-t-a the teacher two-times write-CAUS-PAST.3SG.DEF down Laci-INST vers-et. the poem-ACC 'The teacher made Laci write down the poem twice.' (ambiguous: 'twice made/caused' or 'twice wrote') (Bartos 2011: 11) b. A tanár két-szer énekel-tet-te the teacher two-times sing-caus-past.3sg.def Laci-acc 'The teacher made Laci sing twice.' (ambiguous: 'twice made/caused' or 'twice sung')

Thus, while the failure of agent-oriented and other 'high'-adverbials to modify the embedded event was taken by Horvath and Siloni (2010; 2011) as evidence that Hungarian morphological causatives are built in the lexicon, a syntactic Verb-selecting analysis easily accounts for these properties. Moreover, compared to Horvath and Siloni's analysis, positing a Verb-selecting structure of Hungarian morphological causatives better captures the data. Under a lexicalist account, it does not naturally follow that modification of the embedded event by agent-oriented adverbial should be illicit, while modification by a 'low' adverbial should be permitted. However, under a Verb-selecting analysis, since agent-oriented adverbials obligatorily target arguments generated in the specifier of VoiceP, the complement of verb-selecting causatives, which lacks a VoiceP, would not allow modification by Agentive adverbials, but permit modification by 'low' adverbials that attach at the vP level.

#### 3.3.2 Principle B

The next well-utilized diagnostic (Jung 2014; Key 2013; Myler and Mali 2021) for distinguishing between Voice- and Verb-selecting causatives concerns binding patterns. It is commonly assumed that VoiceP establishes a phrase boundary and thus also creates a binding domain (Chomsky 2001; Chomsky 2004; Chomsky 2008. Given this assumption, voice-selecting causatives include two binding domains due to the presence of a phase head (VoiceP) in the embedded event, as illustrated in (55a). Verb-selecting causatives, in contrast, lack an embedded VoiceP to establish a lower phase boundary and therefore act as a single binding domain, as in (55b). Put simply, the causee in Voice-selecting causatives defines a binding domain, like a true subject, while the causee in Verb-selecting causatives does not. This means that the causer in Verb-selecting causatives cannot be co-referential with an object, while the causer in a Voice-selecting causative can. Note that in (55b) the causee is located in the specifier of vP,

I discuss how the cause is introduced in Verb-selecting causatives in more detail in §3.4.1.



Recall that Horvath and Siloni (2011) demonstrate that Japanese and Hungarian morphological causatives show this contrast with respect to Principle B. In (56a), *Toru*, the causer of the Japanese causative can be co-indexed with the object pronoun *kare*, because the causative projection embeds a VoiceP, which projects a phase, yielding two separate binding domains. Conversely, in (56b) co-indexation of the causer with the object of the embedded verb results in ungrammaticality, since no phase head is present in the embedded verbal substructure and the binder is included in the same domain as the pronoun, in violation of Condition B. Note that for the Hungarian morphological causative, this Principle B violation can only be tested for the instrumental-causee construction, as the presence of an object within the embedded event disallows an accusative causee.

- (56) a. Toru<sub>i</sub>-wa [Kitahara<sub>j</sub>-ni kare<sub>i/\*j</sub>-o syookai-s]-ase-ta. (Japanese) Toru-TOP Kitahara-DAT he-ACC introduction-do-CAUS-PAST 'Toru made Kitahara introduce him.'
  - b. \*Kati $_1$  le-fotóz-tat-ta őt $_{*i/*j}$  Mari-val $_j$ . (Hungarian) Kati.NOM down-photograph-CAUS-PAST.DEF.DO she.ACC Mari-INST 'Kati made Mari photograph her.' (Horvath and Siloni 2011: 667)

Again, this contrast—which was originally taken by Horvath and Siloni (2010; 2011) as evidence that Hungarian morphological causatives are composed in the lexicon, while their

Japanese counterparts are composed in the lexicon—can easily be accounted for syntactically by assuming that Hungarian causatives select for a vP-sized verbal substructure (and are therefore composed of a single binding domain), while Japanese causatives embed a VoiceP (and, due to the presence of a higher and lower Voice head, are composed of two binding domains).

#### 3.3.3 Negation

Key (2013) uses negation as a test to distinguish between Verb-selecting and Voice-selecting causatives. Assuming that negation attaches at the edge of the verbal phrase, when a Voiceselecting causative is negated, the negative marker should, in principle, attach to either the lower VoiceP, in which case it will negate only the caused event, or the higher VoiceP, in which case it negates the entire causation event. However, with Verb-selecting causatives the complement of the causative projection is a reduced verbal substructure, specifically a vP, and lacks an attachment position for negation. Consequently, negating a Verb-selecting causative will only yield a single interpretation; this being where the entire causation event is negated.

Again, recall that Horvath and Siloni (2011) show that Hungarian and Japanese morphological causatives display a contrast with respect to the scope of negation. The Japanese causative permits negation to scope over the entire causative, as (57a), or scope within the causing event, as in (57b).

- (57)Toru-wa Yoko-o ik-ase-nakat-ta. (Japanese) Toru-Top Yoko-ACC go-Caus-Neg-Past 'Toru did not make Yoko go.'
  - b. Toru-wa Yoko-o ik-anaku-ase-ta. Toru-Top Yoko-ACC go-NEG-CAUS-PAST 'Toru make Yoko not go.'

(Horvath and Siloni 2011: 661)

Hungarian morphological causatives, in contrast, do not allow negation of the caused event; in (58), negation can only be interpreted as scoping over the entire causative. Note that I altered Horvath and Siloni (2011)'s original example to one that includes both an accusative and instrumental causee.

- (58) Nem énekel-tet-tem a gyerekek-et/gyerekek-kel (Hungarian) not sing-CAUS-PAST.1SG the kids-ACC/kids-INST
  - (i) 'I didn't make the kids sing.'
  - (ii) Narrow scope impossible: 'I made the kids not sing'

Once again, the contrast between between Japanese and Hungarian morphological causatives falls out from the assumption that Hungarian causatives are Verb-selecting while their Japanese counterparts are Voice-selecting.

In sum, agent-oriented modification and binding facts show that the causee in Hungarian morphological causatives is not an external argument, indicating that Hungarian causatives are Verb-selecting, that is, they select for an vP-sized verbal substructure. Similarly, the fact that Hungarian causatives do not allow the caused event to be negated, while Japanese causatives do, likewise follows from the Verb-selecting/Voice-selecting distinction. I have demonstrated that these contrasts between Japanese and Hungarian morphological causatives, originally taken by Horvath and Siloni (2010; 2011) as evidence for a lexical/syntactic devide between morphological causatives, can be explained within the syntax by assuming a Verb-selecting structure for Hungarian causatives and a Voice-selecting one for their Japanese counterparts. Before I conclude this section, I will account for the vP-ellipsis facts that Horvath and Siloni (2010; 2011) take as evidence for the lexical origin of Hungarian morphological causatives.

#### 3.3.4 VP-Ellipsis

Recall that Horvath and Siloni (2010; 2011) claim that Hungarian and Japanese morphological causatives display a contrast with respect to VP-ellipsis. In (59a), elision of a Japanese causative results in an ambiguous reading: the elided material in the second clause can be interpreted as referring to the entire causation event, as in (i), or exclusively to the caused event, as in (ii). In contrast, elision of a Hungarian causative, as in (59b), yields a single reading: the elided material is obligatorily interpreted as the causation event, while the reading where it refers the caused event is unavailable.

- (59) a. Yoko-wa [musuko-ni [huku-o ki]-sase]-ru to Junko mo soo yoko-TOP son-DAT clothes-ACC wear-CAUS-NONPAST and Junko also so si-ta. (Japanese)
  - (i) 'Yoko made her son wear clothes, and Junko <made her son wear clothes> too.'
  - (ii) 'Yoko make her soon wear clothes, and Junko <<del>wore clothes</del>> too.'

- b. fel-olvas-tat-t-am Mari-val egy vers-et, mert János is up-read-CAUS-PAST.1SG Mari-INST a poem-ACC because János.NOM too az-t csinálta. (Hungarian) that-ACC did
  - (i) 'I made Mari read out a poem because János <<del>made Mari read out a poem</del>> too.'
  - (ii) \*I made Mari read out a poem because János <<del>read out a poem</del>> too.' (Horvath and Siloni 2011: 666)

Horvath and Siloni (2010; 2011) claim that this contrast is evidence that Japanese morphological causatives contain two predicates, while their Hungarian counterparts are composed of a single predicate—and therefore that Hungarian causatives are derived in the lexicon and Japanese causatives in the syntax. Their argument is repeated as follows. Since Japanese causatives are built in the syntax, they are composed of a layered VP-structure. Crucially, each VP can act as an acceptable antecedent for elided material, thereby yielding the ambiguous interpretation observed in (59a). However, since elision of a Hungarian morphological causatives does not result in an ambiguous interpretation, the V+CAUS complex must be a single predicate, that is, composed of a single VP. This therefore suggests that the Hungarian morphological causatives are derived in the lexicon and then inserted into the syntax as a single lexical verb.

However, there is an issue with Horvath and Siloni (2010; 2011)'s argument. The data in (59) are not cases of VP-ellipsis, but are VP anaphora constructions. VP-ellipsis leaves the predicate and its internal arguments unpronounced. For instance, in a prototypical example of VP-ellipsis (60), the second clause is missing the verbal predicate and its direct object, i.e. throw costume balls. Instead of leaving the predicate unpronouced, Horvath and Siloni (2010; 2011)'s examples in (59), contain overt anaphors, soo sita 'do so' in the Japanese example and azt csinálta 'do that' in the Hungarian.

#### (60) Rebecca threw costume balls, but Mrs. de Winter never does < threw costume balls > .

The claim that the Japanese example in (59a) is an instance of VP-ellipsis is also contradicted by Hinds (1973), Kuno (1978), and Murasugi (2005) who point out VP-ellipsis of the type in (60) is not attested in Japanese and neither is pseudogapping, which involves VP-ellipsis. Fukaya (2019), citing Kuno (1978), argues that the reason Japanese lacks VP-ellipsis is two-fold. First, it does not have an equivalent to English do-support making contexts like (61a) unacceptable. Second, Japanese auxiliaries are bound morphemes, they cannot stand without the verb they attach to, as in (61b).

- (61) a. \*Taroo-ga [<sub>VP</sub> kaetta]-node watasi-mo kaetta. (Japanese)
  Taro-NOM left-because I-also left

  'I left because Taro did.' (Murasugi 2005: 168-9)
  - b. \*Taroo-wa  $[_{VP}$  huransugo-ga hanas]-eru ga Ziroo-wa Taro-TOP French-NOM speak-can but Jiro-TOP  $[_{VP}$  huransugo-ga hanas]-e-nai. French-NOM speak-can-not

'Taro can speak French, but Jiro cannot.'

(Fukaya 2019: 887)

Accordingly, the examples in (59) are not instances of VP-ellipsis, instead they more closely resemble VP anaphora constructions similar to English do so and do that constructions, shown in (62a) and (63a), respectively. I have repeated the examples in (59) with a revised translation to make the VP anaphora more explicit. Note that the reference patterns for the Japanese and Hungarian examples are still maintained. In the Japanese example (62b), the VP anaphor soo sita 'do so' has two interpretations: either the causing or caused event can be understood as what was 'done again'. Conversely, the Hungarian VP anaphor azt csinálta 'do that' in (63b), can only be interpretated as referring to the entire causation event, i.e. what János 'did too' was make Mari read out a poem, János did not read out a poem himself.

- (62) a. Mrs. de Winter worries about her marriage and Mr. de Winter does so, too.
  - b. Yoko-wa [musuko-ni [huku-o ki]-sase]-ru to Junko **mo** yoko-TOP son-DAT clothes-ACC wear-CAUS-NONPAST and Junko also **soo si-ta**. (Japanese) so do-PAST

'Yoko make her son wear clothes, and Junko did so, too.

(ambiguous: Junko made her son wear clothes or Junko wore clothes)

(Horvath and Siloni 2011: 666)

- (63) a. Maxim testified at the inquest and Ms. Danvers did that, too
  - b. fel-olvas-tat-t-am Mari-val egy vers-et, mert János is up-read-CAUS-PAST.1SG Mari-INST a poem-ACC because János.NOM too az-t csinálta. (Hungarian) that-ACC did

'I made Mari read out a poem because János did that, too.'

(unambiguous: János made Mari read out a poem, not János read out a poem)

(Horvath and Siloni 2011: 666)

Despite misidentifying VP anaphora for VP-ellipsis, it is still possible that Horvath and Siloni (2010; 2011)'s argument holds. If VP anaphora and VP-ellipsis exhibit the same grammatical

properties—specifically, the link between the anaphor and the antecedent is established in the syntax, under the same identity conditions, and they target the same sized structure—then the contrast between (62b) and (63b) can still be used to support their claim.

Unfortunately, the VP anaphors do this/that, and to a lesser extent do so, have received relatively little treatment in the literature, since do it/this/that, generally pattern togeather, do it is often taken as representative of the do + pronoun set of VP anaphora, and the particulars of what determines the choice between do it/this/that is often left out of consideration. Additionally, the existent literature on the topic is primarily restricted to English data. A thorough treatment of the Hungarian do that anaphor, seen in (63b), or VP anaphora in general, is outside the bounds of the present work.

However, it is generally accepted in the literature that VP anaphora require an agentive antecedent, that is, the their antecedent should denote an action under the control of an animate agent. However, the literature varies in the strength of this requirement: some (Huddleston and Pullum 2005; Culicover and Jackendoff 2005) regard agentivity as a condition, or partial condition (Houser 2010), on the use of VP anaphora, while others (Miller 2011; Flambard 2018) consider it to be a preference. Notably, this condition, or preference, does not appear to apply to all types of VP anaphora equally: do so more readily accepts non-agentive antecedents than do this/that/it (Michiels 1978; Huddleston and Pullum 2005; Houser 2010; Miller 2013). Consider the examples in (64):

- (64) a. Maxim made Mrs. de Winter change her outfit and I did so, too

  (ambiguous: I made Mrs. de Winter change her outfit or I changed my own outfit)
  - b. Maxim made Mrs. de Winter change her outfit and I did that/this/it, too (unambiguous: I made Mrs. de Winter change her outfit, not I changed my own outfit)

While both the causing and caused event can act as an antecedent for do so (64a), do this/that/it only permit the entire causation event to act as an antecedent (64b). I argue the relative strictness of the agentivity requirement is the reason for this contrast between Japanese and Hungarian causatives shown in (62b) and (63b), respectively. The embedded verb of a Hungarian morphological causative is an illicit antecedent because the causee and embedded event are not 'agentive' enough. In contrast, this agentivity requirement is less strict in the case of do so, allowing the caused event of the Japanese morphological causative to act its antecedent.

Accordingly, the examples (62b) and (63b) cannot be used to conclude that Hungarian morphological causatives are a single predicate—and therefore derived in the lexicon—while Japanese morphological causatives are composed of two predicates—and therefore derived in the syntax. The next section will continue the analysis of Hungarian morphological causative, proposing that the instrumental-causee and accusative-causee construction correspond to to distinct syntactic structures.

# 3.4 The Causee(s)

## 3.4.1 Asymmetries Between Accusative and Instrumental Causees

The previous section established that both the instrumental- and accusative-causee constructions pattern as Verb-selecting causatives in Hungarian with respect to standard diagnostics. Despite this, accusative and instrumental causees display a set of notable syntactic asymmetries. Specifically, they pattern differently with respect to syntactic distribution, optionality, agreement behaviour, animacy requirements, and interpretation. To account for these contrasts, I will argue that Hungarian instrumental- and accusative-causee constructions correspond to separate structures with the variation stemming from the position where the causee is merged into the derivation. To start I will outline these asymmetries.

First, accusative and instrumental causees they have different distributions. When a transitive verb is causativized in Hungarian, the causee is obligatorily case-marked in the instrumental; the accusative causee is ungrammatical (65a). However, when the causativized verb is intransitive, specifically unergative (as causatives of unaccusatives are ungrammatical), the causee may appear in either accusative or instrumental case (65b).

- (65) a. írattam a fiú-val/\*fiú-t egy levél-et. (Hungarian) write-CAUS.PAST the boy-INST/\*boy-ACC a letter-ACC 'I had the boy write a letter.'
  - b. köhög-tet-tem a gyerek-kel/gyerek-t. cough-CAUS-PAST.1SG the child-INST/child-ACC 'I made the child cough.'

Second, accusative causees are obligatory (66a), while instrumental causees are optional.

(66) a. János beszel-tet-te \*(Kati-t). (Hungarian) János speak-CAUS-PAST.3SG.DEF Kati-ACC 'János made Kati speak.' b. János beszel-tet-t (Kati-vel).
 János speak-CAUS-PAST.3SG.INDEF Kati-INST
 'János made Kati speak.'

Since Hungarian is a *pro*-drop language, it is possible that the absence of the instrumental causee in (66b) can be explained by deletion at PF. In which case, the 'optionality' of the instrumental-causee would not be a genuine absence of the causee from the syntactic structure, and therefore would not necessarily count as a meaningful difference in ability from the accusative causee. However, certain facts are not consistent with a *pro*-drop analysis of (66b).

In Hungarian, when oblique pronouns are dropped, the case marker is obligatorily retained, as in (67). Note that when attached to a personal pronoun the instrumental case-marking must be followed by an agreement suffix expressing the person and number of the pronoun. If the optionality of the instrumental causee were the result of *pro*-drop we would expect the instrumental case-ending and agreement affix to be retained, as in (68a). Accordingly, the absence of an instrumental case-marker in examples like (66b) is not consistent with a *pro*-drop analysis.

- (67) (én-)vel-em. (Hungarian)
  I-INST-1SG

  'with me.' (Kiss et al. 2021: 36)
- (68) a. János ír-at-ot level-et (ő)-vel-e.

  János write-CAUS-PAST.3SG.DEF letter-ACC he/she-INST-3SG

  'János made him/her write a letter.'

Even ignoring this, other facts are inconsistent with (66b) being analyzed as a case of prodrop. pro-dropped DPs obligatorily receive a referential interpretation. For example, in (69a) the third-person singular pronoun  $\sigma$ , is best paraphrased as he/she; a paraphrase with a non-referential, specifically an existential interpretation, is awkward to ungrammatical. Crucially, in instances where the instrumental causee is unexpressed, the 'dropped' element is not paraphrased with referential interpretation; instead the causee is best paraphrased with a existential interpretation, 'someone', akin to how the unexpressed agent of a passive is interpreted.

Thus, we can conclude that the absence of the instrumental causee in examples like (66b) and (69b) is the result of a genuine syntactic optionality.

(69) a. (ő) ír-t level-et. (Hungarian) he/she write-PAST.3SG.INDEF letter-ACC 'he/she wrote a letter. / #someone wrote a letter.'

b. János ír-at-ot level-et
János write-CAUS-PAST.3SG.DEF letter-ACC
'János made someone write a letter. / #János made him/her write a letter.'

The third asymmetry between accusative and instrumental causees has to do with verbal agreement. In Hungarian, a definite direct object triggers definite agreement on the verb. Interestingly, a causativized verb will agree in definiteness with the accusative causee, however, no such agreement occurs when the definite causee is instrumentally case-marked. For example, the verb in (70a) appears with the past tense indefinite ending -ott in the presence of the definite instrumentally case-marked causee. When the causee is in the accusative, as in (70b), the verb surfaces with the past tense definite morpheme -ta.

- (70) a. A tanár fut-tat-ott a gyerek-ek-kel. (Hungarian) the teacher run-CAUS-PAST.INDEF the child-PL-INST
  - b. A tanár fut-tat-ta a gyerek-ek-et. the teacher run-CAUS-PAST.DEF the child-PL-ACC 'the teacher made the children run.' (Key 2013: 209)

Fourth, accusative and instrumental causees exhibit contrasting restrictions with respect to animacy. An instrumental causee must be animate, while the accusative causee has no such restriction. For example, (71b) is perfectly acceptable when the inamimate causee is accusative, however, when the causee is instrumentally marked, as in (71a) the sentence is ungrammatical.

- (71) a. \*A diák fut-tat-ott a program-mal. (Hungarian) the student run-CAUS-3SG.INDEF the program-INST
  - b. A diák fut-tat-ott a program-ot.
    the student run-CAUS-3SG.DEF the program-ACC
    'The student ran the program.' (Key 2013: 210)

The final asymmetry is more contentious. In Hetzron (1976)'s survey of the Hungarian causative construction, he notes that the instrumental- and accusative-causee constructions are associated with distinct interpretations. Illustrated by (72a), instrumental case marking is associated with causation realized through instruction. Conversely, the presence of an accusative causee results in a reading where the causee has contributed some degree of direct or mediated action to induce the causation: the standard 'making do' or 'causing to do', as in (72b).

(72) a. Az árok-ba pisil-tet-tem a gyerek-kel. (Hungarian) the ditch.into pee-CAUS-PAST the child-INSTR

'I had the child go pee-pee into the ditch (by sending him there)'

b. Az árok-ba pisil-tet-tem a gyerek-et.
the ditch.into pee-CAUS-PAST the child-ACC
'I made the child go pee-pee into the ditch (by taking him there).' (Hetzron 1976: 395)

This ambiguity has been omitted in many analyses of Hungarian causatives for reasons of simplification, and in other cases, some authors (Komlósy 2000) have labelled the instrumental usage in such constructions as a bad, nonstandard variant. Nonetheless, my informants concur with Hetzron's judgments. In additon, Nemesi (2003) provides further evidence that the case-marking of the causee correlates with unique interpretations by using corpus data on the causative variant of dolgoz 'work'. Corpus extracts show that the instrumental causee is used in contexts where the causee is induced into the 'work' via instruction; in (73a), for instance, the causee is charged with a task. In contrast, the accusative causee is associated with situations where the causation is more coercive, as in (73b).<sup>3</sup>

- (73) a. "tankönyvek kiszállítása és a szlőkhz való eljuttatása sokak szerint egyébként is a rendszer kritikus pontjja. A nagy kiadók persze saját terjesztőkkel [INST] dolgoztatnak, a kisebbek viszont gyakran maguk csomagolják és postázzák a könyvkuldeményeket..." ['The delivery of textbooks and getting them to the parents are said to be the critical points of the system. The big publishing houses, of course, have their own distributes do the work, but the smaller ones pack and post the book consignments themselves...']
  - b. "A felperzselt föt taktikáját követve Szud'anban százezrek váltak földönfutóvá. Az ország központi területerie bemerészedő újságírók szerint virágzik a rabszolgaság: főként gyerekeket és nőket hurcolnak el, akiket [ACC] laktanyákban dolgoztatnak addig, amíg a férek és apák ki nem váltják őket..." ['Following the tactic of scorchted earth, hundreds of thousands of people became homeless in Sudan. According to journalists who ventured into the heart of the country, slavery is rampant: mainly children and women are carried off and forced to work in barracks until the husbands and fathers have paid the ransom.']

    (Nemesi 2003: 14–15)

I opt to characterize this distinction using the terms 'manipulative' and 'directive' (similar

<sup>&</sup>lt;sup>3</sup>Nemesi (2003) notes that the corpus data does include cases where the accusative-causee construction is associated with an indirect interpretation, however, such cases were uncommon. He suggests that these exceptional cases could be the result of dialectal variation or the effect of weak implicatures (see Nemesi 2003: 16-17 for more discussion).

terms used in the literature include indirect/direct, contactive/noncontactive, causer-controlled/causee-controlled, willing/unwilling, a.o.). The manipulative interpretation, corresponding to the accusative-causee construction, expresses situations involving the physical or direct manipulation of an object or person (the causee) by the causer. In contrast, the directive interpretation, associated with the instrumental-causee construction, typically involves the causer's giving an oral direction or instruction to the causee. These contrasting manipulative/directive (i.e. 'make' vs. 'had') interpretations noted by Hetzron (1976) and Nemesi (2003) are not confined to Hungarian. Similar alternations are widely attested cross-linguistically (Bolivian Quechua Schoenfeld 2008: 46, Japanese Shibatani 1973: 333–334, Telugu Krishnamurti and Gwynn 1985: 202, among others) While such semantic contrasts are well documented in the typological literature, formal syntactic and semantic work on the topic is limited (although see Lyutikova and Tatevosov 2018; Myler and Mali 2021 for treatments of the sociative interpretation in causatives). Although it is not clear how such meanings are encoded, I take the fact that differences in case-marking correspond to distinct interpretations to suggest that instrumental-and accusative-causee constructions are associated with separate structures.

In the previous section I argued that Hungarian morphological causatives are Verb-selecting, that is, they take a vP complement, and thereby contrast with Japanese Voice-selecting causatives which select for a VoiceP. However, in the case of Voice selecting causatives there is a distinct syntactic position for the causee, i.e. the Spec of the embedded VoiceP. In contrast, accounting for the causee in a Verb-selecting analysis is not straightforward; since by definition there is no VoiceP embedded under a verb-selecting causative, the external argument of the embedded predicate (the causee) must be introduced in some other way. Further, if the causee is not introduced by Voice, how exactly is the external thematic role associated with the embedded predicate assigned to the causee? Put simply, how is the causee semantically interpreted as the Agent of the embedded predicate when the projection typically responsible for this is absent from the structure below CauseP?

The issue of the causee arises in all languages that have Verb-selecting causatives. Pykkänen (2002; 2008) leaves this as a open question for future work and subsequent literature has varied in how they address the issue of introducing the causee. Unfortunately, the literature has limited discussion on the problem of integrating the causee into the semantic composition. The expectation then in Pykkänen's framework, is that languages should vary in terms of how they resolve problems of introducing the causee and integrating it into the semantic composition. Of

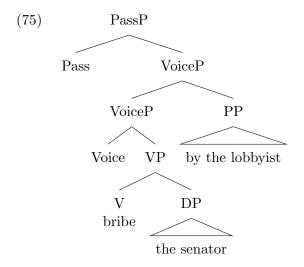
course, this variation should be related to the variation we see in the syntactic status of causees in verb-selecting causatives. Cross-linguistically, causees in Verb-selecting causative often appear as obliques and/or as non-Agentive arguments. Notably, the instrumental causee patterns as the former and the accusative causee as the latter. To account for the differences in syntactic distribution, optionality, agreement behaviour, animacy requirements, and interpretation, I propose that Hungarian morphological causatives employee two introduction strategies for the causee. I will detail this analysis in what follows.

#### 3.4.2 Appeal to Passives

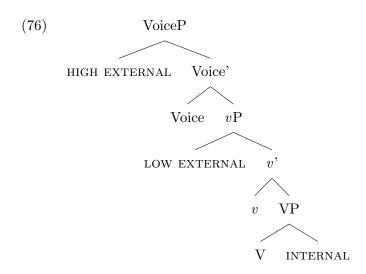
Examining the properties outlined in §3.4.1, it is notable that there are a number of similarities between the instrumental causee and the Passive 'by'-phrase. Most clearly, in the fact that the 'by'-phrase (which denotes the Agent of the passive) is optional, and even when it is absent from the structure, the passive is still interpreted as having an implicit Agent; an existential 'someone'. Take (74) as an example, despite the lack of a 'by'-phrase, the passive is still understood to have an Agent that is responsible for offering the cash payment; notably, this implied agent is compatible with a rationale phrase i.e. 'to appease the workers'.

#### (74) A cash payment was offered to appease the workers.

Literature on passives generally accounts for implicit Agents by positing that some mechanism prevents the full realization of the external argument. Bruening (2013) argues for a separate Pass head that selects for a Voice projection that has not yet projected its external argument. This unsaturated Voice projection is then saturated by the Pass head, which existentially binds it, yielding the existential interpretation we observe in passives. The 'by'-phrase is analyzed as an adjunct that, like the Pass head, selects for an unsaturated Voice projection. The argument in the complement of the P head 'by' is linked with the unsaturated argument in Voice. Specifically, 'by' takes a function with an open individual argument and supplies its own argument to saturate that function (see Bruening 2013: 22-26 for a overview of the semantic composition)



However, a problem arises if we want enlist a similar analysis to account for the implicit argument in the instrumental-causee construction. Since, as I have argued, Hungarian morphological causatives are Verb-selecting, the embedded event lacks the projection responsible for introducing external arguments, i.e. VoiceP. This issue can be resolved if we assume, in line with Massam (2009), Polinsky (2016), Tollan (2018), and Nash (2018), that both Voice and v introduce external arguments. These proposals make a distinction between low- and high-external arguments, arguing that the subjects of unergative verbs are introduced lower than the subjects of transitive verbs. Specifically, unergative subjects are introduced in the specifier of vP, while the subjects of transitive verbs are introduced in the specifier of VoiceP. This structure is illustrated in (76).



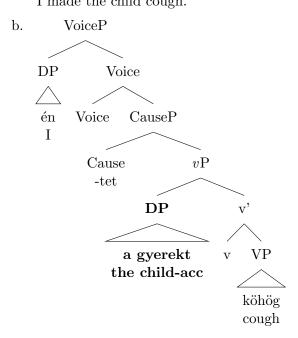
v encodes the initiation and experience of the event, and arguments merged in the specifier of vP are mapped as the *holder* (*undergoer* in Ramchand 2008, *actor* in Massam 2009) of the action denoted by the unergative verb. In contrast, Voice encodes volition, and arguments merged in Spec of Voice are mapped as agents.

With this assumption in place, I propose that Hungarian Verb-selecting causatives utilize two strategies for introducing the causee. Accusative causees are unergative subjects introduced in the specifier of vP, that is, they are low external arguments. Instrumental causees, in contrast, are adjuncts adjoined at vP, akin to the 'by'-phrase in passives. I will sketch these structures in more detail below.

#### 3.4.3 Accusative Causee

I argue that the accusative-causee construction, exemplified by (77a), corresponds to the structure in (77b).<sup>4</sup> The causee is introduced in the specifier of vP as the subject of the unergative verb (Massam 2009; Polinsky 2016; Tollan 2018; Nash 2020). Recall that when a transitive verb is causativized, the causee cannot surface with accusative case, as such the accusative-causee construction is restricted to the causatives of unergative verbs. I will save the explanation for the ungrammaticality of accusative causees in the causatives of transitive verbs and the discussion of how the unergative subject receives case and participates in object-verb agreement for §3.4.5.

(77) a. Én köhög-tet-tem a gyerek-et. (Hungarian)
I cough-CAUS-PAST.1SG the child-ACC
'I made the child cough.'



By analysing the accusative causee as an unergative subject, we provide an explanation for how the causee is integrated into the event structure of the embedded predicate. Specifically,

<sup>&</sup>lt;sup>4</sup>Note that both the verb and causer  $\acute{e}n$  'I' undergo movement that is not included in this tree: the verb moves up to T, picking up the causative and tense affixes; and the causer becomes the Topic, moving to the specifier of TopP. I have omitted this movement for the sake of clarity.

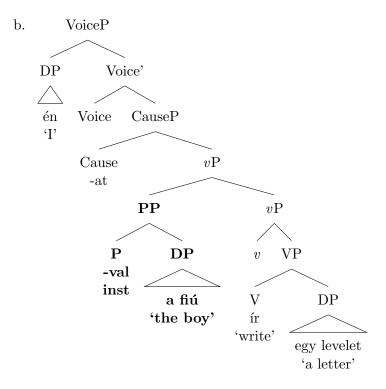
the accusative causee is interpreted as the Agent of the embedded verb because it receives the same theta role it would in a standard unergative clause. Importantly, despite being an external argument, the causee is still incompatible with agent-oriented modification. Most split VoiceP/vP literature (Harley 2013; Legate 2014; Poole 2016; Pylkkänen 2008, among others), assume that VoiceP is responsible for encoding volition (the element that agent-oriented phrases are sensitive to). Since, in a Verb-selecting causative construction like (77), the verbal substructure embedded under the causative morpheme lacks a VoiceP, the unergative subject is not mapped as the volitional Agent of the embedded event and will therefore, resist agent-oriented modification.

In a Verb-selecting structure like (77), the verbal substructure embedded under the causative morpheme lacks a VoiceP, as such the unergative subject is not mapped as the Agent of the embedded event and will therefore, resist agent-oriented modification.

#### 3.4.4 Instrumental Causee

I propose that the instrumental-causee construction, represented by the example in (78a), is an adjunct adjoined to vP, as in (98). Here Cause takes a vP that does not project an external argument. When the instrumental causee is absent the unsaturated argument undergoes existential closure, yielding an existential interpretation like the one we observed in (68a). In contrast, when the instrumental causee is adjoined to vP, existential closure is undone and the adjunct causee is linked with the unsaturated argument position in vP. This linking explains why the adjunct causee is semantically interpreted as an argument.

(78) a. Én írattam a fiúval egy levélet. (Hungarian)
I write-CAUS-PAST.1SG the boy-INST a letter-ACC
'I had the boy write a letter.'



By arguing that accusative- and instrumental-causee constructions correspond to structures in (77b) and (98), a number of the facts outlined in §3.4.1 fall out. First, these structures explain the argument-oblique contrast between accusative and instrumental causees. Since accusative causee are arguments, specifically, unergative subjects introduced in the specifier of vP, they are syntactically obligatory; thereby deriving the ungrammaticality we observe in examples like (66a). Similarly, since instrumental causees are a PP adjunct adjoined to vP, the optionality observed in (66b) falls out. Second, since accusative causee is merged in the Specifier vP, it is in accessible position to be assigned structural (in this case, accusative) case and to participate in object-verb agreement, both of which are mediated by a probe on v. Third, the ungrammatically of accusative causees in the causatives or transitive verbs can be explained by reasons of case-licensing: both the causee merged in the specifier of vP and the direct object compete for accusative case, which can only be assigned to one DP, leaving the other without case and thereby crashing the derivation. Case and agreement will be examined in more detail in §3.4.5.

However, the differences between accusative- and instrumental-causee constructions with respect to animacy requirements do not necessarily fall out from the merge positions I propose above. Nonetheless, they can still be accounted for. §3.4.6 will cover animacy, and crucially, it will show that the animacy requirement for instrumental causees cannot be accounted for under a Horvath and Siloni (2010; 2011)'s lexical causativization operation.

## 3.4.5 Case, Agreement, and Licensing

Before I go on to discuss the Case and Agreement in Hungarian morphological causatives, there is an issue I must resolve. Famously, Burzio (1986) links the ability of a verb to assign accusative case to its ability to assign an external (agent) theta role. This is formulated as Burzio's Generalization:

#### (79) Burzio's Generalization:

All and only the verbs that can assign a  $\theta$ -role to the subject can assign accusative Case to an object. [subject = external subject (agent)] (Burzio 1986: 178)

Burzio's generalization is intended to extend to passives, and in addition to, unaccusative and raising verbs. If, as I claim above, the verb embedded under Cause in the instrumental-causee construction does not assign an external  $\theta$ -role to the causee, then, according to Burzio's Generalization, we would expect that the embedded verb is unable to assign accusative case. As we saw previously, this is not the case. Recall that when a transitive verb is causativized, as in (80), the causee appears in instrumental case and the object surfaces with accusative.

(80) írattam a fiúval egy levél-et. (Hungarian) write-CAUS.PAST the boy-INST a letter-ACC 'I had the boy write a letter.'

However, a large body of literature has come to challenge the empirical and theoretical basis of Burzio's Generalization (e.g. Haegeman 1986; Sigursson 1989; Von Stechow 1990; Reuland 2000; Haider 2000, a.o.). There is now considerable consensus that Burzio's Generalization is an epiphenomenon arising from the fact that when only one Case feature is checked in a clause, it is spelled out as nominative. Instead, more recent work attempts to explain why the object gets nominative Case when the there is no nominative subject (e.g. Schütze 1997; Burzio 2000; Mahajan 2000; Laka 2000; Woolford 2003, a.o.). For a more thorough discussion, see Woolford (2003). Accordingly, I assume that all v heads are able to assign structural (accusative) case, as such, the Case pattern in (80) is expected.

Under Chomsky's (2000, 2001) minimalist framework, Case and agreement are two aspects of a single syntactic operation: Agree. This operation is mediated by a probe, which hosts an unvalued (uninterpretable) feature [uF] that it aims to value in the course of the derivation. This valuation occurs when the probe enters into a relationship with a suitable goal [F]. Once this relation is established, the valued features are copied back onto the probe (and may or

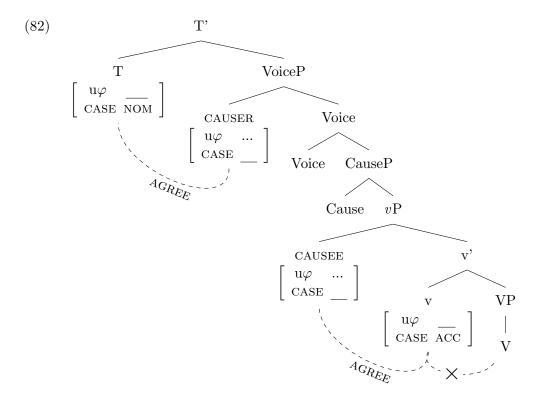
may not be spelled out as morphological agreement). Literature on Case and agreement in Hungarian (Bárány 2015; Den Dikken 2004 a.o.), and in general (Chomsky 2001), assume that the functional head v acts as probe hosting both unvalued  $\varphi$  features (reasonable for object agreement) and a valued case feature (responsible for 'assigning' accusative case). Accordingly, object agreement and accusative case are established through an identical operation, originating from the same syntactic position, i.e. v. We therefore expect them to pattern together. In addition, Agree has an important role in driving the derivation: probes must attempt to value their  $\phi$ -features, and nominals must value their case features, otherwise the derivation crashes. A nominal that has not entered into an Agree relation with a Case-assigning probe will not get Case; it will therefore violate the Case Filter, which rules out overt nominals appearing without Case, and the derivation will crash (Chomsky 1981).

With this framework in place the Case and agreement patterns of Hungarian morphological causatives fall out. Typically, in Hungarian the verb will agree in definiteness with its direct object: if the direct object is definite the verb will show a definite agreement, if the direct object is indefinite, or if the verb lacks a direct object, then the verb will show indefinite morphology. Recall that, when the causee is definite, the causativized verb will show definite morphology in the accusative-causee construction (81b), but indefinite morphology in the instrumental-causee construction (81a).

- (81) a. A tanár fut-tat-ott a gyerek-ek-kel. (Hungarian) the teacher run-CAUS-PAST.INDEF the child-PL-INST
  - b. A tanár fut-tat-ta a gyerek-ek-et.
    the teacher run-CAUS-PAST.DEF the child-PL-ACC
    'the teacher made the children run.' (Key 2013: 209)

In the accusative-causee construction, illustrated in (82), the head of T (which hosts unvalued case and  $\varphi$  features responsible for realizing nominative case and subject agreement, see Chomsky 2001) enters into an Agree relation with the closest accessible nominal, in this case, the causer located in the specifier of VoiceP. However, agreement between the causee in specifier of vP and the v probe poses a problem. Although specifier-head agreement is commonly assumed, it crucially involves movement of an XP from below the agreeing head to the specifier of this head. This instance would involve agreement between a head and a DP base-generated in its specifier without movement. To resolve this, I will adopt Béjar and Rezac (2009)'s view of agreement whereby the head must first attempt to agree with an element in its complement

(i.e. Chomsky's agree operation), however, if and only if this attempt fails then the head can agree with an element in its specifier. Accordingly, the v probe looks into its complement, since there is no nominal in its c-command domain, the v then enters into agreement with the DP base-generated in its specifier, valuing its  $\phi$  features an assigning it accusative case. Since it is relevant, the order of operation is specified below.



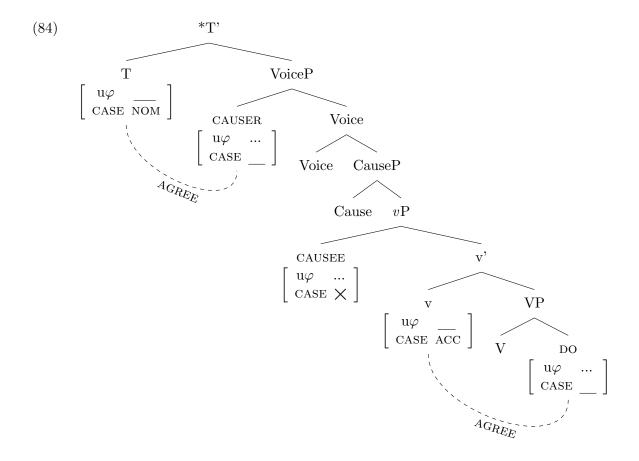
The order of operations in (82) is as follows:

- 1. v attempts to Agree with a nominal in its complement.
- 2. Agree between v and the cause in its specifier, valuation of  $\varphi$  and CASE features.
- 3. Agree between T and causer, valuation of  $\varphi$  and CASE features.

In addition, we can account for the ungrammaticality of accusative causees in the causatives of transitive verbs, shown again in (83), for reasons of case licensing.

(83) írattam a fiú-val/\*fiú-t egy levél-et. (Hungarian) write-CAUS.PAST the boy-INST/\*boy-ACC a letter-ACC 'I had the boy write a letter.'

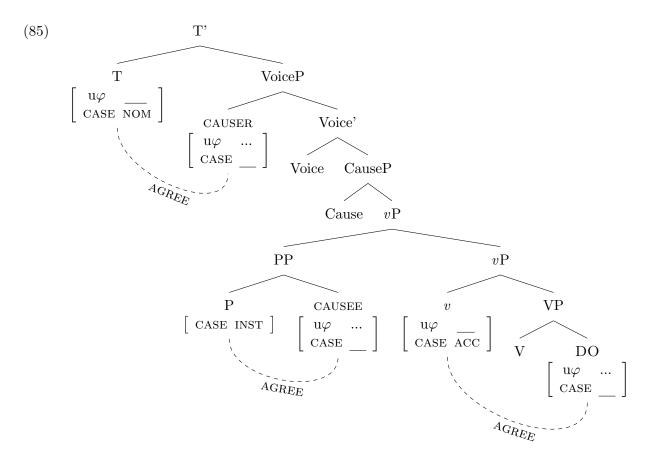
Assuming that the causee is merged within the vP, for example in the specifier of vP, it would not be able to have its case feature valued by any case probe. This is illustrated by the tree in (84).

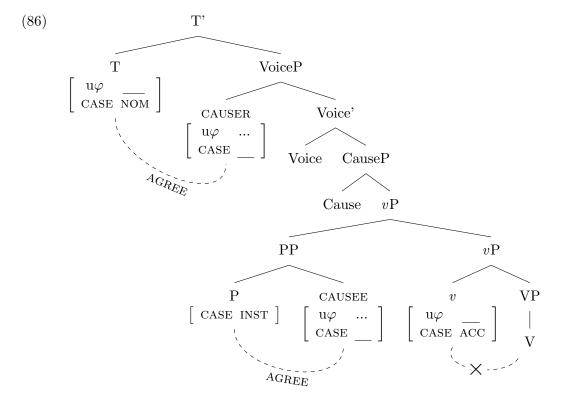


Since the direct object is merged as the complement of v, following Béjar and Rezac (2009), the probe on v must agree with the direct object before it can attempt to agreement with the causee located in its specifier. Accordingly, if both the causee and the direct object are present in the structure, it is the direct object that will receive accusative case and value the  $\phi$ -features on v. Additionally, it is not possible for the causee to have its unvalued Case feature checked by the Case features on v, as the causer, located in the specifier of VoiceP, is the closet accessible goal and will therefore intervene. Therefore the causee in a structure like (82) is left with an unvalued case feature, violating the Case Filter and crashing the derivation.

Turning to the instrumental-causee construction, the agreement and case pattern is straightforward. Recall that unlike accusative causees instrumental causees do not participate in object agreement. This falls out from the claim that the instrumental causee is a PP adjunct adjoined to vP. In both the transitive (85) and intransitive variants (86), the adjunct causee is inaccessible to the agreement probe located on v as the causee is not within v's c-command domain nor a Spec-Head configuration with v. Instead, the adjunct causee is assigned Case by the P head, while the unvalued features located on v probe downward to the nearest DP: if the verb is transitive, it will agree with, and assign accusative case to, the direct object; if the verb is intransitive, it will fail to agree (á la Preminger 2014) and spell out default (indefinite)

agreement morphology on the verb.





In sum, using standard assumptions, this section has accounted for: (i) the case-marking

patterns of Hungarian morphological causatives; (ii) the failure of instrumental causees to participate in object-verb agreement; and (iii) the ungrammaticality of the accusative causee to surface in the causative of transitive verbs. The next section will cover the final syntactic asymmetry noted in §3.4.1, the animacy requirement for instrumental causees; a fact that Horvath and Siloni (2010; 2011)'s lexical account is unable to account for.

#### 3.4.6 Animacy

In comparing the (dis)advantages of adopting a lexical or syntactic account of 'monoclausal' morphological causatives, one must pay special attention to where the accounts diverge or make different predictions. Key (2013) notes that causee is one of these battlegrounds. Recall the lexical causatization operation formulated by Horvath and Siloni (2011):

#### (87) Causativization in the lexicon:

 $V < \alpha > \rightarrow CAUS-V < [+c+m], \alpha' >$ , where  $\alpha$  includes a role specified as external; if this role includes a [+c] feature, the feature is revaluated to [-c] (otherwise  $\alpha$  equals  $\alpha'$ ). (Horvath and Siloni 2011: 692)

The lexical causativization operation targets the theta-grid of the base verb, specifically, its external argument, i.e. the 'to be' causee. If the external argument has the +c feature (which encodes that the individual is responsible for causing the event), it is revalued to -c (encodes that the individual is not responsible for causing the event). In contrast, under a syntactic account the causative head, taking the base verb as its complement, does not embed an external argument introducing head, as such, the causee must be introduced some other way. The expectation under a syntactic framework then is that the causee will vary in behaviour depending on how it is introduced. However, in the lexical approach the behaviour of the causee should not differ from its behaviour as the subject of the base verb prior to causativization other than in way directly attributable to revaluation of +c to -c.

Recall that the instrumental causee in Hungarian morphological causatives exhibit an animacy requirement. Key (2013), notes that Turkish causatives, which he likewise analyzes as Verb-selecting, display a similar animancy restriction for oblique causees. For instance, the verb  $a\varphi$  'open' allows for both an animate subject, as in (88a), and an inanimate instrument subject kapi-yi 'key', shown in (88b). However, when  $a\varphi$  'open' causativized the dative causee, the logical subject of  $a\varphi$  'open', cannot be inanimate: in (89b) the instrument causee kapi-yi 'key' is ungrammatical.

#### (88) Non-causative

- a. Bekçi kapı-yı anahtar-la aç-ti. (Turkish) watchman-DAT door-ACC key-with open-PAST 'The watchman opened the door.'
- b. Anahtar kapı-yı aç-ti.
  key door-ACC open-PAST
  'The key opened the door.'

(Key 2013: 187)

#### (89) Causative

- a. Müdür bekçi-ye kapı-yı aç-tır-dı.
   directer watchman door-ACC open-CAUS-PAST
   'The director made the watchman open the door.'
- b. \*Bekçi anahtar-a kapı-yı aç-tır-dı.
  watchman key-DAT door-ACC open-CAUS-PAST
  Intended: 'The watchman made the key opened the door.' (Key 2013: 187)

Note that the accusative causee in Turkish morphological causatives, exhibits no such animacy restriction. In (90b) the inaminate causee *araba* 'car' is grammatical.

(90) a. Araba çalış-tı. (Turkish) car work-PAST 'The car started.'

b. Mehmet araba-yı çalış-tır-dı.

Mehmet car-ACC work-CAUS-PAST

'Mehmet started the car'

(Key 2013: 190)

Key (2013) notes that Hungarian exhibits the pattern with *open*-type verbs, that is, verbs that allow Agent, Instrument, and natural force subjects. In Hungarian, the subject of *nyit* 'open' may be an animate agent, such as  $az \, \delta r$  'the watchman' (91a), or it may be an instrument, like  $a \, kulcs$  'the key' (91b). However, in the causative variant of the nyit 'open', the instrumental causee must be animate:  $a \, kulcs$  'the key' is not longer an acceptable subject for nyit 'open' (92b).

#### (91) Non-causative

- a. Az őr ki-nyit-ott-a az ajtó-t. (Hungarian) the watchman PV-open-PAST.3SG-DEF.DO the door-ACC 'The watchman opened the door.'
- b. A kulcs ki-nyit-ott-a az ajtó-t. the key PV-open-PAST.3SG-DEF.DO the door-ACC

'The key opened the door.'

(Key 2013: 207)

### (92) Causative

- a. A főnök az őr-rel ki-nyit-tat-t-a az ajtó-t. the director the watchman-INST PV-open-CAUS-PAST.3SG-DEF.DO the door-ACC 'The director made the watchman open the door.
- b. \*Az őr ki-nyit-tat-t-a az ajtó-t a kulccsal. the watchman PV-open-CAUS-PAST.3SG-DEF.DO the door-ACC the key-INST Intended: 'The watchman made the key open the door. (Key 2013: 207)

According to Key (2013), there are two ways for the lexical approach to encode this animacy requirement. The first involves revising the  $\theta$ -grid of open-type verbs to include a +m feature. Typically, under a lexical account the  $\theta$ -grid for a verb like open has a single [+c] argument. Crucially, this argument is underspecified for m. Consequently, the subject may realize any +c cluster, that is, it may surface as an Agent [+c+m], a Cause [+c], or an instrument [+c-m]. In fact, it is through this underspecification of m that the lexical approach defines the class of verbs that participate in the causative/inchoative alternation (see Reinhart 2016). As such, Key (2013) argues that revising the  $\theta$ -grid of open-type verbs to include a +m feature, would eliminate the main explanatory power of the entire arity operation enterprise. As such it is not an effective solution.

The second option is to adjust the causativization operation to add a +m feature in the causee's feature bundle. Key (2013) reformulates the operation below (modification in bold):

#### (93) Causativization in the lexicon:

 $\overline{V} < \alpha > \rightarrow CAUS-V < [+c+m], \alpha' >$ , where  $\alpha$  includes a role specified as external; if this role includes a [+c] feature, the feature is revaluated to [-c] and the feature [+m] is added (otherwise  $\alpha$  equals  $\alpha'$ ).

(Key 2013: 209)

However, he notes that this revision fails to account for the fact that this animacy requirement is restricted to the instrumental causee, as shown again in (94).

- (94) a. \*A diák fut-tat-ott a program-mal. (Hungarian) the student run-CAUS-3SG.INDEF the program-INST
  - b. A diák fut-tat-ott a program-ot.
    the student run-CAUS-3SG.DEF the program-ACC
    'The student ran the program.' (Key 2013: 210)

The operation in (93) predicts that both the accustive- and instrumental-marked causee should be be specified for m, since external argument of the input verb, i.e. the to-be causee

(irrespective of final its final case-marking), is the target of this operation. Consequently, as is Horvath and Siloni (2011)'s lexical approach to causation fails to account for the data.<sup>5</sup>

A syntactic account is in a better position to account for the animacy requirement seen in Turkish and Hungarian morphological causatives, since, under a syntactic account, the causee may be introduced in distinct structural positions, and differences in the behaviour of causees is expected. Depending on one's theoretical commitments there are various ways to encode animacy in the syntax. I propose an account in line with Landau (2010) and Legate (2014), whereby they analyze implicit arguments as a set of interpretable  $\phi$ -features. These  $\phi$ -features, which may be partial, act as interpretive constraints on the denotation of an argument. This is illustrated by (95). The value of X, i.e. the individual denoted by the implicit argument, is minimally constrained by they values of its  $\phi$ -set, in this case, third person, singular, and feminine.

(95) 
$$[{3rd, sg, F}] = a$$
 female X that is neither the speaker nor the addressee

(Landau 2010: 383)

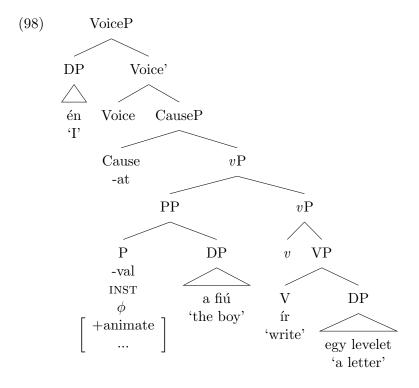
Legate (2014) combines  $\phi$ -sets and the predicate restriction mode of composition (see Chung and Ladusaw 2003) to account for the passive in Acehnese. She argues that located on Voice are a set of  $\phi$ -features that restrict the external argument position. In the case of Acehnese, this  $\phi$ -feature tracks the person and politeness features of the passive agent. These features are then realized by a morpheme, in (96). Replacing this prefix with  $l\hat{o}n$ , which realizes features of the theme, results in ungrammaticality.

However, the values in these  $\phi$ -sets may also be specified, thereby restricting the possible realization of the 'by'-phrase. For example, Legate (2014) notes that in the Balinese low-register passive marked by -a, the implicit agent must be third person. Thus in (97) a 'by'-phrase may be used, but only if the agent in the 'by'-phrase is third person; if the preposition teken 'by' takes a first person pronoun the result is ungrammatical.

<sup>&</sup>lt;sup>5</sup>In a footnote Horvath and Siloni (2011) minimize the generality of the animacy restriction and imply the ungrammaticality of inanimate causee is the result of independent properties of the semantics of causation (691-692, n. 36). Addressing the first point, my informants second the animacy judgements in Key (2013), for them animacy effects are robust and general. To the second point, Key (2013) provides a thorough argument against their appeal to the semantics of causation, however I have omitted it here for the sake of brevity (see Key 2013: 210-213 for more detail)

- (97) a. Bli Man nyudaang masih tepuk-a teken Made Arini. (Balinese) bother Man can still see-PASS.3 by Made Arini 'Bother Man can still be seen by Made Arini.'
  - b. \*Bli Man nyudaang masih tepuk-a teken tiang.
    bother Man can still see-PASS.3 by 1
    'Bother Man can still be seen by me' (Arka et al. 2008: 81)

I argue that, similar to the Balinese example, restrictive  $\phi$ -features constrain the denotation of the instrumental causee in Hungarian. Specifically, I claim that P hosts a [+animate] feature that restricts the realization of the causee located in its complement.



Through predicate restriction the set of  $\phi$ -features located on P constrain the DP merged as its complement. Instances where the DP selected by the instrumental is not animate will yield a mismatch with the restrictive [+animate] feature on P and will result in ungrammaticality.

### 3.5 Conclusion

In this chapter, I have proposed a syntactic analysis of Hungarian morphological causatives that reduces the contrasts between Hungarian and Japanese morphological causatives to a matter of complement selection. Put simply, I argued that the causative in Hungarian takes a vP-sized complement (i.e. is Verb-selecting), while the Japanese causative embeds a VoiceP (i.e. is Voice-selecting). This analysis predicts that Hungarian and Japanese morphological

causatives will pattern differently with respect to diagnostics that test for the presence or absence of Voice. I have shown that the 'clausality' tests used by Horvath and Siloni (2010; 2011) as evidence that Hungarian causatives are a single predicate (and are therefore derived in the lexicon), while Japanese causatives are two (and are therefore derived in the syntax) are actually standard diagnostics used in the literature to distinguish between Verb- and Voice-selecting causatives. Therefore these contrasts do not pose a problem for syntactic accounts of causatives and cannot be used as motivation to posit an independent computational component in the lexical. This chapter has also claimed that the instrumental-causee and accusative-causee construction correspond to to distinct syntactic structures. Specifically, I have argued that accusative causees are unergative subjects introduced in the specifier of vP, while instrumental causees are adjuncts adjoined to vP.

# Chapter 4

# Extension

#### 4.1 Introduction

Recall that Horvath and Siloni (2010; 2011) present evidence that Hungarian morphological causatives fail to causativize control and raising verbs, while Japanese morphological causatives can causativize both. In (99), attaching the causative morpheme -(t)At to the aspectual raising verb kezd 'start' results in ungrammaticality. Japanese, in contrast, permits the causativization of the aspectual raising verb owar 'finish', as shown in (100).

- (99) \*Kati (el-)kezd-et-ett énekel-ni Mari-val (Hungarian) Kati.NOM PERF-start-CAUS-PAST.3SG sing-INF Mari-INST 'Katie make Mari start to sing.'
- (100) Anata-wa watasi-ni hon-o kaki-owat-ta. (Japanese)
  You-TOP I-DAT book-ACC write-finish-CAUS-PAST
  'You made me finish writing the book.' (Horvath and Siloni 2011: 674-675)

Similarly, in Hungarian the subject control verbs (el)kezd 'start' and (meg)-próbál 'try' likewise fail to causativize (101). In Japanese, however, the causative morpheme is able to embed the control verb mi 'try' (102).

- (101) a. \*A tanár el-kezd-et-te Mari-t [PRO
  The teacher.NOM PERF-begin-CAUS-PAST.DEF.DO Mari-ACC
  zongorázni]. (Hungarian)
  play.the.piano.INF

  'The teacher made Mari-begin to play the piane'
  - 'The teacher made Mari begin to play the piano.'
  - b. \*A tanár meg-próbál-tat-ott Mari-val [PRO el-énekel-ni egy the teacher.NOM PERF-try-CAUS-PAST.3SG Mari-INST away-sing-INF a

```
népdal-t].
folksong-ACC
'The teacher made Mari try to sing a folksong.' (Horvath and Siloni 2011: 670)
```

(102) Mary-wa John-ni [PRO hon-o yonde] mi-sase-ta. (Japanese)
Mary-TOP John-DAT book-ACC read try-CAUS-PAST

'Mary made John try to read a book.' (Horvath and Siloni 2011: 670)

Horvath and Siloni (2010; 2011) use these contrasts as evidence in favour of their lexical account, however, they only account for them with stipulations. They explain the failure of Hungarian morphological causatives to causativize raising verbs by positing that the lexical causativization operation requires an external argument. They formulate this requirement into the operation through the phrase in bold.

#### (103) Causativization in the lexicon:

 $V < \alpha > \rightarrow CAUS-V < [+c+m], \alpha' >$ , where  $\alpha$  includes a role specified as external; if this role includes a [+c] feature, the feature is revaluated to [-c] (otherwise  $\alpha$  equals  $\alpha'$ ).

(Horvath and Siloni 2011: 692)

Since raising verbs lack an external argument, the lexical causativization operation—which requires presence of an external argument to demote—fails to apply because it lacks the external argument to apply to.

Horvath and Siloni (2010; 2011)'s analysis of the control facts is similarly stipulative. As detailed in §2.4.1.5, they argue that during the lexical causativization operation when the external argument of a control verb is demoted (i.e. its [+c] is reevaluated to [-c]), it loses its 'subject control specification' thereby losing its ability to act as controller. According to Horvath and Siloni (2010; 2011), this results in ungrammaticality as the demoted subject cannot establish a control relation with the PRO located in the infinitival complement of the control verb. In turn, since Japanese morphological causatives are built in the syntax, the subject of the control is unaffected and the control relation can be establish as usual.

Although Horvath and Siloni (2010; 2011) provide explanations for the contrasts between Hungarian and Japanese causative with respect to their ability to causativize raising and control predicates, these facts do not fall out naturally from their proposal; they must account for them with stipulations. This does not outright contradict their lexical analysis, but, if these contrasts can be explained under a syntactic analysis, then the failure for Hungarian morphological causatives to causativize raising and control verbs does not constitute compelling evidence to

argue for the existence of a computational lexicon.

In the present chapter, I will explain raising and control contrasts and provide an explanation for the behaviour of the Hungarian morphological causative with respect to the embedding of raising and control predicates. In §4.2, I show that the data that Horvath and Siloni (2010; 2011) use to demonstrate contrasts between Hungarian and Japanese causatives are not actually examples of the raising and control predicates, but of restructuring predicates. §4.3 will provide an account of how Hungarian and Japanese morphological causatives combine with restructuring and non-restructuring control predicates. I argue that, if we assume an analysis of restructuring in line with Cinque (2004; 2006) and Grano (2015), the failure of the Hungarian causative to embed restructuring verbs can be explained away as a selectional violation, that is, it falls out from the proposal that Hungarian morphological causatives are Verb-selecting. In addition, contra to the claims of Horvath and Siloni (2010; 2011), I show that Hungarian morphological causatives can embed genuine control verbs. In §4.4, I account for the causativization of genuine raising predicates. More specifically, I demonstrate that both Hungarian and Japanese morphological causatives fail to causativize raising verbs. Following Bartos (2011), I argue that this failure is due to independent constraints on the semantics of causation.

# 4.2 Reevaluating the Raising/Control Facts

Restructuring constructions differ from control and raising constructions in acting as transparent domains for phenomena that is usually clause-bound—most notably, clitic climbing and so-called 'long passives'. The most famous example of restructuring phenomena is clitic climbing which is illustrated by the Italian examples in (104) and (105). Typically, clitics must occur in the same clause in which they are introduced. For instance, in (104a) the direct object of the embedded verb veder 'see' is the clitic lo. lo must appear in the embedded clause, while the clitic surfacing in the matrix clause results in ungrammaticality, as in (104b). However, with the restructuring verb cominciava 'begin' the object clitic lo can appear in the embedded clause where it is introduced, as in (105a), or it may surface in or 'climb' into the matrix clause, as in (105b). Crucially, the availability of clitic climbing depends on the choice of matrix predicate, that is, cominciava 'begin' permits clitic climbing, while detestava 'hate' does not. (I have only outlined the basic phenomena for a more detailed discussion see Burzio 1986; Cardinaletti and Shlonsky 2004; Cinque 2004; Kayne 1989; Napoli 1981; Rizzi 1978)

- (104) a. Gianni detestava veder-lo. (Italian)
  Gianni hated see-it
  'Gianni hated seeing it.'
  - b. \*Gianni lo detestava vedere.Gianni it hated see'Gianni hated seeing it.'
- (105) a. Gianni cominciava a veder-lo. Gianni was.beginning to see-it 'Gianni was beginning to see it.'
  - b. Gianni lo cominciava a vedere.
    Gianni it was.beginning to see
    'Gianni was beginning to see it.'

(Grano 2015: 11)

Another example of restructuring is the long passive construction seen in German (Bayer and Kornfilt 1990; Lee-Schoenfeld 2007; Schmid et al. 2005; Wurmbrand 2001). In the example in (106a), der Wagen 'the wagon' is the direct object of the embedded verb reparieren 'repair', however, it can be promoted to the subject position of the matrix verb versucht 'try' via passivisation. As is the case for clitic climbing, the availability of long passives depend on the choice of matrix predicates; while versucht 'try' permits long passivization behauptet 'claim' does not. In (106b), promotion of the embedded object to the subject position via passivization is ungrammatical.

- (106) a. weil der Wagen<sub>i</sub> [ $t_i$  zu reparieren] **versucht** wurde. (German) because the wagon to repair tried was  $\approx$  'because they tried to repair the wagon.' (Wurmbrand 2001:330)
  - b. \*weil der Wagen $_i$  [ $t_i$  zu reparieren] **behauptet** wurde. because the wagon to repair claimed was

    Intended: 'Because the wagon was claimed to repair.' (Wurmbrand 2001:332)

To account for these transparency facts, restructuring configurations are typically analyzed as monoclausal. Specifically, restructuring predicates combine with a smaller verbal complement, rather than a full CP or TP complement (see Wurmbrand 2001; Cinque 2004; Grano 2015 among others). Crucially, restructuring is cross-linguistically pervasive in the sense that the class of restructuring verbs is relatively consistent across languages. (Wurmbrand 2001, Cinque 2004). Typically, aspectual, modal, motion and implicative verbs tend to form restructuring configurations. Put simply, the verbs that restructure in one language generally restructure in others. This is illustrated by table 4.1. which is taken from Wurmbrand's (2001: 342) survey.

Note that '+' indicates that the predicate participates in restructuring configurations, while '-' indicates that it does not. 'N/A' indicates that independent factors preclude classification, and ' $\pm$ ' indicates either inter-speaker variation or that the relevant predicate corresponds to more than one predicate in the target language and that these synonyms behave differently with respect to restructuring properties.

Table 4.1: Restructuring status

Predicates	German	Dutch	Italian	Spanish	Japanese
can, may	+	+	+	+	+
must, need	+	+	+	+	+
want	+	+	+ .	+	+
other (semi) modals	+	+	+	+	+
causatives	+	+	+	+	+
begin	+	+	+	+	+
come, go	+	+	+	+	+
(be) used to	+	+	+	+	N/A
easy	+	N/A	+	+	+
continue	N/A	N/A	+	+	+
start	N/A	N/A	+	+	+
finish, stop	N/A	N/A	+	+	+
be about to	N/A	N/A	+	+	+
re-do	N/A	N/A	N/A	+	+
know how	N/A	+	+	+	N/A
return	N/A	N/A	±	+	±
intend (≈want, mean)	+	+	±	±	N/A
forget	+	+	±	±	+
try	+	+	±	±	±
manage/succeed	+	+	±	±	+
fail	+	N/A	N/A	N/A	+
dare	+	+	±	-	N/A
seem	+	+	±	-	-
promise, threaten	+	-	-	-	-
allow, permit	+	-	-	±	-
forbid	+	-	-	-	-
recommend	+	-	-	-	-
refuse, reject	-	+	-	-	-
appea <b>r</b>	N/A	+	-	-	-
order	-	-	-	±	-
decide, chose	-	-	-	-	-
plan	-	-	-	-	-
prefer	-	-	-	-	-
wish	-	-	-	-	-
offer	-	-	-	-	-
propose	-	-	-	-	-
propositional	-	-	-	-	-
factive		-	-	-	-

According to Wurmbrand (2001)'s survey, the Japanese verbs that Horvath and Siloni (2010;

2011) use to exemplify raising and control predicates, owar 'finish' and mi 'try', respectively, both form restructuring configurations.<sup>1</sup> However, the restructuring status of the Hungarian verbs (meg)próbál 'try' and (el)kezd 'begin' must still be established.

Although the long passive test is not applicable in Hungarian, transparency effects are. Hungarian verbs often have a particle-like adverbial element. In neutral sentences (those without negation or focus), the verbal prefix appears to the left of their selecting verb, as shown in (107).<sup>2</sup> Typically, verbal modifiers are blocked from moving out of the clause of their verb. Take the examples in (108), be 'in' must appear in the embedded clause adjacent to its verb megy 'go', attaching to the right of the matrix verb mond 'say' results in ungrammaticality.

- (107) László be ment. (Hungarian) László in go-PAST.3SG.DEF 'László went in.'
- (108) a. Mondok (hogy) László be ment. said-PAST.1SG.INDEF that László in go-PAST.3SG.DEF
  - b. \*be mondok (hogy) László ment.
    in said-PAST.1SG.INDEF that László go-PAST.3SG.DEF
    'I said (that) László went in.'

However, in certain infinitival constructions, if the embedded verb has a verbal prefix, that verbal prefix obligatorily attaches to the matrix verb. Consider the examples in (109). The verbal prefix be 'in' must surface to the left of the matrix verb kezd 'begin', as in (109b), if it remains in the embedded clause the result is ungrammatical, shown in (109a).

- (109) a. \*László kezd-ett be menni. (Hungarian) László begin-PAST.3SG.INDEF in go-INF
  - b. László be kezd-ett menni.
     László in begin-PAST.3SG.INDEF go-INF
     'László began to go in.'
- (110) a. \*László próbál-t be menni. László try-PAST.3SG.INDEF in go-INF

 $<sup>^{1}</sup>$ Although, according to Wurmbrand (2001), mi 'try' exhibits variable behaviour with respect to its restructuring status, I will assume that Horvath and Siloni 2011's mi 'try' example in (102) is an example of an restructuring configuration. I make this assumption because the example where the causative morpheme embeds owar 'finish' (100) demonstrates that Japanese morphological causatives are indeed able to embed unambiguous restructuring predicates. I will leave a more thorough investigation of the interaction between Japanese morphological causatives and restructuring predicates to future work.

<sup>&</sup>lt;sup>2</sup>In orthography the procliticized prefix and the verb are spelled as one word, this is, of course, omitted in all examples and glosses for reasons of clarity.

b. László be próbál-t menni.
 László in try-PAST.3SG.INDEF go-INF
 'László tried to go in.'

In the literature on Hungarian, the verbs that allow verbal prefix climbing in Hungarian are termed auxiliary verbs (Kálmán et al. 1986, Dixon 2000). Notably, these so-called auxiliary verbs correspond to cross-linguistically pervasive restructuring verbs:

- (111) a. Aspectual: kezd 'begin', folytat 'start', szokaás 'be customary'.
  - b. Modal: fog 'will', lehet 'may', szeretne, 'would like', kell 'must', bír 'be able', tud 'be able to/know how.
  - c. <u>Implicative</u>: szokott 'tend', talál 'happen to', kíván 'wish', mer 'dare', tetszik 'lit. please', szabad 'be permitted'.
  - d. Other: akar 'want', proábaál 'try', szaándékozik 'intend', óhajt 'desire'.

In contrast, the infinitival constructions of standard non-restructuring predicates, such as  $ut\acute{a}l$  'hate' in (112), pattern like the finite example in (108). In (112b), the verbal prefix is blocked from raising into the matrix clause.

- (112) a. László utál-t be menni. (Hungarian) László hate-PAST.3SG.INDEF in go-INF
  - b. \*László be utál-t menni.
     László in hate-PAST.3SG.INDEF go-INF
     'László hated to go in.'

Note that elkezd 'begin' and megpróbál 'try', i.e. the variants with the verbal prefix, do not allow the verbal prefix of their embedded verb to climb into the matrix clause. The examples in (113) and (114) show that for both elkezd 'begin' and megpróbál 'try', the verbal prefix be 'in' must be attached to the embedded verb megy 'go'.

- (113) a. László el-kezd-ett be menni. (Hungarian) László PERF-begin-PAST.3SG.INDEF in go-INF
  - b. \*László be el-kezd-ett menni.
    László in PERF-begin-PAST.3SG.INDEF go-INF
    'László began to go in.'
- (114) a. László meg-próbál-t be menni. László PERF-try-PAST.3SG.INDEF in go-INF

b. \*László be meg-próbál-t menni.
 László in PERF-try-PAST.3SG.INDEF go-INF
 'László tried to go in.'

However, the failure of verbal prefix climbing in (113) and (114) cannot be taken as evidence that elkezd 'begin' and  $megpr\acute{o}b\acute{a}l$  'try' are not restructuring predicates, as the presence of verbal prefixes on the matrix verbs blocks the verbal prefix of the embedded verb from 'climbing' into the matrix clause. As such, further evidence is required to establish the restructuring status of elkezd 'begin' and  $meqpr\acute{o}b\acute{a}l$  'try'.

Fortunately, there is additional test that can be used to ascertain the presence of restructuring in Hungarian. Grano (2015) notes that restructuring and non-restructuring predicates differ with respect to finite complementation. Non-restructuring predicates can take CP complements (115), while restructuring predicates cannot (116). (The examples in (115) and (116) are based off data from Grano 2015: 17) This contrast follows from the assumption that restructuring predicates take smaller vP-sized complements coupled with the assumption of subcategorizational uniformity: when they take clausal complements, restructuring predicates always take vP complements.

- (115) a. John claimed [that he solved the problem].
  - b. John hated [that he solved the problem].
  - c. John promised [that he solved the problem].
- (116) a. \*John began [that he solved/would solve the problem].
  - b. \*John tried [that he solved/would solve the problem].

With respect to finite complementation, (el)kezd 'start' and (meg)proábaál 'try' pattern with restructuring verbs. As illustrated in (117), both predicates are ungrammatical with CP complements.

- (117) a. \*Béla (el-)kezd-te [hogy meg-nyerte (volna) a Béla (PERF-)begin-3sg.Def.PAST that (PERF-)win-3sg.Def.PAST (would) the verseny-t]. (Hungarian) race-ACC
  - 'Béla began that he won/would win the race.'
  - b. \*Béla (meg-)próbál-ta [hogy meg-nyerte (volna) a Béla (PERF-)try-3sg.def.past that (PERF-)win-3sg.def.past (would) the verseny-t].

    race-ACC

'Béla tried that he won/would win the race.'

Note that presence or absence of the verbal prefix has no effect: the variants with verbal prefixes likewise prohibit CP complements. This indicates that irrespective of the verbal prefix (el)kezd 'start' and (meg)proábaál 'try' are restructuring predicates.

In this section, I argued that the examples that Horvath and Siloni (2011)'s take as instances of raising and control predicates are actually instances of restructuring predicates. We must therefore re-frame the discussion: why is it that Japanese morphological causatives can embed restructuring verbs while their Hungarian counterparts cannot. The following section will provide and explanation for this contrast.

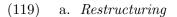
#### 4.3 Restructuring and Non-restructuring Predicates

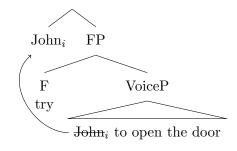
I will assume an analysis of restructuring predicates in line with Cinque (2004; 2006) and Grano (2015) (but c.f. Wurmbrand 2001; 2004) whereby restructuring predicates obligatorily realize functional heads in the inflectional layer of the clause. The approach presupposes a universal hierarchy of clausal functional projections. Famously, Cinque (1999) argues on the basis of the fixed ordering of adverbs that the inflectional layer of the clause contains semantically finegrained functional projections whose ordering is universally fixed. An incomplete list of this ordering is illustrated in (118).

$$(118) \quad \text{MoodP}_{speechact} > \text{MoodP}_{evaluative} > \text{MoodP}_{evidential} \quad \text{ModP}_{epistemic} > \text{TP(Past)} > \\ \text{TP(Future)} > \text{MoodP}_{irrealis} > \text{ModP}_{alethic} > \text{AspP}_{habitual} > \text{AspP}_{repetitive(I)} > \\ \text{AspP}_{frequentive(I)} > \text{ModP}_{volitional} > \text{AspP}_{celerative(I)} > \text{TP(Anterior)} > \\ \text{AspP}_{terminative} > \text{AspP}_{continuative} > \text{AspP}_{retrospective} > \text{AspP}_{proximative} > \\ \text{AspP}_{durative} > \text{AspP}_{generic/progressive} > \text{AspP}_{prospective} > \text{ModP}_{obligation} > \\ \text{ModP}_{permission/ability} > \text{AspP}_{conative} > \text{AspP}_{completive} > \text{VoiceP} > \text{AspP}_{celerative(II)} \\ > \text{AspP}_{repetitive(II)} > \text{AspP}_{frequentive(II)} \qquad \qquad \text{(Cinque 2006: 12)}$$

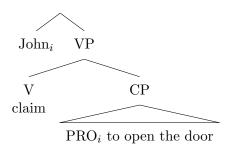
Utilizing this universal structure, Cinque (2004; 2006) and Grano (2015) argue that restructuring verbs instantiate these inflectional-layer functional heads. Therefore the transparency effects exhibited by restructuring constructions are a consequence of the fact that the restructuring predicate, rather than being a full-fledged verb taking a clausal complement, is a functional head sitting in the extended projection of its 'embedded' verb, which is, in actuality, the main

verb in the structure, as in (119a). Restructuring verbs do not introduce arguments of their own, instead, they 'share' the arguments of the main verb. More importantly, they instantiate raising structures in the sense that the 'subject' originates in the complement of the restructuring predicate. In contrast, non-restructuring predicates like *claim*, *promise*, *hate* are lexical verbs that introduce their own base-generated subject and take a full clausal complement with a PRO subject, i.e. they correspond to the standard control structure. This structure is shown in (119b).





#### b. Non-restructuring

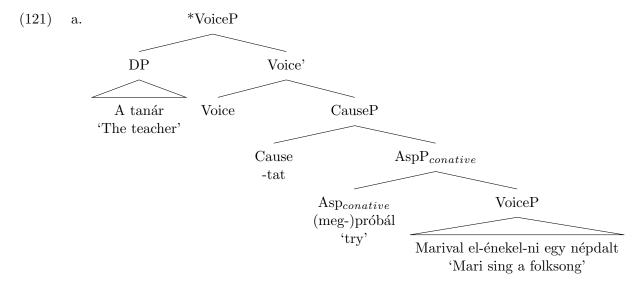


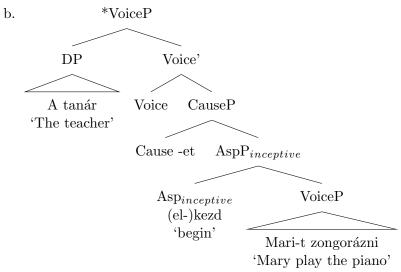
With this analysis in place, accounting for Horvath and Siloni (2010; 2011)'s Hungarian examples is straightforward. The restructuring verbs  $(meg)pr\acute{o}b\acute{a}l$  'try' and (el)kezd 'begin' in (120) and (120b) fail to causativize because they correspond to a structure that is larger than a vP, and are, therefore, not acceptable complements for the Hungarian Verb-selecting causative.

- (120) a. \*A tanár (meg-)próbál-tat-ott Mari-val [PRO el-énekel-ni egy the teacher.NOM PERF-try-CAUS-PAST.3SG Mari-INST away-sing-INF a népdal-t]. (Hungarian) folksong-ACC
  - 'the teacher made Mari try to sing a folksong.'
  - b. \*A tanár (el-)kezd-et-te Mari-t [PRO The teacher.NOM PERF-begin-CAUS-PAST.DEF.DO Mari-ACC zongorázni].
    play.the.piano.INF

'The teacher made Mari begin to play the piano.' (Horvath and Siloni 2011: 670)

According to Grano (2015), try is located in the head of  $Asp_{conative}$  and begin in the head of  $Asp_{inceptive}$ . Both of these functional projections are located above VoiceP, as such the they are too large to the embedded under the Verb-selecting causative. This selectional violation is illustrated by the trees in (121).





However, the fact that Japanese morphological causatives can embedded restructuring verbs, as in (122), requires further explanation. Notably, mi 'try' is instantiated in the head of  $Asp_{conative}$  which is located above VoiceP in Cinque (1999)'s functional hierarchy. Since, as I have argued, Japanese morphological causatives are Voice-selecting, it is not expected that the causative morpheme should be able to embed inflectional projections that are above VoiceP. Therefore the grammatically of (122) is unexpected.

In order to account for this, I argue that Voice-selecting is a misnomer and Japanese morphological causatives may embedded certain (lower) functional projections. There is evidence to support this assumption. First, Japanese causative constructions allow certain adverbs to modify both the causative and embedded event. We saw this previously with the agent-oriented ad-

verbials. In (123a), the agent-oriented adverbs tyuuchonaku 'without.hesitation' and yorokonde 'with.pleasure' can refer to the causer  $Sono\ bengosi$  'the lawyer' or the causee John. Notably, adverbs that are associated with  $Asp_{conative}$ , i.e. adverbs that specify endeavor or effort, such as nannaku 'effortlessly', can modify either the embedded event or the entire causative event (123b).

- a. Sono bengosi-wa tyuuchonaku/yorokonde John-ni keiyakusyo-ni sain the lawyer-TOP without.hesitation/with.pleasure John-DAT contract-DAT sign s-ase-ta. (Japanese) do-CAUS-PAST

  'The lawyer made John sign the contract without hesitation/with pleasure.'

  (ambiguous: the lawyer or John were without hesitation/with pleasure)

  (Horvath and Siloni 2011: 669)
  - Taro-wa Hanako-o nannaku aruk-ase-ta.
     Taro-TOP Hanako-ACC effortlessly walk-CAUS-PAST
     'Taro made Hanako walk effortlessly
     (ambiguous: the making or walking was effortless)

Standardly, the ambiguity we observe in bi-eventive examples like (123a) and (123b), is analyzed a matter of attachment; each interpretation is associated with a different attachment site for the adverbial projection. The interpretation where the adverb modifies the higher event, in this case, the causative morpheme, corresponds to a structure where the adverb is located above the causative. In contrast, the interpretation where the adverb modifies the embedded event corresponds to a low attachment stucture, where the adverb is located under the causative functional projection. Under Cinque (1999)'s framework, adverbs are generated in the specifier of their semantically associated functional category. For instance, agent-oriented adverbials like tyuuchonaku 'without.hesitation' and yorokonde 'with.pleasure' are located in the specifier of  $ModP_{volitional}$  and nannaku 'effortlessly' in the specifier of  $Asp_{conative}$ . Crucially, these functional projections occur in a fixed order,  $ModP_{volitional}$  is higher than  $Asp_{conative}$ , and both of these projections are higher than VoiceP, but lower than TP. If one assumes Cinque (1999)'s functional hierarchy, the fact that Japanese morphological causative allow these adverbs to attach under the causative projection indicates that Japanese causatives can embed functional projections up to  $Mod_{volitional}$ .

Importantly, Japanese morphological causatives does not take TP-sized complements; this accounts for the fact that the causative construction acts as a single domain for tense and nominative case assignment. If this analysis is on the right track, it is expected that adverbs as-

sociated with functional projections above TP should not be able to modify the embedded event. Fortunately, the example in (124) shows that is this the case. In (124) the adverb akirakani 'clearly' is acting as an evidential adverb, specifying the evidential status of the causative construction. Therefore, akirakani 'clearly' would be licensed in the specifier of  $MoodP_{evidential}$ . Crucially, the example in (124) is unambiguous, akirakani 'clearly' can only be interpreted as modifying the entire causation event.

(124) Taro-wa Hanako-o akirakani aruk-ase-ta. (Japanese)
Taro-TOP Hanako-ACC clearly walk-CAUS-PAST
unambiguous: 'Taro clearly made Hanako walk.'

Therefore, I conclude that Japanese morphological causatives can embed functional projections up to Mod<sub>volitional</sub>, but, in line with Harley (2008), do not take TP-sized complements.

Turning now to the issue of non-restructuring/control predicates. Since under this proposal control predicates are analysed an lexical verbs, I predict that control predicates should be compatible with the morphological causatives. Contra to the claims of Horvath and Siloni (2010; 2011), the examples in (125) show this prediction is borne out; the control verbs állít claim (125a), utál hate (125b), and ígér promise (125c) permit causativization.

- (125) a. állít-at-tam el-olvas-ni volna a könyv-et Bélá-val. (Hungarian) claim PV-read-INF have the book-ACC Bélá-INST

  'I made Béla claim to (have) read the book.'
  - b. Meg-utál-tat-tam énekel-ni Bélá-val.
     PV-hate-CAUS.PAST.1SG sing-INF Bélá-INST
     'I made Béla hate to sing.'
  - c. Meg-ígér-et-tem énekel-ni Bélá-val. PV-promise-CAUS.PAST.1SG sing-INF Bélá-INST 'I made Béla promise to sing.'

Similarly, Japanese morphological causatives can embed control verbs. According Wurmbrand's (2001: 342) survey, in Japanese, yakusoku 'promise' instantiates a non-restructuring control predicate. The example in (126) demonstrates that yakusoku 'promise' permits causativization by the causative morpheme.

(126) Taro-wa Hanako-ni [kuruma-o kau to] yakusoku-sase-ta. (Japanese)
Taro-TOP Hanako-DAT car-ACC buy Comp promise-CAUS-PAST
'Taro made Hanako promise to buy a car.'

In sum, this section has provided an account of the contrast between Japanese and Hungarian morphological causatives with respect to the ability to embed restructuring predicates. Importantly, the locus of this variation has to do with the size of the complements taken by the Japanese and Hungarian causatives. That is, this contrast falls out from my proposal that Japanese causatives are able to take the larger restructuring complements, while Hungarian causatives are Verb-selecting, and therefore fail to embed these larger structures. The next section will discuss on the causativization of non-restructuring raising predicates.

#### 4.4 Raising Predicates

Contrary to the claims made in Horvath and Siloni (2010; 2011), both Japanese and Hungarian causatives fail to causativize genuine raising verbs. In Hungarian, tűnik 'appear' and látszik 'seem' pattern as prototypical raising predicates (Kiss et al. 2021). The examples in (127a) and (127b) show that tűnik 'appear' and látszik 'seem' can embed weather predicates.

- (127) a. tűn-t havaz-ni. (Hungarian) seem-3SG.INDEF.PAST snow-INF
  'It appeared to snow.'
  - b. látsz-ott havaz-ni. appear-3sg.indef.past snow-inf 'It seemed to snow.'

Additionally, t "appear" and l átszik 'seem' are non-restructuring. Both raising predicates block movement of a verbal prefix into the matrix clause, as shown in (128), and permit CP complements, as in (129).

- (128) a. \*László be tűn-t men-ni. (Hungarian) László in appear-PAST.3SG.INDEF go-INF
  - b. \*László be látsz-ott men-ni.
    László in seem-PAST.3SG.INDEF go-INF
    'László began to go in.'
- (129) Ugy tűnik/látsik [hogy Béla el-olvasta a könyve-t]. it appear/seem-PRES.3SG.INDEF that Béla PERF-read-PST.3SG.DEF the book-ACC 'It appears/seems that Béla read the book.'

Notably, tűnik 'appear' and látszik 'seem' resist causatiziation, as shown in (130a) and (130b), respectively.

- (130) a. \*Béla tűn-et-te nyer-ni a verseny-t. (Hungarian)
  Béla appear-CAUS-3SG.DEF.PAST win-INF the race-ACC.

  'Béla appeared to win the race.'
  - b. \*Béla látsz-at-ta nyer-ni a verseny-t.
    Béla seem-CAUS-3SG.DEF.PAST win-INF the race-ACC.
    'Béla seemed to win the race.'

It is the same situation in Japanese. According to Wurmbrand (2001), the Japanese verb *mie* 'appear' is a non-restructuring raising verb. In parallel with Hungarian, *mie* 'appear' does not permit causativization; the example in (131b) is ungrammatical.

- (131) a. Taro-ga<sub>i</sub> [ $t_i$  kat-ta] mie-ta. (Japanese) Taro-NOM win-PAST appear-PAST 'Taro appeared to have won the race.'
  - b. \*Taro-wa Hanako-ga [kat-ta yooni] mie-sase-ta.
     Taro-TOP Hanako-NOM win-past MOD appear-CAUS-PAST
     'Taro made Hanako appear to have won.'

Given that there is no contrast between Hungarian and Japanese morphological causatives with respect to the ability to causativize raising predicates, Horvath and Siloni (2010; 2011) argument in favour of lexical account of Hungarian causatives is fundamentally undermined.

To provide an account for the failure of raising verbs to causativize, I will adopt an explanation outlined in Bartos (2011). Bartos (2011), utilizing an explanation from Komlósy (2000), argues that the failure of raising verbs to causativize is the result of a semantic constraint. He argues that raising predicates like *seem* and *appear* are static experiencer predicates, that is, their surface subject is some understood experiencer from whose prospective the state of affairs is evaluated. As such, the surface subject of a raising verb like  $t\tilde{u}nik$  'appear' and  $l\tilde{u}tszik$  'seem' has no role in bringing about the state of affairs denoted by embedded clause. Therefore the event donated by  $t\tilde{u}nik$  'appear' and  $l\tilde{u}tszik$  'seem' cannot be factitively caused, as the to-be causee has no ability to cause the given state of affairs to 'seem'/'appear' to hold.

If this explanation is on the right track and the impossibility of causativizing the *seem/appear* class is semantic in nature, then one would expect it to be absent from any language. However, English has an apparent counterexample, shown in (132).

(132) We made/caused it (to) seem/appear that we had won the race.

Nonetheless, the example in (132) carries little weight, as Bartos (2011) notes that (132) is a special use of seem/appear meaning 'to falsely appear'. Crucially, this interpretation implies

some degree of intentionally on the subject's part which is not consistent with a standard raising analysis of seem/appear. Notably, in Hungarian the falsely seem/falsely appear variants permit causation. In the example in (133), the aspectually marked variant of tűnik 'appear', eltűnik 'appear/pose (falsely) as' has a causative form.

(133) Laci-t igyekez-t-ünk okos-nak fel-tün-tet-ni. (Hungarian)
Laci-ACC strive-PAST-1PL clever-DAT up-appear-CAUS-INF

'we stove to make Laci appear clever.' (Bartos 2011: 18)

Consequently, it appears that the failure of Hungarian and Japanese morphological causatives to causativize raising verbs is due to independent properties regarding the semantics of causation. Irrespective of how one chooses to account for this failure, the fact that Hungarian and Japanese morphological causatives do not exhibit any contrast with respect to the ability to embed raising verbs significantly weakens Horvath and Siloni (2010; 2011)'s claim that Hungarian morphological causatives are derived in the lexicon

#### 4.5 Conclusion

In this chapter, I demonstrated that the data utilized by Horvath and Siloni (2010; 2011) to illustrate differences between Hungarian and Japanese causatives actually pertain to restructuring predicates, not raising and control predicates. I argued that, by adopting an analysis of restructuring in accordance with Cinque (2004; 2006) and Grano (2015), the contrasts between Hungarian and Japanese causatives with respect to the ability to causativize restructuring verbs, fall out from my proposal that Hungarian causatives are Verb-selecting, while Japanese causatives are Voice-selecting. Specifically, Japanese causatives take larger complements and are therefore able to embed restructuring predicates that instantiate functional projections in Cinque 1999's hierarchy. Hungarian causatives, in contrast, are Verb-selecting and therefore fail to embed these larger restructuring structures. In addition, I established that, contrary to the claims of Horvath and Siloni (2010; 2011), Hungarian and Japanese causatives exhibit no contrast with respect to the ability to embed raising and control verbs. Both Hungarian and Japanese causatives are able to causativize control verbs, and this is expected under my proposal, as control predicates instantiate standard lexical verbs. Similarly, both Hungarian and Japanese causatives fail to causativize raising verbs. I argued that this failure is due to independent semantic constraints, specifically, it falls under the wider generalization that static

experiencer predicates do not form causatives.

## Chapter 5

### Conclusion

A broader theoretical issue explored in this dissertation concerns the debate between an all-syntactic approach to morphological phenomena and a Lexicalist approach, specifically the weak lexicalism of Reinhart (2016) and Horvath and Siloni (2010; 2011), which assumes a split model with both lexical and syntactic derivations. In their model, the lexicon includes a computational component that operates using valency changing operations to alter a lexical entry's  $\theta$ -grid. These modified lexical entries are then inserted into the syntax as primitives. According to Horvath and Siloni (2010; 2011), the fact that Japanese morphological are bi-clausal and can embed raising verbs and control verbs, while their Hungarian counterparts pattern as monoclausal (with respect to binding, negative scope, VP-ellipsis, and agent-oriented modification) and fail to embed raising verbs and control verbs is evidence that Japanese causatives are built in the syntax, where hierarchic structure is available, while Hungarian causatives are built in the lexicon, where it is not.

In this dissertation, I presented a syntactic account of Hungarian morphological causatives in opposition to the lexical account proposed by Horvath and Siloni (2010; 2011). The two devices that this account implements are (i) the independently motivated assumption that a basic verb phrase consists of three projections of Voice, v, and V, and (ii) that selectional information is encoded in the functional Cause head. Specifically, I propose that Hungarian morphological causatives embed vP, but not a VoiceP. The primary motivation for this was to implement Pylkkänen (2008)'s proposal to account for the monoclausal behavior of Hungarian causatives. I showed that the contrasts between Hungarian and Japanese, which Horvath and Siloni (2010; 2011) claimed necessitated positing a lexical causativization operation, can be readily accounted for within a purely syntactic framework. Assuming that lexical and syntactic approaches possess

the same empirical coverage, the syntactic camp has the advantage of simplicity. It is already accepted that there is a computational component that composes words into phrases (i.e. the syntax). Therefore it is preferred to derive morphological causatives there, rather than positing a separate computational component exclusively entirely. Despite this inherent advantage, I demonstrated that the syntactic model can also accommodate empirical evidence that Horvath and Siloni (2010; 2011)'s lexical causativization fails to address: (i) the fact that low adverbials to modify can modify the caused event; and (ii) the requirement for the instrumental causee to be animate.

In addition, my discussion of Hungarian causatives adds to the literature on micro-variation within the class of Verb-selecting causatives. It is well-established that there is variation in the restrictions that the verb-selecting causative places on the embedded vP. As outlined in Jung (2014), the Hiaki Verb-selecting causative suffix -tevo prohibits the external argument of the embedded vP from being expressed syntactically, instead the open argument position is existentially bound. The Turkish causative, on the other hand, allows the external argument of the embedded verb to be unexpressed, in which case it receives an existential interpretation, or expressed as an adjunct which must realize an animate participant (Key 2013). According to Myler and Mali (2021), causatives in IsiXhosa exhibit even more variety, the embedded external argument may be unexpressed and existentially bound, it may also be realized as an adjunct or as an argument within the embedded vP.

Hungarian morphological causatives fit comfortably within this typology, like IsiXhosa causatives, as the causee in Hungarian causatives can be unexpressed, or expressed as adjunct or argument. I argued that the instrumental causee is merged as an adjunct adjoined to the embedded vP, while the accusative in introduced as an argument in the specifier of vP. Additionally, the Hungarian adjunct causee patterns like the adjunct causee in the Turkish in the sense that both exhibit an animacy requirement. However, I provided a different account of how this animacy requirement is imposed. Key (2013) imposes the animacy requirement via Reinhart 2016's feature [+m] on the Cause head. I, on the other hand, followed Legate (2014) in analyzing the animacy requirement on adjunct causees as the result of a restrictive [+animate] feature located on the v head.

Notably, the interpretational distinctions between accusative- and instrumental-causee constructions pose a question for future work. Commonly, the typological literature (Comrie 1989; Dixon 2000, among others) has attempted to account for manipulative/directive (usually termed

direct/indirect) meaning distinctions through a theory of relative 'compactness'. It is argued that manipulative/direct meanings are associated with smaller syntactic structures, while directive/indirect interpretations are associated with larger structures. For example, if a language forms causatives with both morphological and periphrastic constructions, it is expected that the morphological causative would be associated with the direct interpretation while the periphrastic would be associated with indirect meaning. However, Hungarian morphological causatives, along with other causatives where interpretation distinctions are encoded via case-marking such as Japanese and Bolivian Quechua, pose a problem for the compactness theory, since, in these cases, the interpretation distinction is not correlated with the size of the causative construction. A possible avenue for future research would include a cross-linguistic analysis of what meanings morphological causatives encode via case-marking. For instance, while Hungarian causatives and Bolivian Quechua (Cole 1983: 118) exhibit a manipulative/directive meaning distinction, Japanese causatives display a contrast with respect to volition i.e. a willing/unwilling distinction (Shibatani 1973: 33), and IsiXhosa causatives encode socaitive/causative meaning distinction (Myler and Mali 2021).

Moving beyond causatives, this dissertation continues the work of Pylkkänen (2008) and many others, in arguing that the verbal domain contains (at least) two functional projections: VoiceP and vP. In order to account for the contrast between Japanese and Hungarian causatives, this more finely-articulated conception of the verbal domain is required.

# **Bibliography**

- Arka, I. W., et al. (2008). Voice and the syntax of= a/-a verbs in balinese. In *Voice and grammatical relations in austronesian languages*. CSLI Publications.
- Baker, M. (1985). The mirror principle and morphosyntactic explanation. *Linguistic inquiry*, 16(3), 373–415.
- Bárány, A. (2015). Differential object marking in hungarian and the morphosyntax of case and agreement. *PhD diss.*, *University of Cambridge*.
- Bartos, H. (2009). The syntax of hungarian-va adverbial participles: A single affix with variable merge-in locations. Adverbs and adverbial adjuncts at the interfaces, 75–102.
- Bartos, H. (2011). Hungarian external causatives: Mono-clausal but bi-eventive. Approaches to Hungarian: Papers from the 2009 Debrecen Conference, 12, 1–38.
- Bayer, J., & Kornfilt, J. (1990). Restructuring effects in german. Edinburgh Working Papers in Cognitive Science, Vi: Parametric variation in Germanic and Romance.
- Béjar, S., & Rezac, M. (2009). Cyclic agree. Linguistic Inquiry, 40(1), 35–73.
- Bresnan, J., & Mchombo, S. A. (1995). The lexical integrity principle: Evidence from bantu.

  Natural Language & Linguistic Theory, 13(2), 181–254.
- Bruening, B. (2013). By phrases in passives and nominals. Syntax, 16(1), 1–41.
- Burzio, L. (1986). *Italian syntax: A government-binding approach* (Vol. 1). Springer Science & Business Media.
- Burzio, L. (2000). Anatomy of a generalization. Arguments and case: Explaining Burzio's generalization, 195–240.
- Cardinaletti, A., & Shlonsky, U. (2004). Clitic positions and restructuring in italian. *Linguistic Inquiry*, 35(4), 519–557.
- Chomsky, N. (1965). Aspects of the theory of syntax. MIT press.
- Chomsky, N. (2001). Derivation by phase. In *Ken hale: A life in language* (pp. 1–52). MIT Press.

- Chomsky, N. (2004). Beyond explanatory adequacy. Structures and beyond, 104–131.
- Chomsky, N. (2008). On phases. Current Studies in Linguistics Series, 45, 133.
- Chomsky, N. (2014). The minimalist program. MIT press.
- Chomsky, N., Jacobs, R. A., & Rosenbaum, P. S. (1970). Remarks on nominalization. 1970, 184, 221.
- Chung, S., & Ladusaw, W. A. (2003). Restriction and saturation. MIT press.
- Cinque, G. (1999). Adverbs and functional heads: A cross-linguistic perspective. Oxford University Press.
- Cinque, G. (2004). Restructuring and functional structure. Structures and beyond: The cartography of syntactic structures, 3, 132–191.
- Cinque, G. (2006). Restructuring and functional heads: The cartography of syntactic structures volume 4 (Vol. 4). Oxford University Press.
- Cole, P. (1983). The grammatical role of the causee in universal grammar. *International Journal* of American Linguistics, 49(2), 115–133.
- Comrie, B. (1989). Language universals and linguistic typology: Syntax and morphology. University of Chicago press.
- Culicover, P. W., & Jackendoff, R. (2005). Simpler syntax. OUP Oxford.
- Den Dikken, M. (2004). Agreement and 'clause union'. Verb clusters: A study of Hungarian, German and Dutch, 445–498.
- Dezsy, L. (1988). Passiveness in hungarian: With reference to russian passive. *Passive and voice*, 16, 291.
- Di Sciullo, A. M., & Williams, E. (1987). On the definition of word. MIT Press.
- Dixon, R. M. (2000). A typology of causatives: Form, syntax and meaning. *Changing Valency:*Case studies in transitivity, 30, 83.
- Dubinsky, S. (1994). Predicate union and the syntax of japanese causatives 1. Journal of linguistics, 30(1), 43-79.
- Fillmore, C. J. (1967). The case for case.
- Flambard, G. (2018). English vp anaphors: Do it, do this, do that [Doctoral dissertation, Université Sorbonne Paris Cité].
- Fukaya, T. (2019). Japanese. In J. Van Craenenbroeck & T. Temmerman (Eds.), *The oxford handbook of ellipsis* (pp. 865–899). Oxford Handbooks.
- Grano, T. (2015). Control and restructuring (Vol. 56). Oxford University Press.

- Grimshaw, J. (1979). Complement selection and the lexicon. Linguistic inquiry, 10(2), 279–326.
- Haegeman, L. (1986). The double object construction in west flemish.
- Haider, H. (2000). The license to license. Arguments and Case. Explaining Burzio's Generalization, 31–54.
- Hale, K., & Keyser, S. J. (1993). On argument structure and the lexical expression of syntactic relations. *An annotated syntax reader*, 312–327.
- Halle, M., Marantz, A., Hale, K., & Keyser, S. J. (1993). Distributed morphology and the pieces of inflection. 1993, 111–176.
- Hara, M. (1999). Causatives in japanese. Unpublished ms., Truman State University, Kirksville, MO.
- Harley, H. (2008). On the causative construction. In *Handbook of japanese linguistics* (pp. 20–53). Oxford University Press.
- Harley, H. (2013). External arguments and the mirror principle: On the distinctness of voice and v. *Lingua*, 125, 34–57.
- Harley, H. (2017). The "bundling" hypothesis and the disparate functions of little v. *The Verbal Domain*, 3, 3–28.
- Hetzron, R. (1976). On the hungarian causative verb and its syntax. Brill.
- Hinds, J. V. (1973). On the status of the vp node in japanese. Language Research, 9(2), 44–57.
- Horvath, J., & Siloni, T. (2010). Lexicon versus syntax: Evidence from morphological causatives.

  \*Lexical Semantics, Syntax, and Event Structure, 153–176.
- Horvath, J., & Siloni, T. (2011). Causatives across components. *Natural Language & Linguistic Theory*, 29(3), 657–704.
- Houser, M. J. (2010). The syntax and semantics of do so anaphora [Doctoral dissertation, UC Berkeley].
- Huddleston, R., & Pullum, G. (2005). The cambridge grammar of the english language. Zeitschrift für Anglistik und Amerikanistik, 53(2), 193–194.
- Jackendoff, R. S. (1972). Semantic interpretation in generative grammar.
- Jung, H. K. (2014). On the syntax of applicative and causative constructions [Doctoral dissertation]. The University of Arizona.
- Kálmán, L., Prószéky, G., Nádasdy, Á., & Kálmán, C. G. (1986). Hocus, focus, and verb types in hungarian infinitive constructions. *Topic, focus and configurationality*, 129–142.
- Kayne, R. S. (1989). Null subjects and clitic climbing. The null subject parameter, 239–261.

- Key, G. (2013). The morphosyntax of the turkish causative construction [Doctoral dissertation, The University of Arizona].
- Kiss, K., Kiss, P., & Hegedus, V. (2021). Syntax of hungarian: Postpositions and postpositional phrases. Amsterdam University Press.
- Komlósy, A. (2000). A műveltetés [causativization]. Strukturális magyar nyelvtan, 3, 215–292.
- Kratzer, A. (1996). Severing the external argument from its verb. *Phrase structure and the lexicon*, 109–137.
- Krishnamurti, B., & Gwynn, J. (1985). A grammar of modern telugu. Delhi: Oxford University Press.
- Kuno, S. (1975). The structure of the japanese language. Foundations of Language, 13(3).
- Kuno, S. (1978). Japanese: A characteristic ov language. In W. P. Lehmann (Ed.), Syntactic typology (pp. 57–138). University of Texas Press.
- Kuroda, S.-Y. (1965). Generative grammatical studies in the japanese language. [Doctoral dissertation, Massachusetts Institute of Technology].
- Kuroda, S.-Y. (2003). Complex predicates and predicate raising. Lingua, 113, 447–480. https://doi.org/10.1016/S0024-3841(02)00082-7
- Laka, I. (2000). Thetablind case: Burzio's generalization and its image in the mirror. Arguments and Case: Explaining Burzio's Generalization, 34, 103.
- Landau, I. (2010). The explicit syntax of implicit arguments. Linguistic Inquiry, 41(3), 357–388.
- Larson, R. K. (1988). On the double object construction. Linguistic inquiry, 19(3), 335–391.
- Le Roux, C. (1988). On the interface of morphology and syntax: Evidence from verb-particle combinations in afrikaans.
- Lee-Schoenfeld, V. (2007). Beyond coherence: The syntax of opacity in german (Vol. 114). John Benjamins Publishing.
- Legate, J. A. (2014). Voice and v. Lessons from achieve (Vol. 69). MIT Press.
- Lyutikova, E., & Tatevosov, S. (2018). Event (de) composition and fake causativization. *Proceedings of WAFL*, 10, 34–56.
- Mahajan, A. (2000). Oblique subjects and burzio's generalization. Arguments and Case: explaining Burzio's generalization, ed. Eric Reuland, 79–102.
- Marantz, A. (1981). On the nature of grammatical relations [Doctoral dissertation, Massachusetts Institute of Technology].

- Marantz, A. (1997). No escape from syntax: Don't try morphological analysis in the privacy of your own lexicon. *University of Pennsylvania working papers in linguistics*, 4(2), 14.
- Massam, D. (2009). The structure of (un)ergatives.
- Michiels, A. (1978). A note on the relation between agent and stativity. *Neophilologus*, 62(2), 172.
- Miller, P. (2011). The choice between verbal anaphors in discourse. Anaphora Processing and Applications: 8th Discourse Anaphora and Anaphor Resolution Colloquium, DAARC 2011, Faro, Portugal, October 6-7, 2011. Revised Selected Papers 8, 82–95.
- Miller, P. (2013). Usage preferences: The case of the english verbal anaphor do so. *The 20th International Conference on Head- Driven Phrase Structure Grammar (HPSG 2013)*, 121–139.
- Miyagawa, S. (1984). Blocking and japanese causatives. Lingua, 64 (2-3), 177–207.
- Miyagawa, S. (1998). (s) ase as an elsewhere causative and the syntactic nature of words. *Journal* of Japanese linguistics, 16(1), 67–110.
- Murasugi, K. (2005). Sakuzyo [deletion]. Sobukaku to sakuzyo [Binding and deletion].
- Myler, N., & Mali, Z. O. (2021). Two places for causees in productive isixhosa morphological causatives. *Syntax*, 24(1), 1–43. https://doi.org/https://doi.org/10.1111/synt.12208
- Napoli, D. J. (1981). Semantic interpretation vs. lexical governance: Clitic climbing in italian.

  Language, 841–887.
- Nash, L. (2018). Nonunitary structure of unergative verbs: From monovalent statives to bivalent reflexive causatives in georgian. *Ms. Université Paris*, 8.
- Nash, L. (2020). Causees are not agents. Perspectives on Causation: Selected Papers from the Jerusalem 2017 Workshop, 349–394.
- Nemesi, A. L. (2003). The interaction between linguistic levels in the case-marking alternation of hungarian causatives.
- Oshima, S. (1979). Conditions on rules: Anaphora in japanese. Explorations in linguistics: Papers in honor of Kazuko Inoue, 423–448.
- Pesetsky, D. (1991). Zero syntax: Vol. 2: Infinitives. MIT.
- Polinsky, M. (2016). Deconstructing ergativity: Two types of ergative languages and their features. Oxford University Press.
- Poole, E. (2016). Deconstructing subjecthood. Ms. University of Massachusetts Amherst.
- Preminger, O. (2014). Agreement and its failures (Vol. 68). MIT press.

- Pylkkänen, L. (2002). *Introducing arguments* [Doctoral dissertation, University of Pittsburgh].
- Pylkkänen, L. (2008). Introducing arguments (Vol. 49). MIT Press.
- Ramchand, G. (2008). Verb meaning and the lexicon: A first-phase syntax (Vol. 116). Cambridge University Press Cambridge.
- Reinhart, T. (2016). The theta system: Syntactic realization of verbal concepts. *Concepts, syntax, and their interface: The theta system*, 1–112.
- Reinhart, T., & Reuland, E. (1993). Reflexivity. Linguistic Inquiry, 24(4), 657–720.
- Reuland, E. (2000). Explaining burzio's generalization'. Arguments and Case, Benjamins, Amsterdam, 1–9.
- Rizzi, L. (1978). A restructuring rule in italian syntax.
- Rosenbaum, P. S. (1965). The grammar of english predicate complement constructions. [Doctoral dissertation, Massachusetts Institute of Technology].
- Schmid, T., Bader, M., & Bayer, J. (2005). Coherence-an experimental approach. *Linguistic* evidence, 435–456.
- Schoenfeld, R. A. (2008). The role and manifestation of the causative '-chi' in cuzco quechua.
- Schütze, C. T. (1997). Infl in child and adult language: Agreement, case and licensing [Doctoral dissertation, Massachusetts Institute of Technology].
- Shibatani, M. (1973). Semantics of japanese causativization. Foundations of language, 327–373.
- Sigursson, H. Á. (1989). Verbal syntax and case in icelandic: In a comparative gb approach.

  Citeseer.
- Song, J. J. (2014). Linguistic typology: Morphology and syntax. Routledge.
- Starke, M. (2009). Nanosyntax: A short primer to a new approach to language.  $Nordlyd,\ 36(1),\ 1-6.$
- Stowell, T. A. (1981). Origins of phrase structure [Doctoral dissertation, Massachusetts Institute of Technology].
- Terada, M. (1990). Incorporation and argument structure in japanese. University of Massachusetts Amherst.
- Tollan, R. (2018). Unergatives are different: Two types of transitivity in samoan. Glossa: a journal of general linguistics, 3(1).
- Von Stechow, A. (1990). Status government and coherence in german. *Grewendorf und Sterne*feld (1990), 143–198.

- Woolford, E. (2003). Burzio's generalization, markedness, and constraints on nominative objects. New perspectives on case theory, 301-329.
- Wurmbrand, S. (2001). Infinitives: Restructuring and clause structure (Vol. 55). Walter de Gruyter.
- Wurmbrand, S. (2004). Two types of restructuring—lexical vs. functional. *Lingua*, 114(8), 991–1014.