IMPULSATIVES
THE SYNTAX AND SEMANTICS OF INVOLUNTARY DESIRE

by

MaryEllen Cathcart

A dissertation submitted to the Faculty of the University of Delaware in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Linguistics

Spring 2011

IMPULSATIVES
THE SYNTAX AND SEMANTICS OF INVOLUNTARY DESIRE

by

MaryEllen Cathcart

Approved: _____

Frederic Adams Ph.D.
Chairperson of the Department of Linguistics and Cognitive Science

Approved: _____

George H. Watson Ph.D.
Dean of College of Arts and Sciences

Approved: _____

Charles G. Riordan, Ph.D.
Vice Provost for Graduate and Professional Education

I certify that I have read this dissertation and that in my opinion it meets the academic and professional standard required by the University as an dissertation for the degree of Doctor of Philosophy.

Signed: _____

Benjamin Bruening, Ph.D.
Professor in charge of dissertation

I certify that I have read this dissertation and that in my opinion it meets the academic and professional standard required by the University as an dissertation for the degree of Doctor of Philosophy.

Signed: _____

Satoshi Tomioka, Ph.D.
Member of dissertation committee

I certify that I have read this dissertation and that in my opinion it meets the academic and professional standard required by the University as an dissertation for the degree of Doctor of Philosophy.

Signed: _____

Gabriella Hermon, Ph.D.
Member of dissertation committee

I certify that I have read this dissertation and that in my opinion it meets the academic and professional standard required by the University as an dissertation for the degree of Doctor of Philosophy.

Signed: _____

Peter Cole, Ph.D.
Member of dissertation committee

I certify that I have read this dissertation and that in my opinion it meets the academic and professional standard required by the University as an dissertation for the degree of Doctor of Philosophy.

Signed: _____

Anne Vainikka, Ph.D.
Member of dissertation committee

TABLE OF CONTENTS

ACKNOWLEDGMENTS

I think it goes without saying that completing a dissertation is a monumental experience and that's why before everything else is the acknowledgments. First and foremost, thanks goes to my committee members, who have each played a crucial role. In particular, I would like to thank my advisor Benjamin Bruening, who always held the bar high. He ensured that the the level of quality of my work was the best, that my arguments were solid and that my writing was clear. In addition, he provided a tremendous amount of support. He was always available to answer questions and he was always positive and encouraging. Secondly, I'd like to thank Satoshi Tomioka, Gabriella Hermon and Peter Cole for all the insight and support over the years. And special thanks goes to Anne Vainikka for all her dedication and help on the Finnish chapter.

In linguistics, everything relies on data. Research cannot be done without good data. Therefore, I would like to extend my gratitude to all my informants. As mentioned, Anne Vainikka provided much of the Finnish data. In addition, Hannu Reime was also a great help. For Bulgarian, I would like to thank Slaven Gospodinov and Todor Koev. For Albanian, I would like to thank Eni and Fioralba Cakoni. And for Cusco Quechua, I would like to thank Magda Yabar, Milagros Suaña Cusi and Lucia Limo Llanos. In addition, I'd like to thank John Miller and MariaElena Mendoza for helping me while i was in Cusco, Peru.

My colleagues in the linguistics department also contributed a lot to my linguistic thinking. The members of FYD (Finish your Dissertation) Solveig Bosse, Anne Peng and Nadya Pincus were always there to discuss, debate, explain and decipher any problem that came my way. They helped to solve not only linguistic problems but provided motivation and camaraderie. Special thanks goes to Gina Cook who fundamentally changed my work habits and taught me to problem solve and pay attention to details.

Last but not least, I'd like to thank my husband, Gilberto Carbajal and my family. They have been there by my side throughout these years, through the ups and the downs. Their constant support and love through thick and thin has pushed me through these years.

ABSTRACT

Many languages utilize a desiderative affix to express desire. However, some languages, particularly the Quechua languages, have desiderative affixes that express involuntary desire (Hermon, 1985; Cole, 1985; Jake and Cole, 1978). Non-volitional desideratives differ systematically from volitional desideratives. In addition to semantic differences, desiderative constructions in Quechua have syntactic differences such as oblique case marking and lack of verbal agreement. Therefore, it is necessary that they be clearly differentiated. I propose the term **Impulsative** for the non-volitional type. This dissertation investigates the syntax and semantics of impulsatives cross-linguistically.

Impulsatives in the Quechua languages share properties with other constructions in the literature, such as the Involuntary State Construction (Rivero, 2009) present in Albanian(Kallulli, 2006*b*), and the South Slavic languages (Marušič and Žaucer, 2006; Rivero, 2004; Franks, 1995), and causative desideratives in Finnish (Pylkkänen, 1999*b*). Like Quechua impulsatives, these constructions also have subjects that lack volition, have oblique case-marking on the subject and do not inflect agreement on the verb. However, there is one striking difference. These languages lack dedicated verbal morphology that indicate 'feel like/be in the mood to V'.

There is a debate in the literature as to whether the impulsative meaning comes from a covert impulsative element (Marušič and Žaucer, 2006) or from other syntactic properties such as being imperfect or non-active (Rivero, 2009; Kallulli, 1999). I argue that these languages have a covert instantiation of the overt impulsative in Quechua based upon the event and argument structure of impulsatves in each language. I provide a unified semantic denotation of the impulse head. Furthermore, I provide a syntactic structure for impulsatives in each language.

ABBREVIATIONS

ACC = Accusative

AOR = Aorist

AUX = Auxiliary

CAUS = Causative

COMP = Complementizer

DAT = Dative

DEF = Definite

DES = Desiderative

EV = Evidential

F = Feminine

IMPF = Imperfect

INDEF = Indefinite

IMPU = Impulsative

M = Masculine

NEG = Negation

NOM = Nominative

N = Neuter

NACT = Non-active

OM = Object Marker

PART = Partitive

P = Preposition

PL = Plural

PR = Present

PROG = Progressive

SG = Singular

SUBJ = Subjunctive

Chapter 1

INTRODUCTION

1.1 Two Types of Desideratives

Every language has a way to express a desire that is not volitional. This is often times described as an uncontrollable urge, a yearning, a craving or even something one is in the mood to do. English uses a periphrastic expression 'feel like', such as 'I feel like sleeping', 'I feel like watching TV', or 'I feel like dancing.' Intuitively, English speakers know that there is a difference between these sentences and sentences with the volitional verb 'want'. While both express desire, the former expresses an involuntary desire while the latter expresses a willing desire. Often, these two desires can compete. For example, Chuck is on a diet and he 'wants' to eat more healthily, however he may 'feel like' eating junk food. Despite the semantic difference, these two types of desires have been traditionally grouped together under the category of desideratives.

The linguistic category "desiderative" is a well-recognized and well-documented one; the World Atlas of Linguistic Structures (WALS) (Haspelmath, 2008), for instance, lists 45 languages distributed across the globe as having desiderative affixes. The WALS lists affixes under the section on 'want complements', assuming desiderative affixes are all volitonal. Nevertheless, I argue that we need to distinguish two different categories [1] that have been labelled desideratives: volitional and non-volitional. Many of the affixes listed are either volitional or their volitionality is not discussed.

However, there is one notable exception. It has been observed that desiderative affixes in the Quechua languages are involuntary in nature primarily by Jake and Cole (1978); Cole (1985); Hermon (1985) for Imbabura Quechua. Hermon (1985) additionally discusses

[1] While canonical categories are parts of speech such as noun and verbs, linguistic categories also include anything from tense to causatives (Crystal, 1985; Hopper, 1992; Bybee, 1985)

involuntary desideratives in Huanca and Ancash Quechua. In addition to the semantic difference, they observe that desideratives in the Quechua languages also have non-canonically case-marked subjects. Involuntary desideratives in the Quechua languages differ both semantically and syntactically from the voluntary desideratives in other languages.

Furthermore, I argue that there are a number of systematic differences between them that requires us to clearly differentiate them, including the oblique case marking mentioned for Imbabura Quechua. I will call the category of involuntary desire an impulsative, from the noun *impulse*, which is defined by the Oxford English Dictionary as a "Sudden or involuntary inclination or tendency to act," (definition 3c). I will simply call desideratives that are not impulsatives, volitional desideratives.

This dissertation will investigate the systematic differences between impulsatives and volitional desideratives. As mentioned, semantically, impulsatives are non-volitional, in the sense that the subject has no control over the desire. Impulsatives are always translated with non-volitional meanings such as 'feel like' or 'have an urge to'. The feeling is often described as a yearning, an urge or an impulse as in the following example from Cusco Quechua. [2]

(1) *Noqa-ta tusu-***naya**-*wa-n.*
I-ACC dance-IMPU-1OM-3SG
'I feel like dancing.'

In example (1), the suffix *-naya* added to a verbal stem V gives the meaning 'feel like/be in the mood to V'. In addition, speakers say the most salient context for impulsatives are verbs that describe bodily functions, such as 'pee', 'vomit', 'cough,' 'yawn', and 'sleep'.

(2) *Noqa-ta hanllari-naya-wan.*
I-ACC yawn-IMPU-1OM-3SG
'I feel like yawning.'

(3) *Noqa-ta aqtu-naya-wan.*
I-ACC sleep-IMPU-1OM-3SG
'I feel like vomiting.'

[2] Research on Cusco Quechua in this dissertation is supported by NSF Doctoral Dissertation Research Improvment Grant #0518308.

It is semantically salient to have an urge or impulse to vomit, however, vomiting is something few people desire to do in the volitional sense. Furthermore, it is possible for the desire and impulse to be two separate things. Consider the following example.

(4) *Noqa-ta puñu-naya-wa-n.*
I-ACC sleep-IMPU-1OM-3SG
'I feel like sleeping.'

Example (4) is salient in a context where I am tired, even though I may not want to sleep. For instance, it may be New Year's Eve and I want to be awake at midnight but am very tired. This sentence cannot be used when what I want is not what I am feeling. The sentence cannot be used in a context where I have a busy day the next day and want to get a good night's rest, but cannot fall asleep.

In contrast, typical volitional desiderative affixes can be translated as 'want' or 'will' (often being ambiguous between the two); the WALS has desiderative affixes as a subcase of the feature " 'want' complement subjects." Moreover, in many languages, desideratives can also mean 'will' and have a future interpretation. This is true of volitional desideratives in Chukchi (Skorik, 1961), for instance.

Chukchi

(5) *ñeekkeqej toryky* **re**-*winren*-**ñ**-*yrkyn*
little.girl you re-help--PRES.I
'The little girl wants to help you'

(6) *qutti tyletumgyt petle* **re**-*jen*-**ñ***yt (re-jet-ñyt).*
other fellow-travellers soon will-arrive
'The other fellow travellers will soon arrive'

In example (5) the circumfix *re....ñ* provides the sentence with a volitional desiderative meaning and is translated as 'want'. However this circumfix can also provide a future reading, as in example (6), where it is translated as 'will'. Furthermore, volitional desideratives can be used in contexts where impulsatives can not, as in the following Japanese example.

Japanese

(7) *watashi-ga* *ne*-**ta**-*i*
speaker.NOM sleep-DES-PR
'I want to sleep.'

Example (7) cannot be used in the same contexts as (4). It infelicitous to say (7) when one is tired on New Year's Eve. On the other hand, it is natural to say this sentence when one cannot fall asleep but wants to be rested for the next day. Whereas example (4) referred to the uncontrollable urge to sleep despite ones's desires, (7) refers to one's desire to sleep despite one's ability to sleep.

In addition to semantic differences, impulsatives also diverge from volitional desideratives syntactically. The subject is marked with an oblique case, not the nominative that characterizes subjects generally, and it also fails to agree on the verb (this pattern of case and agreement probably reflects the lack of volition).

(8) *Noqa-ta puñu-naya-wa-n.*
I-ACC sleep-IMPU-1OM-3SG
'I feel like sleeping.'

In example (8), the impulsative affix is *naya*. The subject *noqa* 'I' is marked with accusative case *ta* as opposed to nominative case, which subjects in Cusco Quechua ordinarily receive. Furthermore, the verb receives third person singular subject agreement despite the fact that the logical subject is first person. Desideratives in other languages, on the other hand, usually assign the typical subject case, as in the Japanese example (7), and do not affect agreement, as shown in the following examples from Passamaquoddy.

Passamaquoddy

(9) *Msi=te* *keq* **'t**-*olluk*-**hoti**-*ni*-**ya** *ewapoli-ko-k*
all=Emph what 3-do-Plural-N-3P IC.wrong-be-IIConj
'They do everything that is wrong.'
(Mitchell, 1921/1976*a*, Line 5)

(10) *Aqami=te=hc* **'t**-*oli=koti=olluk*-**hot***i-ni*-**ya**.
more=Emph=Fut 3-thus=DES=do-Plural-N-3P
'They will want to do it even more.'
(Mitchell, 1921/1976*b*, Line 99)

In example (9), the verb *ollok* is inflected for the third person plural agreement, which is distributed across three morphemes: a prefix *'t*, a suffix *hoti* and another suffix *ya*. When the verb *'ollok* has the desiderative preverb a *koti* , as in example (10), it still agrees with the third person plural subject.

Cross-linguistically, it is common for languages to not assign nominative case to arguments of experiencer predicates (McCawley, 1976). Aikhenvald, Dixon and Onishi (2001) list various categories of predicates that can take non-canonically[3] marked subjects, such as verbs with affected subjects,, verbs of possession, verbs expressing 'happenings' and verbs with secondary modal meanings. They discuss various semantic parameters such as volitionality, stativity and modality. For example, volitionality plays a role in the marking of non-canonical subjects in South Asian languages (Masica, 1976; Klaiman, 1980) where non-canonically marked subjects lack volition. Cusco Quechua Impulsatives pattern much like these experiencer predicates falling in the class of verbs with secondary modal meanings. Accordingly, the non-canonical subject and verb marking in impulsatives reflects a lack of volition. To reiterate, the construction in Cusco Quechua differs from volitional desideratives both semantically and syntactically. Desideratives express a willful desire and exhibit canonical subject marking. Impulsatives, however, pattern like experiencer predicates in that they are non-volitional and do not exhibit canonical case marking. Given the robust cross-linguistic trend which distinguishes typical predicates and experiencer predicates, it is not surprising that similar differences arise between desideratives and impulsatives as well.

[3] Dixon et al use 'non-canonical' to refer to any marking which is not typically used for subjects of basic active verbs. Their discussion includes nominative-accusative languages where subjects are generally marked with nominative with the exception of some of these types of predicates.

1.2 Overt vs. Covert Impulsatives

While the only attested case of an impulsative affix exists in the Quechua languages, many languages have constructions that are very similar to impulsatives in Quechua, but lack dedicated morphology. The constructions in these languages have meanings akin to "feel like/ be in the mood to V'. Furthermore, the logical subject takes an oblique case, and the verb no longer agrees with the logical subject. For example, in Albanian, the impulsative is marked by the use of dative case and the non-active verbal form.

(11) *Agimit kërcehet në zyrë.* *(Albanian)*
Agim.DAT dance.3SG.NACT.PR in office.DEF
'Agim feels like dancing in the office.' [4]

In example (11), the impulsative in Albanian is formed by using the non-active form of the verb *kërcen* 'dance' and by marking the experiencer argument *Agim* with dative case. In addition, the experiencer argument must also be the subject of the internal verb. It cannot be a distinct subject. *Agim* must desire that *Agim* dance, not anyone else. I will call impulsative constructions which lack a dedicated morpheme, *covert impulsatives*. In addition, Albanian also has a periphrastic impulsative.

(12) *Shpesh më vinte të kërceja në zyrë.*
often 1sg.DAT come.3SG.IMP MOOD dance.1SG.IMP.SUBJ in office
'Often I have felt like dancing in my office.

Example (12) is analogous to example (11) both semantically and syntactically. The subject is marked with dative case and the verb is conjugated in third person. Many grammatical categories, like the causative and the desiderative, have both morphological and periphrastic counterparts. Albanian does not have a morphological volitional desiderative but does have a verb 'want' which I will call a periphrastic volitional desiderative. Periphrastic

[4] Can also be interpreted as 'There was dancing in the office and it affected Agim (e.g. it was Agim's office.)' This is the passive of the affected argument construction, which looks identical on the surface.

volitional desideratives in Albanian are distinct from both the covert and periphrastic impulsative.

(13) *(Unë) dua (që) të shkoje në Shqipëri.*
I.NOM want.PR.1SG (that) to go.SUBJ.3SG to Albania
'I want that he/she to go to Albania.'

This sentence differs from (11) and (12) in several ways. First, the subject is volitional. Secondly, the subject receives canonical nominative case marking and the verb agrees with the subject. Furthermore, the 'goer' can be distinct from the 'wanter'.

While impulsatives in Albanian like (11) and Quechua appear different morphologically, they share a number of elements. Impulsatives can be defined as having the following properties. First, the verb is morphologically complex. Quechua has a dedicated morpheme; while Albanian uses the non-active voice. Secondly, the associated NP non-volitionally feels like doing V. The subject is an experiencer, and the content of the experience an impulse to do V. The experiencer is usually marked with a non-subject case, and the verb does not agree with the experiencer. In addition, the construction is mono-clausal in that there is only one set of tense and aspect. Lastly, impulsatives also introduce modal semantics. In the modal world of impulse, the experiencer is the external argument of V. I will use the term, covert impulsative, to refer to constructions like those in Albanian and, overt impulsatives, to refer to constructions like those in Quechua.

Covert impulsatives of this sort have been observed in many languages including Albanian (Kallulli, 2006*b*), Finnish (Pylkkänen, 1999*b*) and the South Slavic languages (Marušič and Žaucer, 2006; Rivero, 2004; Franks, 1995). The literature is divided as to whether the source of the intensionality comes from a covert impulsative element (Marušič and Žaucer, 2006), or from other syntactic properties such as being imperfect or non-active (Rivero, 2009; Kallulli, 1999). Furthermore, there has been no attempt to build a unified analysis for covert impulsatives across languages. In addition, covert impulsatives have never been compared

to languages that have overt impulsatives, such as Quechua (Hermon, 1985).

This dissertation will look at impulsative constructions in Albanian, Bulgarian, Finnish and Cusco Quechua and provide a unified analysis by defining an impulsative head. All data from these languages come from my own fieldwork and very gracious informants. Before I can introduce my denotation for the impulsative head, I must acknowledge some background assumptions.

1.3 Background Assumptions

This thesis approaches the syntactic structure of impulsatives with semantic compositionality in mind. At the end of each chapter, I will provide a semantic derivation for the impulsatives in that language. Syntactic trees are generated by mechanisms from Heim and Kratzer (1998) and the semantic values of each element. Each element α is a syntactic object with a semantic value written as $[\![\alpha]\!]$ and a semantic type T written as α_T. Semantic types are governed by the following rules in (14).

(14) Semantic Types
a. e, t, s, and v are the semantic types of individuals, truth-values, situations and events, respectively.
b. If α and β are semantic types, then $<\alpha,\beta>$ is a semantic type.
c. If α is a type than $<s,\alpha>$
d. Nothing else is a semantic type.
(Heim and Kratzer, 1998, Chapter 2.3 Ex 5 and Chapter12.3 Ex 1)

Type theory in conjunction to the functional rule below, determine the semantic value of each syntactic node.

(15) Function Application
If α is a non-branching node, $\{\ \beta,\ \gamma\}$ is the set of α's daughters, and $[\![\beta]\!]$ is a functions whose domain contains $[\![\gamma]\!]$ then $[\![\alpha]\!] = [\![\beta]\!]([\![\gamma]\!])$.
(Heim and Kratzer, 1998, Chapter 3.1 Ex 3)

Furthermore, I will assume event semantics as in (Kratzer, 1996, 2003; Pylkkänen, 2002). In the event semantics, verbs are understood as properties of events, and they may take an internal argument. Following (Kratzer, 1996), we assume that external arguments are not arguments of the verb, but are introduced by a higher functional head, Voice. Additionally, I use neo-davidsonian logical forms, assuming theta roles such as Agent, Experiencer and Theme. Thus the denotations of Voice and a ordinary verb, such as *hit*, are as follows.

(16) $[\![\textbf{Voice}]\!] = \lambda x.\lambda e.\ \text{Agt}(e,x)$

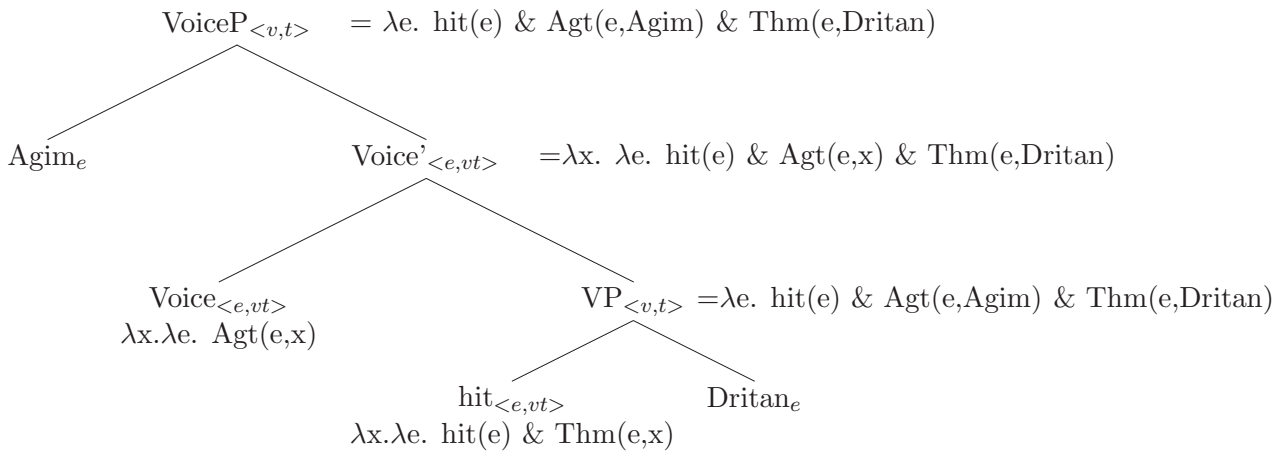
(17) $[\![\textbf{hit}]\!] = \lambda x.\lambda e.\ \text{hit}(e)\ \&\ \text{Thm}(e,x)$

VP and Voice combine via Event Identification, as follows:

(18)
$f_{<s,t>}$	$g_{<e,st>}$	$\rightarrow$ $h_{<e,st>}$
$\lambda e.f(e)$	$\lambda x.\lambda e.g(x)(e)$	$\lambda x.\lambda e.g(x)(e)\ \&\ f(e)$

Sample Derivation

(19) Agim hit Dritan.



In addition, I will be assuming Chomsky (1995, 2000, 2001)'s case and agreement framework. In this framework, the heads T and v are probes that look for goals, which are arguments which to assign structural case via Agree. Subsequently, the arguments check agreement features on v and T. I also assume that certain verbs have the ability to assign inherent case that is dependent on

the theta role of the argument(Chomsky, 1986).

Lastly, since impulsatives are by nature intensional, therefore it is necessary to introduce possible worlds (Fintel and Heim, 2002). I will follow (Cresswell, 1990) in treating possible worlds as a variable. Furthermore, I have applied Hintikka (1969)'s conception of attitude verbs to that of the impulsative. Therefore it is a function which maps the proposition to a set of possible worlds which are compatible with the impulse.

1.4 Analysis

In this dissertation, I provide a unified account of impulsatives in Cusco Quechua, Bulgarian, Albanian and Finnish. I propose a semantic denotation for the impulsative head as shown below.

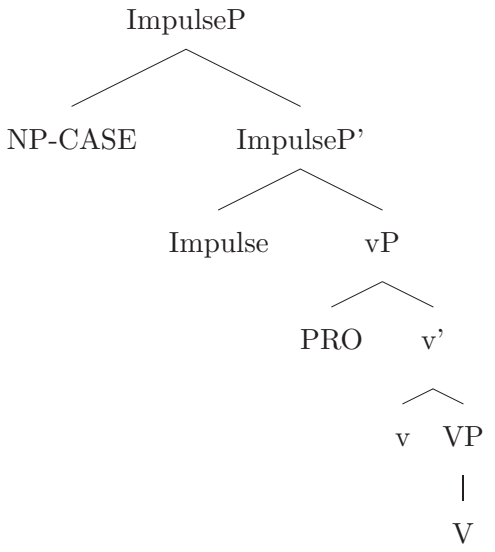
(20) $[\![\textbf{Impulse}]\!] = \lambda P_{<e,vt>}\lambda x.\lambda e.\lambda w.\forall w'[w' \text{ is compatible with what x has an impulse to do in e in w}] \rightarrow [\exists e' \text{ in } w'.P(x)(e')]$[5]

The denotation reads: For all possible worlds w' such that w' is compatible with what x has an impulse to do in e in w then there exists an event e' such that e' is x doing the P in w'.

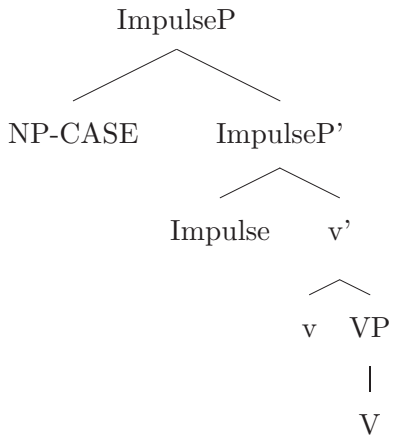
Semantically, the null impulsative head will do several things. First, it will provide intensionality by quantifying over possible worlds. Secondly, it has an event argument. Finally, it introduces an experiencer argument and links it with the agent of the internal predicate in the modal world. Syntactically, the impulsative head will license and case-mark an experiencer argument and select for a voice projection. The overt impulsative head in Cusco Quechua will select for a saturated voice projection. The covert impulsative head in Albanian, Bulgarian and Finnish will select for an unsaturated impulsative head.

[5] While it is true that English has several periphrastic ways to denote involuntary desire, none are quite exact. English 'feel like' generally is not used for bodily functions. I use less common 'have an impulse to' as the closest translation and something that can be used for both bodily functions and more deliberate events such as 'reading a book.'

(21) Overt Impulsative



Covert Impulsative



I begin my investigation with Cusco Quechua which has a dedicated morpheme to indicate the impulsative in Chapter 1. I discuss both the event and argument structure of impulsatives in Cusco Quechua. Next, in chapter 2, I independently motivate a null impulsative head in Bulgarian by showing no other element can be responsible for the intensionality in impulsatives. Furthermore, impulsatives in Bulgarian are bi-eventive.[6] In addition to further motivating the positing of a null morpheme, the bi-eventive nature of impulsatives in Bulgarian parallels the event structure in Cusco Quechua impulsatives. Because of the similarities of event and argument structure I argue that Bulgarian impulsatives are the covert version of the impulsative morpheme in Cusco Quechua. Next, I cover Albanian impulsatives in Chapter 4, which morphologically corresponds to the impulsative in Bulgarian with one difference; namely that impulsatives in Albanian are subject to selectional restrictions. This adds to the mounting evidence that there is an impulsative head. Lastly, I look into impulsatives in Finnish in Chapter 5, which superficially appear to be the most different. Nevertheless, I show that impulsatives in Finnish can be accounted for by the same impulsative head used in all the other languages. Moreover, while impulsatives in Finnish appeared to be causative, I argue that the morphology involved in Finnish impulsatives has similar

[6] The second event of the overt predicate is included in the possible world introduced by the impulsative head. Truth-conditionally, impulsatives are not bi-eventive like causatives, but they are bi-eventive in that the event of feeling and the event of the overt predicate in the possible world are separate events.

properties to the morphology in Albanian and Bulgarian impulsatives. Thus, impulsatives in Cusco Quechua, Bulgarian, Albanian and Finnish can all be accounted for by the denotation in (20). This denotation provides an argument and event structure that is identical across impulsatives. In addition, the impulsative head explains the intensional behavior of the seemingly non-intensional constructions in Bulgarian, Albanian and Finnish.

Chapter 2

CUSCO QUECHUA

2.1 Introduction

Cusco Quechua is one of seven Quechuan languages are spoken in Western South America, specifically in the countries of Ecuador, Bolivia, Peru, Columbia, Chile and Argentina. There are over 10 million speakers of these languages, the largest group residing in Peru, with Cusco Quechua being spoken by over a million speakers. Cusco Quechua is part of the Quechua II grouping, on the Southern Quechua branch. Its default word order is SOV and it is an agglutinating language with overt case-marking on nouns and often extensive derivational and inflectional suffixation on verbs (Cusihuaman, 2001).

Cusco Quechua, like other Quechua languages, has a desiderative affix (Muysken, 1988) which appears to be an impulsative, shown below:

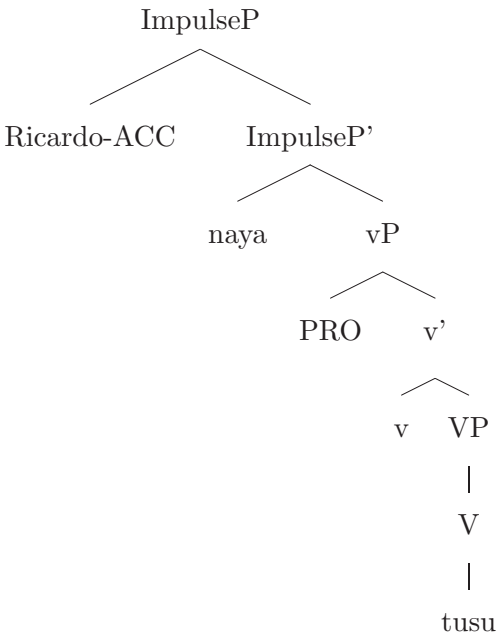
(1) *Noqa-ta tusu-***naya**-*wa-n.*
I-ACC dance-IMPU-1OM-3SG
'I feel like dancing.'

In this construction, the suffix -*naya* added to a verbal stem V gives the meaning 'feel like/be in the mood to V'. The goal of this chapter is to provide a syntax and semantics of impulsatives in Cusco Quechua. In the introduction, I showed the impulsative affix in Cusco Quechua differed from volitional desiderative affixes in other languages. In this chapter, I will show that within Cusco Quechua, impulsatives differ from periphrastic desiderative constructions. Then I begin to study the nature of the suffix *naya* itself. With regards to event structure, the impulse head is an event-introducing predicate. Furthermore, the impulse head introduces an experiencer argument and is responsible for assigning it case. The impulse head selects as its complement a vP.

(2) $[\![\textbf{Impulse}]\!] = \lambda P_{<e,vt>}\lambda x.\lambda e.\lambda w.\forall w'[w' \text{ is compatible with what x has an impulse to do in e in w }] \rightarrow [\exists e' \text{ in } w'.P(x)(e')]$

Semantically, the null impulse head will do several things. First, it will provide intensionality by quantifying over possible worlds. Secondly, it has an event argument. Finally, it introduces an experiencer argument and links it with the agent of the internal predicate in the modal world. Syntactically, the impulse head will license and case-mark an experiencer argument and select for an aspectual projection. The structure for example (1) is shown in the tree below.

(3)



The rest of the chapter is organized as follows. In the second section I differentiate impulsatives from desideratives in Quechua. In the third section I discuss the event structure of Cusco Quechua impulsatives and show that impulsatives are a predicate over events. In the fourth section, I argue that impulsatives introduce an experiencer argument. In section five, the possibilities for the complement of the impulse head are reviewed. Impulsatives in Cusco Quechua select for a control structure headed by vP. Finally section six concludes the chapter and provides a full derivation and analysis.

2.2 Impulsatives vs. Volitional Desideratives

Cusco Quechua has a construction that is known in the literature as a *desiderative*. However as I demonstrated in the Introduction, there are two types of desideratives; impulsatives and volitional desideratives.. In the following section, I demonstrate how this construction in Cusco Quechua differs from volitional desideratives in Cusco Quechua. Cusco Quechua does not have a desiderative affix but rather a periphrastic desiderative much like English 'want'.

(4) *Noqa tusu-y-ta muna-ni.*
I.NOM dance-INF-ACC want-1SG
'I want to dance.'

In example (4) differs from (1) is several ways. First, the subject of (4) is volitional and is often translated as 'want'. As previously mentioned, impulsatives are always translated with non-volitional meanings such as 'feel like' or 'have an urge to'. Furthermore, it is possible for the desire and impulse to be two separate things. Consider the following examples.

(5) *Noqa-ta puñu-naya-wa-n.*
I-ACC sleep-IMPU-1OM-3SG
'I feel like sleeping.'

(6) *Noqa puñuyta munani.*
I.NOM sleep-INF-ACC want-1SG
'I want to sleep.'

Example (5) is salient in a context where I am tired even though I may not want to sleep. For instance, it may be New Year's Eve and I want to be awake at midnight but am very tired. However, this sentence cannot be used when what I want is not what I am feeling. The sentence cannot be used in a context where I have a busy day the next day and want to get a good night's rest but cannot fall asleep. On the other hand, example (6) cannot be used in the same contexts as (5). It infelicitous to say (6) when one is tired on New Year's Eve but wants to stay awake. On the other hand, it is natural to say this sentence when one cannot fall asleep but wants to be rested for the next day. Whereas example (5) refers to the uncontrollable urge to sleep despite ones's desires, (6) refers to one's desire to sleep as opposed to one's ability to sleep.

A second difference between impulsatives and volitional desideratives is case of the subject. Subjects of volitional desideratives in Cusco Quechua are nominative as seen in example (6). Subjects of impulsatives in Cusco Quechua, on the other hand, are accusative, as seen in (5). While nominative case is the case that characterizes subjects generally in Cusco Quechua, accusative case is the case marker for experiencers in Cusco Quechua. A certain class of experiencer verbs mark their subjects with accusative case in Cusco Quechua.

(7) *Noqa tusu-ra-ni.*
I-NOM dance–PST-1SG
'I danced.'

(8) *Noqa-ta chiri-wan.*
I-ACC cold-1OM-3SG
'I am cold.'

(9) *Ricardu-ta rayqan.*
Ricardu-ACC hungry-3OB
'Ricardo is hungry.'

In example (7), the canonical agentive subject is marked with the null nominative case. In contrast, in examples (8) and (9) the arguments *Noqa* and *Ricardu* are marked by the accusative case marker *ta*. These subjects are experiencer arguments of the lexical experiencer predicates *chiriy* and *rayqan*.

Furthermore, impulsatives and desideratives affect verbal agreement differently. Subject of volitional desideratives trigger canonical subject agreement. Whereas, the subject in impulsatives fails to agree with the verb.

(10) *Noqa tusu-ni.*
I-NOM dance-1SG
'I dance.'

(11) *Noqa-ta *tusu-naya-ni/tusu-naya-wa-n.*
I.ACC dance-IMP-1SG/dance-IMP-1OM-3SG
'I feel like dancing.'

Example (10) has the same agreement as (6) since both have first person subject. However, Example (10) and (11) exhibit the contrast between a subject induces agreement as in (10) and a subject that doesn't as in the impulsative example (11). The verb instead carries object marking agreeing with the experiencer, which typically agrees with the objects of transitive verbs.

(12) *Magda qan-ta moqa-sunki.*
Magda you-ACC hit-2OM.3SG
'Magda hits you.'

(13) *Qan-ta tusu-naya-sunki.*
you.ACC dance-IMP-2OM.3SG
'You feel like dancing.'

In examples (12) and (13) the predicates host second person object marking *sunki*. While example (12) is the canonical use of object marking in Cusco Quechua, example (13) exhibits the pattern of impulsatives, wherein the experiencer argument triggers the object marking. Although it is called object marking because objects always trigger this agreement, it can be triggered by any argument that is affected.

(14) *Noqa-q wasi-y watumu-wa-ra-nki.*
I-GEN house-1SG.PX visit-1OM-PST-2SG
'You visited my house.'

In example (14), even though the object is *wasiy* 'my house', the verb still receives the first person object marking *wa* because I am affected by you visiting my house. Therefore, it is not just objects that can trigger object marking, but rather arguments that are affected. None of the other languages in this dissertation have object marking; this is a characteristic unique of Cusco Quechua impulsatives.

Thus, volitional desideratives in Cusco Quechua differ from the constructions with the impulsative affix. While both express desire and introduce intensionality, impulsatives lack volition while volitional desideratives denote a willing subject. Moreover, syntactically they behave as opposites. While volitional desideratives contain normal subject case marking and agreement, impulsatives do not. Instead, subjects in impulsatives receive accusative case marking, the same case

marking other experiencer arguments in Cusco Quechua receive. Furthermore, instead of triggering subject agreement, they trigger object agreement, which is the agreement pattern that affected arguments in the language trigger. Consequently, not only does the impulsative affix in Cusco Quechua differ from volitional desiderative affixes in other languages, they also differ from the periphrastic desiderative in Cusco Quechua.

2.3 Event Structure

In this section I discuss the event structure of Cusco Quechua impulsatives. Cusco Quechua impulsatives are intensional in that they introduce possible worlds. Additionally, I argue that impulsatives in Cusco Quechua are bi-eventive and thus event introducers.

Cusco Quechua impulsatives are intensional. First, impulsatives in Cusco Quechua do not preserve the truth value when a coreffering term is substituted.

(15) a. *Noqa-ta Alan García-ta watuku-naya-wa-ran.*
I-ACC Alan García-ACC visit-IMPU-1OM-PST.3SG
'I feel like visiting Alan García.'

b. *Noqa-ta presidenti-ta watuku-naya-wa-ran.*
I-ACC president-ACC visit-IMPU-1OM-PST.3SG
'I feel like visiting the president.'

Example (15-a) does not mean the same as (15-b). It is possible that the person uttering (15-a) does not know who the president of Peru is and therefore has no desire to see Mr. Alan García. Since the two terms *Clark Kent* and *Superman* co-refer in the real world, the sentences are only different in the possible worlds created by the impulsative element.

Furthermore, intensional sentences can be true when they a non-existing term like *Superman*. This contrasts with a non-intensional sentence which is necessarily false if Superman does not exist.

(16) a. *Noqa-ta superman-ta watuku-naya-wa-ran.*
I-ACC superman-ACC visit-IMPU-1OM-PST.3SG
'I feel like visiting the Superman.'

b. *Noqa superman-ta watukurani.*
I-NOM Superman-ACC visit-PST-1SG
'I visited Superman.'

Example (16-b) is false, because Superman doesn't exist. However, even though Superman does not exist (16-a) could still be true. This is because there is a possible world wherein Superman does exist that has been created by the intensional context introduced by the impulse head *naya*.

Since impulsatives quantify over possible worlds, one might hypothesize that impulsatives are analogous to circumstantial modals. Circumstantial modals have a modal base that quantifies over worlds compatible with a certain set of facts in the evaluation world. In other words, worlds that are determined by a specific set of circumstances (Kratzer, 1991). Similar constructions in Polish have been analyzed as circumstantial modals (Rivero, Arregui and Frackowiak, to appear). Hacquard (2006) argues that modals are not predicate of events but instead have an accessibility relation that relates a set of possible worlds to an event. Consequently, modals do not generate presuppositions with adverbs that apply to predicate of events such as *again* (von Stechow, 1996; Bale, 2006).

(17) *Yapamanta Gilbertu llank'a-na-n*
again Gilberto-NOM work-OBL-3SG
'Gilberto has to work again.'

(18) *Yapamanta Gilbertu llank'a-ma-n*
again gilberto-NOM work-COND-3SG
'Gilberto would work again'

Examples (17) and (18) both obligatorily presuppose that Gilberto has worked before. However, they do not generate any presuppositions associated with the modals. Example (17) cannot mean that Gilberto had to work yesterday but didn't and thus has to work again today[1]. Likewise, (18) cannot be used in a context where yesterday Gilberto would have worked (in the fields) if it was sunny, but it was rainy and today he would work again (if it is sunny). In contrast, impulsatives are ambiguous when associated with the adverb *yapamanta* 'again'.

[1] This presupposition may be available in the English translation for some speakers, possibly because it has an infinitival complement

(19) *Noqa-ta yapamanta llank'a-naya-wan.*
I.ACC again work.IMPU.1OM
'I feel like working again.'

In example (19) there are two possible presuppositions: one in which I had the feeling before, and the second where I worked (maybe begrudgingly) before. This indicates that *naya* is more than a modal. Modals do not yield additional presuppositions because they do not introduce an event that can be presupposed. This suggests that the impulse head introduces its own event.

However the ability to generate presuppositions with 'again' does not indicate a bi-eventive structure. Some predicates undergo Event Identification (Kratzer, 1996). Under event identification, two separate events become the same event. When there is only one event, two conflicting time adverbs create a contradiction. However, if the structure is bi-eventive, each adverb can modify each event separately (Marušič and Žaucer, 2006).

(20) **Qaynap'unchaw lloqsi-ra-ni khunan p'unchaw-paq*
Yesterday go.out-PST-1SG now day-for
'Yesterday, I am going out today.'

(21) *Qaynap'unchaw lloqsi-naya-wa-ra-n khunan p'unchaw-paq*
Yesterday go.out-IMPU-1OM-PST-3SG now day-for
'Yesterday, I felt like going out today.'

In example (21), the adverb *Qaynap'unchaw* 'yesterday' modifies the time of the impulse whereas the adverb *khunan p'unchaw* modifies the time of the going out. Thus there is no conflict in time because there are two separate events. In contrast, example (20) is ungrammatical because the two opposing time adverbs create a contradiction. This indicates that the impulsatives are bi-eventive and do not undergo Event Identification like the voice projection in (20).

In this section, I have discussed the event properties of impulsatives in Cusco Quechua. First, I showed that impulsatives are intensional. Next, I demonstrated that although they are intensional, they are not like modals but instead event-introducing predicates. Finally, I showed that impulsatives are bi-eventive.

2.4 Argument Structure

In this section, I discuss the argument structure of impulsatives; namely, the nature of the experiencer argument introduced by the impulse head. First, I review a previous analysis of Imbabura Quechua by Hermon (1985). Next, I compare Imbabura Quechua and Cusco Quechua concluding that while both experiencer arguments behave like subjects the former is assigned structural case while the latter is assigned "quirky" case. Finally, I discuss the proximate reading available with weather predicates.

While little work has been done on impulsatives in Cusco Quechua, significant work has been done on impulsatives in Imbabura Quechua. Impulsatives are discussed at length in Hermon (1985), but the focus of her work is the nature of the logical subject rather than the syntax and semantics of the impulse head. Hermon (1985) observed that in Imbabura Quechua, like Cusco Quechua, impulsatives have an argument that is marked accusative.

(22) *(Ñuka-ta) aycha-ta miku-naya-wa-n-mi.*
me-ac meat-acc eat-desid-1-OM-pr-3val
'I desire to eat meat.' [2]
(Hermon, 1985, Example 1)

In example (22), the argument *ñuka* is affixed with the accusative case marker *-ta*, despite it being understood as the subject of the sentence. Hermon (1985) investigated the nature of the argument and determined that it behaved like a subject. Based on evidence from diagnostics such as wh-extraction, and control she concluded that the argument begins as an object and moves to subject position at LF. Under her analysis, the argument receives structural accusative case as the object of the affix *naya*. When the argument appears as the subject of a matrix predicate than it appears with nominative case rather than accusative case. This is demonstrated by embedding the predicate under a raising predicate.

(23) *Kan-ø-ga puñu-naya-y yarin-gi*
You-NOM-TOP sleep-DES-INF seem-2-SG-PRES

[2] Hermon's glossing may be slightly different from the glossing I use.

'You seem to want to sleep'
(Hermon, 1985, Example 83)

In example (23), the argument *Kan* does not receive accusative case but rather is marked null nominative case marking as subject of raising verb *yarin-gi*. Moreover, when embedded beneath a control predicate, the argument also receives nominative case.

(24) *Ñuka puñu-naya-chi-ni.*
I-nom sleep-desid-pers-pr1
'I desire to sleep.'
(Hermon, 1985, Example 70)

In example (24), the subject does not receive accusative case. This is due to the personalizing morpheme *chi* which assigns nominative case to its argument. In this case, *ñuka* is the argument of *chi* rather than an argument of the impulse head *naya*. Additionally, Hermon (1985) observes that the personalizing morpheme *chi* has a semantic effect on the subject. Example (24) denotes a wish to perform the action, rather than an overwhelming urge to sleep.

Impulsatives in Imbabura Quechua differ from lexical experiencer predicates that do not allow for the arguments to be raised.

(25) **Kan-ga yarja-y yari-ngi.*
you-top hunger-inf seem-pr-2
'You seem to be hungry.'
Hermon (1985, Example 83b)

In example (25), the argument of the lexical experiencer *kan* 'you' is raised to the subject position of the raising predicate*yari* and is ungrammatical.

Like Imbabura Quechua, Cusco Quechua experiencer arguments also behave like subjects in that they are targeted by raising predicates. However, the experiencer argument in impulsatives in Cusco Quechua retains its case even after being raised.

(26) *Noqa tusu-y-ta qallari-ni.*
I-NOM dance-INF-ACC begin-1SG

'I begin to dance.'

(27) *Noqa-ta chiri-wa-y-ta qallari-n.*
I-ACC cold-1OM-INF-ACC begin-3SG
'I begin to get cold

(28) *Noqa-ta tusu-naya-wa-y-ta qallari-n*
I-ACC dance-IMP-1OM-INF-ACC begin-3SG
'I am beginning to feel like dancing.'

Example (26) is a raising predicate with a canonical verb that assigns nominative case and triggers agreement. Example (27) shows that a lexical experiencer retains its accusative case despite being the subject of a raising predicate. Similarly, in example (28), the argument *noqa* 'I' must receive accusative case marking *-ta*. Therefore, when an argument raises to subject of *qallariy* 'begin' its case is preserved. In Cusco Quechua, the experiencer argument of an impulsatives behaves like the argument of a lexical experiencer predicate. This suggests that the impulse head in Cusco Quechua assigns inherent case like experiencer predicates do. In contrast, in Imbabura Quechua, the impulse head assigns structural case to its argument.

This differences raises the question as to why the languages would differ in this particular fashion. One hypothesis is that the languages differ with regards to what is considered a subject. Recall that in Imbabura Quechua, lexical experiencer predicates were not permitted to be embedded under raising predicates. If it were strictly a case of assignment of inherent case vs. structural, the argument should be allowed to raise. However, the sentence is ungrammatical. This may be due to the fact that the argument is not considered a subject in Imbabura Quechua because it is not in Spec of TP (Bobaljik and Jonas, 1996). Having been assigned inherent case, the argument does not need to move to the spec of TP to receive case and stays *in situ*. Thus raising predicates cannot target this argument because it is not in Spec of TP, and therefore not a subject. In Cusco Quechua on the other hand, both impulsatives and lexical experiencers can have their arguments raised by a raising predicate. This suggests that both arguments are considered subjects in Cusco Quechua. Cusco Quechua may consider subjects to be the highest NP rather than the NP in spec of TP.

2.4.1 The Proximate

Because impulsatives assign inherent case to its argument, it seem reasonable to posit that impulsatives are responsible for the introduction of the experiencer argument. However, *naya* can be hosted by a weather predicate (Cusihuaman, 2001) that has no external argument at all.

(29) *Para-naya-n*
rain.IMP.3SG
'It's about to rain.'

However, there are several reasons to believe that this instance of *naya* differs from that of the canonical impulsative use. First, the meaning of -*naya* with a weather predicate is distinct from that of the meaning of -*naya* when affixed to non-weather predicates. In example (29), -*naya*- contributes an proximate reading (Heine, 1994). Instead of meaning 'It feels like raining' it means 'It's about to rain.' The proximate reading is not available when -*naya*- is affixed to a non-weather predicate as in example (30).

(30) *Pay-ta mihu-naya-n.*
s/he-ACC eat-IMP-3SG
'S/he feels like eating.'
∗'S/he is about to eat.' [3]

In contrast to example (29), example (30) does not have the proximate reading available. It cannot mean 'S'he is about to eat.' It only has the truly impulsative reading 'S/he feels like eating.' Nevertheless, this reading is available in Lamas Kechwa (Sanchez, 2003).

(31) *Miku-naya-ni*
eat-des-1p
'I want to/am about to eat'

Example (31) is ambiguous between a desiderative and proximate reading. It is important to note that in this language, the subject is triggering agreement. This means that, syntactically, it is no

[3] Object marking on third person is null.

longer an impulsative. Romaine (1999) discusses how verbs such as 'want' can get grammaticalized to receive proximate readings. She describes the process as the volition being backgrounded when volition does not make sense.

Although it appears that impulsatives can occur without an experiencer argument, I show that instead this is a similar but unrelated reading, the proximate, of the same morpheme. Thus the impulse head introduces an experiencer argument. However, while in Imbabura Quechua it was assigned structural case, in Cusco Quechua it receives inherent case instead.

2.5 Syntactic Structure

In this section, I discuss the syntactic structure and I posit a semantic denotation for impulsatives in Cusco Quechua. First, impulsatives in Cusco Quechua can attach to nouns. I argue that in these cases there is a null 'have' and therefore, *naya* always attaches to a verb. This indicates that the impulse head takes a vP as a complement. As previously established, the impulse head also introduces an experiencer argument. These facts allow us to detail a semantic denotation and composition for impulsatives in Cusco Quechua.

2.5.1 Attaching to Nouns

In this section, I discuss what type of predicates *naya* attaches to. One type of such predicate is certain nouns in Cusco Quechua. However, I argue that in those instances, there is a null 'have' verb much like English intensional complements(Larson and Ludlow, 1997). I propose that impulse head *naya* can only attach to verbs.

One fact that differentiates *naya* from covert impulsatives is that it can attach to nouns.

(32) *Aq'a-naya-wa-n.*
chicha-IMP-1OM-3SG
'I feel like having chicha'[4]

(33) *Ricarduta warmi-naya-n.*
Ricardo-ACC woman-IMP-3SG
'Ricardo desires a woman (sexually)'

[4] Chicha is an alcoholic drink made of fermented corn.

Based on this, one could postulate that *naya* is a verbalizing suffix. However, there are reasons to believe that *naya* isn't directly attaching to nouns and acting as a verbalizer. Instead, I argue that there is a null 'have' in these instances. First, is that this pattern is not fully productive, but limited to a restricted set of commonly desired items.

(34) **Pizza-naya-wa-n.*
pizza-IMP-1OM-3SG
'I feel like having pizza'

Example (34) is ungrammatical, because the noun *pizza* is outside of the class of nouns that *naya* is allowed to attach to. Secondly, all nouns that can appear with *-naya* can also appear as an object of the verb *kan* 'have'.

(35) *Noqaq aq'a-y kan*
I-GEN chicha-VAL have-3SG
'I have chicha.'

(36) *Rodolfoq warmin kan*
Rodolfo-GEN woman-VAL have-3SG
'Rodolfo has a woman (wife).'

The nouns appearing as objects of the predicate *kan* in exmaples (35) and (36) are the same nouns from (32) and (33). However, there a few syntactic differences, namely the subject must have genitive case as shown in the above examples and *kan* is fully productive.

(37) *Noqaq pizza-y kan*
I-GEN pizza-VAL have-3SG
'I have pizza.'

The verb *kan* can take *pizza* as its object as in example (37). However, the verb *kan* cannot form an impulsative.

(38) **Noqa-ta pizza-ta ka-naya-wa-n.*
I-ACC pizza-ACC have-IMP-!OM-3SG
'I feel like having pizza.'

The verb *kan* is Cusco Quechua has many uses existentials and locatives such as the predicates in (Freeze, 1992). In these types of verbs both argument are internal arguments and do not have any voice projection. As I will later explain, the impulse head in Cusco Quechua selects for vP.

It is because of these differences that I posit that the null 'have' is not the same as an elided *kan*. Instead it is a null predicate. Evidence for this is based upon bi-eventivity and the occurrence with other functional heads and attitude verbs.

First, impulsatives attached to nouns are bi-eventive. This can be seen by the use of time conflicting adverbs.

(39) *Khunan p'unchaw noqa-ta aqa-naya-wa-n mincha p'unchaw-paq.*
now day I-ACC chicha.IMPU-1OM-3SG few day-FOR
'Today I feel like having chicha in a few days.'

Example (39) is very salient because chicha takes a few days to ferment. Therefore, it is understood that today, I feel like making the chicha so that I could have the chicha in a few days. This is unexpected if the only event introducer in the sentence is the impulse head. However, if there is a null 'have', it can introduce the second event and allow the bi-eventive interpretation.

Finally, other suffixes can be added to these nouns and induce the meaning of a null 'have', such as the causative.

(40) *Noqa aq'a-chi-ni.*
I-NOM chicha-CAUS-1SG
'I am making chicha.'

In example (40) the causative morpheme *chi* is attached directly to the noun. Without the null 'have' this sentence it would not be clear what event I am causing to happen. Furthermore, attitude predicates, such as the periphrastic desiderative discussed earlier can take object complements.

(41) *Noqa aq'a-ta muna-ni.*
i-NOM chicha-ACC want-1SG
'I want chicha.'

Thus both the causative and the periphrastic desiderative take object complements. I conclude that impulsatives that attach to noun include a null 'have'. This null have selects only a few common nouns in Quechua. Evidence of a null have comes from ellipsis, and bi-eventivity.

2.5.2 Attaching to Verbs

This section discusses what verbal or functional category the Impulse head selects for. It does not select as high as TP, as tense always occurs outside of the impulsative morpheme.

(42) a. **Noqa-ta puñu-ra-naya-wa-n.*
I-ACC sleep-PST-IMPU-1OM-3SG
'I feel like I slept.'

b. *Noqa-ta puñu-naya-wa-ra-n.*
I-ACC sleep-IMPU-1OM-PST-3SG
'I felt like sleeping'

In example (42-b), the past tense morpheme *ra* must occur after the impulsative *naya*. Furthermore, the past tense morpheme modifies the impulse rather than the internal predicate *puñu* 'sleep', adhering to the mirror principal (Baker, 1985).

This indicates that the complement of the impulse head is smaller than a TP. Impulsatives in Cusco Quechua also do not select for Mood. Future and conditional morphemes must occur outside of the impulsative.

(43) a. **Noqa-ta tusu-qa-naya-wan*
I-ACC dance.FUT-IMP-1OM-3SG
'I feel like I will dance'

b. *Noqa-ta tusu-naya-wa-n-qa*
I-ACC dance-IMP-1OM-3SG-FUT
'I will feel like dancing'

In example (43-b), the third person future morpheme *nqa* occurs after the morpheme. *-naya*. However, example (43-a) is ungrammatical when the affix *qa* precedes the impulsative morpheme.

(44) a. **Noqa-ta tusu-man-naya-wa*
I-ACC dance.COND-IMPU-1OM-3SG
'I feel like I would dance'

b. *Noqa-ta tusu-naya-wa-n-man*
I-ACC dance-IMPU-1OM-3SG-COND
'I would feel like dancing'

In example (44-b), the third person future morpheme *nqa* occurs after the morpheme. *-naya*. However, example (44-a) is ungrammatical when the affix *man* precedes the impulsative morpheme.This indicates that the impulsative morpheme selects for a complement smaller than MoodP. Lastly, the impulse head does not select for AspectP.

(45) a. *Noqa-ta tusu-naya-wa-sha-n*
I-ACC dance.IMPU-1OM.-PROG-3SG
'I am feeling like dancing.'

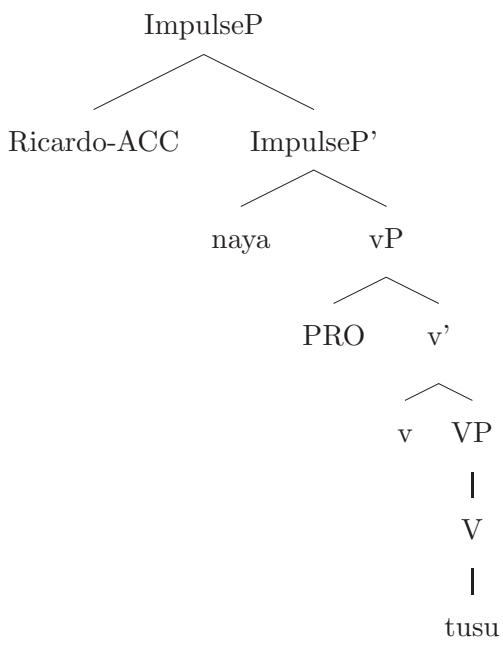
b. *tusu-naya-sha-wa-n*
dance-IMPU-PROG-1OM-3SG
'I am feeling like dancing.'

c. **Noqa-ta tusu-sha-naya-wan*
I-ACC dance-PROG-IMPU-1OM-3SG
'I am feeling like dancing.'

In examples (45-a) and (45-b), the progressive morpheme *sha* occurs after the morpheme. *-naya*. However, example (45-c) is ungrammatical when the progressive affix *sha* precedes the impulsative morpheme.

Therefore, I propose that the syntactic structure of Cusco Quechua impulsatives is that of a control or restructuring structure.

(46)



In the structure above (46), the impulse head selects for an argument, assigns it case and an experiencer theta role. In addition this argument controls the subject of the internal predicate. The impulse head has the following denotation.

(47) $[\![\textbf{Impulse}]\!] = \lambda P_{<e,vt>}\lambda x.\lambda e.\lambda w.\forall w'[w'$ is compatible with what x has an impulse to do in e in w] $\rightarrow[\exists e'$ in w'.P(x)(e')]

(48) a. $[\![\textbf{dance}]\!] = \lambda e.$ dance(e)
$[\![\textbf{v}]\!] = \lambda x\lambda e.$ Agt(e,x)
Event Identification

b. $[\![\textbf{v'}]\!] = \lambda x.\lambda e.$dance(e) & Agt(e,x)
$[\![\textbf{PRO}]\!] = \lambda x.$ g(x)
Functional Application

c. $[\![\textbf{vP}]\!] = \lambda x.\lambda e.$dance(e) & Agt(e,g(x))
$[\![\textbf{Impulse}]\!] = \lambda P_{<e,vt>}\lambda x\lambda e.\lambda w.\forall w'$ [w' is compatible with what x has an impulse in to do e in w] $\rightarrow$ [$\exists$e' in w'.P(x)(e')]
Function Application

d. $[\![\textbf{ImpulseP'}]\!] = \lambda x\lambda e.\lambda w.\forall w'$ [w' is compatible with what x has an impulse to do in e in w] $\rightarrow$ [$\exists$e' in w'.dance(e') & Agent(e',x))]

⟦**Ricardo**⟧ = Ricardo
Function Application

e. ⟦**ImpulseP**⟧ = λe.λw.$\forall$w' [w' is compatible with what Ricardo has an impulse to do in e in w] $\rightarrow$ [$\exists$e' in w' .dance(e') & Agent(e',Ricardo))]

2.6 Conclusion

The goal of this chapter was to describe the event and argument structure of impulsatives in Cusco Quechua. This will serve as a basis to which the covert impulsatives can be compared. With regards to event structure, impulsatives are intensional and quantify over possible worlds. However unlike a circumstantial modal, impulsatives introduce their own event. Furthermore, they are bi-eventive. With regards to argument structure, the impulse head introduces its own experiencer argument. However, in Cusco Quechua, the Impulse head also assigns it case, while Imbabura Quechua does not. Finally, with regards to syntactic structure, the Impulse head selects for a vP. These facts lead us to posit the denotation in (47) for the Impulse head. In the following chapters I will show that this denotation also accounts for impulsatives in Bulgarian, Albanian and Finnish.

Chapter 3

BULGARIAN

3.1 Introduction

Bulgarian is spoken by over 9 million speakers primarily in Bulgaria but also throughout the Balkan peninsula (Gordon, 2005). Bulgarian is a South Slavic language and part of the larger Indo-European language family. Bulgarian has SVO word order and is morphologically fusional. Nouns are inflected for gender and number. Verbs are inflected for person, number tense and aspect. The orthographic system of Bulgarian uses cyrillic characters. For purposes of transparency, I am following Rivero (2009), using Latin characters with diacritics like other South Slavic languages.

In this chapter, I will discuss a construction in Bulgarian which I view as a covert instantiation of the impulsatives in Cusco Quechua. The goal of this chapter is investigate the syntax and semantics of Bulgarian impulsatives. Similar constructions also exist in other South Slavic languages. Bulgarian impulsatives and their South Slavic counterparts present interesting questions about the mapping between syntax and semantics because the source of the impulsative meaning in these constructions is not obvious from the morphology and syntax.

In Bulgarian, impulsatives are composed of a dative argument, the non-active clitic *se* and the imperfective aspect.[1]

(1) *Na Ivan mu se pišeše kniga.*
P Ivan DAT.M.SG NACT write.3SG.IMPF book
'Ivan felt like writing a book.'
'A book was being written for/on Ivan.'

[1] All examples, unless otherwise stated are Bulgarian elicited from two speakers from Sofia, Bulgaria.

In example (1), the argument *Ivan* is marked with the dative preposition *na* and the verb is preceded by the non-active clitic *se*. In addition, (1) is ambiguous. One interpretation of this sentence is where a book was being written and Ivan is somehow affected. I will refer to this type of reading as the affected argument reading (Pylkkänen, 2002; Bosse, Bruening, Yamada, Peng and Cathcart, 2008).[2] The second reading is that Ivan had the desire or impulse to write a book. This is the impulsative reading. Impulsatives introduce modal semantics or intensionality because in the modal world of the impulsative, the experiencer is the external argument of the verb. All potential impulsatives are ambiguous between the affected argument and the impulsative readings. This chapter focuses on the impulsative readings. I will only address the affected argument readings when relevant.

Impulsatives in Bulgarian raise many questions. The central question is the source of the intensionality and the impulsative reading. Since there is an absence of dedicated morphology, it is unclear where the intensionality is coming from. A corollary question is: what is the structure of these constructions? How many events, arguments, functional heads like tense and aspect are in this construction? Furthermore, what licenses the experiencer argument? Finally, what role does the non-active morphology play in this construction?

While South Slavic impulsatives have long been recognized (Benedicto, 1995; Franks, 1995; Dimitrova-Vulchanova, 1999; Rivero and Sheppard, 2003; Rivero, 2004), they have recently garnered attention from two opposing accounts. The two accounts differ in two aspects in particular: the source of the intensionality and the size of the structure. The first is a biclausal account with a null psych-predicate, put forth by Marušič and Žaucer (2006), who call this construction the "feel like construction." The second is Rivero's (2009) monoclausal account involving an imperfective operator as the source of the intensionality. Rivero (2009) calls this construction the 'involuntary state construction." However, neither account fully captures the nature of impulsatives in Bulgarian. I propose a monoclausal analysis with a null impulsative element with the following semantic denotation.

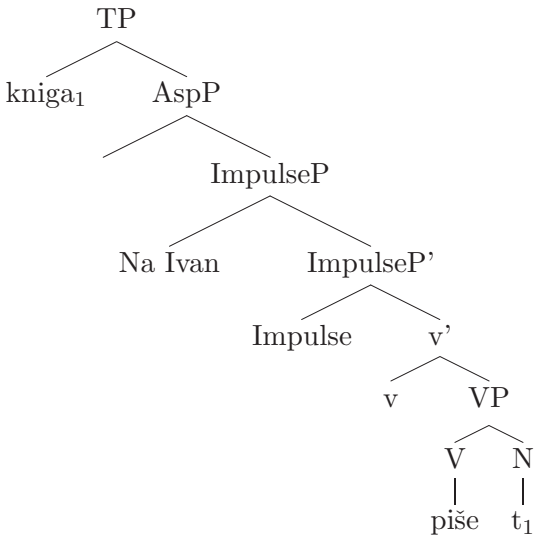
(2) $[\![\textbf{Impulse}]\!] = \lambda P_{<e,vt>}\lambda x.\lambda e.\lambda w.\forall w'[$w' is compatible with what x has an impulse to do in

[2] English translations for affected readings are not exact, for simplicity I will use 'on/for Ivan'.

e in w] →[∃e' in w'.P(x)(e')]

Semantically, the null impulse head will do several things. First, it will provide intensionality by quantifying over possible worlds. Secondly, it has an event argument. Finally, it introduces an experiencer argument and links it with the agent of the internal predicate in the modal world. Syntactically, the impulse head will license and case-mark an experiencer argument and select for an unsaturated voice projection. The structure for example (1) is shown in the tree below.

(3)



The rest of this chapter is organized as follows. The second section is dedicated to finding the source of the intensionality. I present both Marušič and Žaucer (2006)'s account with a null source and Rivero's (2009) analysis with an imperfective operator as the source of the intensionality. I conclude in favor of Marušič and Žaucer (2006) that the source of the intensionality comes from a null element. In the third section, I depart from Marušič and Žaucer (2006)'s use of a psych predicate and argue that this null element is not a desiderative/volitional verb but rather an impulsative, parallel to the construction in Cusco Quechua. I then characterize the null impulse head as introducing an argument and an event. In the fourth section, I further depart from Marušič and Žaucer (2006)'s analysis and argue that the impulsative construction is not biclausal but monoclausal. Then I present a monoclausal structure that derives the non-active morphology by using Distributive Morphology (Halle and Marantz, 1993). Finally, section five provides a full

derivation of the analysis and concludes the chapter.

3.2 The Source of the Intensionality

This section explains the paradox that impulsatives present. I discuss the morphological makeup of Bulgarian impulsatives and demonstrate why none of the overt components of the sentence directly or singularly contribute to the intensional meaning. There are two ways to solve this issue. Marušič and Žaucer (2006) motivate a null verb with a clausal complement. On the other hand, Rivero (2009) argues that there is no need to posit a null element. She argues that impulsatives are analogous to English Futurates (Copley, 2002*a*) and Spanish Imperfects (Cipria and Roberts, 2000) in that an imperfective operator provides intensionality. Nevertheless, I argue that Marušič and Žaucer (2006)'s position must be upheld in that the intensionality of impulsatives in Bulgarian cannot be derived from the components of the construction and that there must be a null element contributing the intensionality and impulsative meaning.

3.2.1 Morphological Makeup of Impulsatives

The mapping of the syntax to the semantics is problematic in impulsatives because the morphological and syntactic components do not singularly introduce modal semantics, while the impulsative construction as a whole does. The morphological makeup of impulsatives appears to have three obligatory elements: non-active morphology, a dative argument, and imperfective aspect. All elements can be used in constructions distinct from that of the impulsative. Moreover, all of these constructions are non-intensional. However, if a sentence is missing any of the three components the impulsative reading cannot be achieved.

Impulsatives in Bulgarian create intensional contexts. One test for intensionality is ability to be true with a non-referring term (Larson, 2002). If there is no intensional context a sentence is false if a term is non-referring, i.e. doesn't exist. However, if there is an intensional context, then the sentence is possible true.

(4) *Pro sreshtnah ednorog.*
1SG meet.PAST unicorn
'I met a unicorn'

(5) *Na mene mi se pokanva ednorog.*
P me.DAT DAT SE invite.3SG unicorn
'I felt like inviting a unicorn.'

Example (4) is false because unicorns do not exist. However, (5) could be true, despite the fact that unicorns do not exist. In intensional context one could posit a possible world where unicorns do exist. Therefore, example (5) creates an intensional context. This is surprising since none of the elements contributes this intensionality.

The first component of Bulgarian impulsatives is the clitic *se*. This is traditionally known as a reflexive clitic (Franks and King, 2000) however it has other uses as well, including passive and unaccusative. Because of its use with arguments that lack an external argument I will follow the use in the Albanian and Greek grammars of the term non-active morphology.

(6) *Knigata se pisa.*
book.the NACT write.AOR.3SG
'The book was written.'

(7) *Ivan se poyavi.*
Ivan NACT appear.AOR.3SG
'Ivan appeared.'

(8) *Ivan se mie.*
Ivan NACT wash.3SG.PR
'Ivan washes himself.'

In example (6), the non-active clitic *se* makes the sentence a passive. Example (7) is an example of an unaccusative verb in Bulgarian. Example (8) is a verb that can be made reflexive by the addition of the non-active clitic. None of these examples (6)-(8) are intensional.

Dative arguments in Bulgarian can also occur in multiple constructions. In addition to occurring in ditransitive constructions, dative arguments can also appear as subjects of psych predicates and as affected arguments in applicative constructions (Pylkkänen, 2002).

(9) *Petar dade knigata na Ivan.*
Petar give.3SG.AOR book.the P Ivan
'Peter gave the book to Ivan.'

(10) *Na Ivan mu se privižhdat tezi momičeta.*
P Ivan DAT.M.SG NACT imagine.3PL these girls.the
'Ivan has a vision of these girls.'

(11) *Joana mu pišeše mnogo statii na Ivan.*
Joana DAT.M.SG write.3SG.IMPF many articles P Ivan
'Joana was writing many articles on/for Ivan.'

In example (9), the dative argument functions as the second argument in a ditransitive, while it serves as the subject of a psych predicate in example (10). Finally, in example (11) the dative argument can take a number of affected roles in applicative constructions. Affected roles include benefactive: 'Joana dedicated many articles to Ivan'; malefactive: 'Joana was stealing Ivan's ideas'; or by proxy: 'Joana was writing the articles so that Ivan didn't have to.' While (11) can be interpreted many ways, none of these interpretations are intensional. Furthermore, neither (9) and (10) are intensional.

The imperfective morphology in Bulgarian is fused with past tense morphology. This is often referred to as the imperfect form. The imperfect form in Bulgarian can be habitual, progressive or iterative.

(12) *Joana pišeše (vseki den).*
Joana write.3SG.IMPF every day
'Joana was writing (every day).'

In (12), the imperfective morphology allows the sentence to have various imperfective readings. It can be used as the past progressive in the context where Joana was writing when the phone rang. It can also have habitual or iterative readings that are more salient when adverbial phrases such as *vseki den* 'every day' is added or understood. These readings are not intensional, however there is one possible intensional reading of the imperfect in Bulgarian, this is the futurate reading (Rivero, 2009).

(13) *Dnes (po plan) izbuxvaše stačkata.*
today (per plan) start.Imp.3Sg strike.the
'According to plans, the strike was breaking out today.'

Example (13) can have the reading that a strike will break out, this is the futurate reading. In this sense, the imperfect in Bulgarian can create intensional contexts, however I will show that the imperfect in Bulgarian impulsatives is ultimately unnecessarily and that the imperfect cannot be the source of intensionality in impulsatives.

Thus, dative arguments, non-active and imperfective morphology in non-impulsative contexts perform specific functions in Bulgarian. In their primary roles, they do not introduce any intensionality. Examples (6)-(12) do not have any intensionality. Since these morphological components do not inherently supply intensionality, the source of the intensionality in impulsatives is a mystery. While none of the morphological components alone can create an impulsative, the impulsative reading cannot be attained without these crucial ingredients. It appears that if any one of these components is absent, the impulsative reading will not be achieved. Later, I will argue that while non-active morphology and dative arguments are indeed obligatory, imperfective morphology is not.

Non-active morphology is obligatory in impulsatives. If a sentence is active, the impulsative reading is not available.

(14) *Na Ivan mu pišeše mnogo statii.*
P Ivan pro DAT.M.SG write.3SG.IMPF many articles
'He/She was writing many articles on/for Ivan.'

Example (14) is an active sentence with a dative argument and imperfective aspect. It does not have the impulsative meaning, but rather a distinct affected argument reading.

Additionally, dative arguments are required in impulsatives. Without the dative argument, the sentence is interpreted as a passive.

(15) *Knigata se pišeše.*
book.the NACT write.AOR.3SG
'The book was being written.'

Example (15) is a non-active sentence with imperfective aspect, but lacking a dative argument. This sentence also does not receive an impulsative reading, but rather is interpreted like a

passive.

Lastly, there appears to be an aspectual restriction. In the past tense, impulsatives must be imperfect. In the aorist tense, the impulsative reading disappears:

(16) *Na Ivan mu se pisa pismoto.*
P Ivan DAT.M.SG NACT write.AOR.3SG letter.the
'They/ people wrote the letter for Ivan.'
∗'Ivan felt like writing the letter.'

Example (16) is in the simple aorist tense, the other morphological past tense in Bulgarian. Though there is both non-active morphology and a dative argument, there is no impulsative meaning. Examples (14)-(16) indicate that all three ingredients are necessary to create the impulsative construction.

While the impulsative meaning cannot be attributed to any of its parts, the impulsative construction is contingent on their presence. The apparent lack of compositionality drives at the central questions concerning impulsative constructions. As initially discussed, the source of the intensionality remains to be explained. Additionally, the requirement of each morphological component in impulsatives, must also be explained.

3.2.2 An Account with a Null Verb

Marušič and Žaucer (2006) propose a biclausal analysis of impulsatives in the South Slavic Languages that involves positing a phonologically null psychological predicate. They compare impulsatives in Slovenian to psych predicates that are nearly synonymous and argue that the structures are the same.

Slovenian

(17) *Gabru se pleše.*
Gaber.DAT SE dance3P.SG
'Gaber feels like dancing.'
(Marušič and Žaucer, 2006, Ex 2)

(18) *Gabru se lušta plesati.*
Gaber.DAT SE desire3P.SG dance.INF

'Gaber feels like dancing.'
(Marušič and Žaucer, 2006, Ex 3)

Marušič and Žaucer argue that Slovenian impulsatives are biclausal because they are not subject to restrictions that monoclausal constructions are. One, in particular, is temporal adverbial modification. Biclausal sentences can have two conflicting time adverbs without bringing about a temporal clash.

(19) *Včeraj se mi ni šlo jutri domov.*
yesterday SE DAT AUX.NEG.PST go tomorrow home
'Yesterday, I didn't feel like going home tomorrow.'
(Marušič and Žaucer, 2006, Example 13)

In example (19), *včerai* 'yesterday' modifies the 'feel like' event while *domov* 'tomorrow' modifies the 'going home' event. On the other hand, non-agreeing adverbs are impossible in ordinary monoclausal constructions (McCawley, 1979).

(20) ∗Tomorrow, Jim will play basketball in two weeks.
(Marušič and Žaucer, 2006, Example 8)

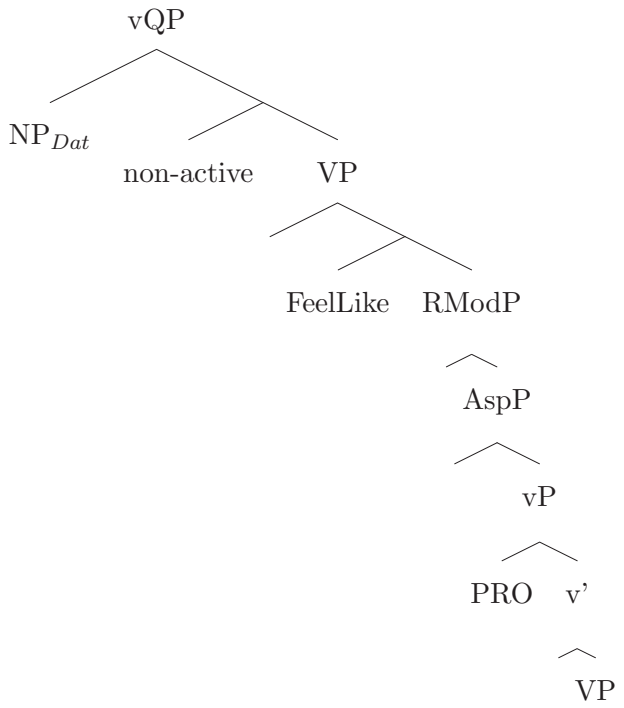
However, many (Ross, 1976; Partee, 1974; McCawley, 1979; Dowty, 1979; den Dikken, 1996; Larson and Ludlow, 1997) have noted that some apparently monoclausal constructions can support two conflicting time adverbs.

(21) Tomorrow, Jim will want a new bike in two weeks.
(Marušič and Žaucer, 2006, Example 7)

While it appears that example (21) only has one predicate, this cannot be true. If it did only have one predicate, it would behave like the monoclausal example (20), and not be able to support two conflicting adverbs. Larson and Ludlow (1997) argue that this is one indication that intensional verbs like *want* always take complement clauses rather than a direct object. This makes the structure biclausal. Because of this and other facts, such as selectional restrictions, binding

effects, and ellipsis, Larson and Ludlow (1997) propose that intensional verbs actually take a null *have* when it appears that they are taking only a direct object. It is therefore the case that only biclausal constructions allow conflicting time adverbs. On the basis of this and related arguments such as conflicting manner adverbials and depictive secondary predicates, which are also limited to biclausal structures, Marušič and Žaucer conclude that Slovenian impulsatives have a biclausal structure and that they also involve a phonologically null verb. The following is the structure they propose for Slovenian impulsatives.

(22)



In the structure in (22), the non-active vP, labelled "vQP"(Boeckx, 2003), selects for the 'feel like' predicate, the source of intensionality and the impulsative reading. It, in turn, selects a clausal complement with both mood and aspect and an internal subject filled by PRO. Note that it is almost a full clause, except for the lack of tense.

This tree is intended to account for impulsatives in Slovenian. Murašič and Žaucer note that certain facts make Bulgarian different from Slovenian, notably with regards to an aspectual restriction. Murašič and Žaucer provide a typology of differences among impulsatives in the South Slavic languages. They claim that the differences stem from the category that the 'feel like' predicate

selects. In Bulgarian, the 'feel like' predicate selects for a deficient clause no bigger than vQP rather than R-ModP. Without an aspect projection to determine aspect, the default option which in Slavic is imperfective (Orešnik, 1994) is chosen. Aside from this difference, Bulgarian and Slovenian impulsatives are identical, according to Murašič and Žaucer.

3.2.3 Impulsatives without a Syntactic Head

In contrast, Rivero (2009) argues for a monoclausal analysis with no covert verb. Rivero derives the intensionality in impulsatives from an imperfective operator. She argues that impulsatives in Bulgarian and Slovenian are analogous to English futurates and Spanish Imperfects. English futurates and Spanish imperfects have a particular intensional reading brought about by the use of imperfective or progressive morphology. These readings exist in addition to the conventional reading that the morphology provides. While it is understood that in most contexts, present progressives in English mean that something is happening now, they can also have a futurate meaning. Contrast the following sentences:

(23) a. The movie is playing.
b. The movie is playing at 7.

In example (23-a), the progressive is used to indicate that the movie has already started and is currently playing. The time of the utterance is located within the progression of the movie playing event. This contrasts with example (23-b), where the playing event cannot happen at the time of the utterance, because there is a later time adverbial *at 7*. Instead, the progressive morphology indicates a planned future event, in which it is understood that the movie is going to start at 7. This is the futurate reading of the English progressive.

Under Copley's (2002) analysis, English futurates are understood as plans. These plans have directors. The directors are usually the subjects of the clause and are often understood as both the 'planners' of the planning event and external argument of the internal predicate. The planner could also be a third party such as the manager of the movie theatre in (23-b). Despite being monoclausal, English futurates (Copley, 2002*b*) and Spanish imperfects (Cipria and Roberts,

2000) can support two conflicting time adverbs without leading to a contradiction.

(24) For two weeks, the Red Sox were playing the Yankees tomorrow.
(Copley, 2002*b*, Example 1a)

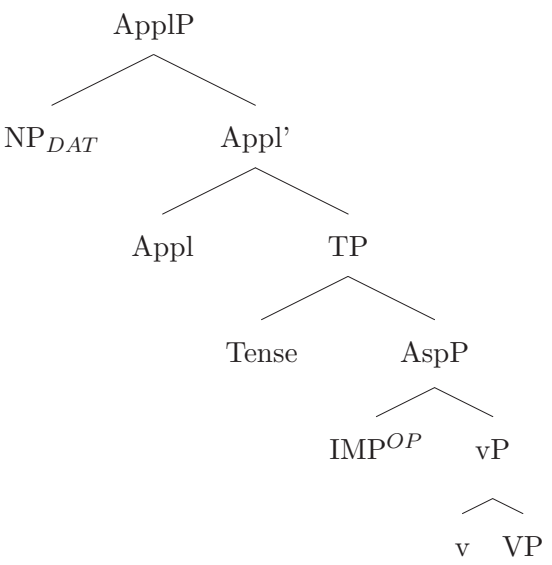
(25) *Durante dos semanas, el equipo jugaba mañana.*
for two weeks the team play.IMPF.3SG tomorrow
'For two weeks, the team was playing tomorrow.'
(Rivero, 2009, Example 5)

In example (3), 'for two weeks' modifies the plan to play and the day of the actual playing is to occur 'tomorrow'. Rivero argues that it is not necessary that impulsatives be biclausal, since English futurates are apparently monoclausal and can support conflicting adverbs.

Moreover, Rivero claims that an imperfective operator is the source of the intensionality in impulsatives in South Slavic, analogous to English futurates. However, in impulsatives the "subject" is a dative argument rather than a nominative argument as in English futurates. Rivero argues that oblique or quirky subjects with dative case cannot function as directors, unlike nominatives in English futurates. Under Rivero's analysis, the dative argument is introduced by a high applicative head (Pylkkänen, 2002). The high applicative phrase is above the TP, which makes it a topic position. Rivero further argues that an argument in the topic position is in the contextual background and therefore cannot be a director. Hence, the dative argument would not be understood as a 'planner' the way the nominative argument is in English futurates.[3] Instead, the dative argument would identify the person with the relevant desire for the main predicate. Her structure is provided below.

[3] This seems to conflict with Copley's analysis, since directors can be a third party as in (23-b). The manager of the movie theatre can only be understood from the contextual background.

(26)



By deriving the intensionality from the Imperfective Operator (IMP^{OP}) in the head of Aspect, Rivero is able to provide a monoclausal structure for South Slavic impulsatives. By placing the dative argument in the specifier of a high applicative she is able to differentiate between the futurate and impulsative constructions and explain why they receive different interpretations. In addition, the high applicative head licenses the dative argument. By these means, Rivero is able to achieve an impulsative construction without having to posit a null source for the intensionality.

3.2.4 IMP^{OP} is Not the Source of Intensionality

In this section, I will argue that an imperfect operator is not the source of intensionality in Bulgarian Impulsatives. Marušič and Žaucer (2010) argue that the parallel between the futurate and the impulsative is problematic. I provide additional evidence showing that the IMP^{OP} is neither necessary or sufficient to account for the intensionality in impulsatives. Finally, an argument from a cross-linguistic standpoint, I demonstrate that IMP^{OP} cannot be the source of intensionality in either Slovenian or Albanian.

The first argument that Marušič and Žaucer (2010) put forth against Rivero (2009)'s analysis. is to say that oblique arguments do not block futurate readings or necessarily create an impulsative reading. Rivero's analysis creates a dichotomy between futurate and impulsative readings. Futurates are sentences with the imperfective operator and a nominative object which serves

as the director of the intended plan. On the other hand, impulsatives are sentences with imperfective operator and oblique argument. She argues that the oblique argument can not be the director of the intended plan because oblique arguments are incompatible with control. This dichotomy is tenuous firstly because futurates can have directors that are not supplied by the nominative argument. Additionally, (Marušič and Žaucer, 2010) point out that imperfective sentences with dative subjects do not necessarily yield impulsative readings.

(27) ?*Danes je Petru jutri mraz. (Slovenian)*
today aux Peter.DAT tomorrow cold
'Today it seems that Peter will be cold tomorrow.'
(Impossible: 'Today Peter feels like being cold tomorrow.')

(28) ?*Včeraj je bilo Petru jutri še mraz. (Slovenian)*
yesterday aux been Peter.DAT tomorrow still cold
'Yesterday it seemed that Peter would still be cold tomorrow.'
(Impossible: 'Yesterday Peter felt like still being cold tomorrow.')
(Marušič and Žaucer, 2010, Examples 6 and 7)

Examples (27) and (28) are marginally acceptable as futurates but cannot have impulsative readings. Rivero's analysis predicts not only should the futurate reading be completely blocked but she also predicts that the impulsative reading should available. Neither of these predictions is correct. This is also true of Bulgarian.

(29) *Na Ivan mu (se) xaresvat tezi momicheta.*
P Ivan DAT.M.SG (NACT) like.3PL these girls.the
'Ivan likes these girls.'

(30) *Na Ivan mu se privizhdat tezi momicheta.*
P Ivan DAT.M.SG NACT imagine.3PL these girls.the
'Ivan has a vision of these girls.'

Despite having a dative argument and present tense, which Rivero claims involves the IMP^{OP}, examples (29) and (30) do not have impulsative readings. Both involve stative predicates with experiencer dative arguments, but the readings are distinct for that of the impulsative.

Furthermore, Marušič and Žaucer (2010) point out that impulsatives can also receive futurate readings.

(31) *Včeraj se mi danes še ni šlo v hribe.* *(Slovenian)*
yesterday refl I.dat today still not go to mountains
'Yesterday, it did not seem that I would be in the mood today for going to the mountains.'
(Marušič and Žaucer, 2010, Example 8)

(32) *Vchera na Ivan mu se vryshtashe v Sofia utre.* *(Bulgarian)*
yesterday to Ivan he.DAT REFL go-back.PAST in Sofia tomorrow
'Yesterday, it did not seem that Ivan would feel like going back to Sofia tomorrow.'

Example (31) and (32) are futurates of impulsatives. Under Rivero's analysis this should be impossible since both readings stem from the same IMP^{OP}, it can only provide one sense of intensionality, it would be impossible for it to simultaneously supply both.

Moreover, futurate readings are not uniformly available wherever impulsative readings are. Under Rivero's analysis, the imperfective operator can yield either the futurate reading or the impulsative reading depending on the case of the noun. If the subject is nominative, then the sentence can have a futurate reading.

(33) *Dnes (po plan) izbuxvaše stačkata.*
today (per plan) start.Imp.3Sg strike.the
'According to plans, the strike was breaking out today.'

Rivero argues that the availability of the impulsative reading indicates that the imperfective operator is present. In addition to the imperfect past, Bulgarian also has a number of prefixes and suffixes that can change the aspect or telicity of an event. In particular, Rivero claims that a verb with the imperfective suffix *-va* is an instantiation of the imperfective operator, because the impulsative reading is available even if the verb is in the aorist tense. If this is the case, a futurate meaning should be available when the subject receives nominative case. However, this prediction is not borne out.

(34) *Na Ivan mu se na-pis-va-xa mnogo statii.*
P Ivan 3SG.DAT REFL PF-write-VA-AOR.3Pl many articles
'Ivan felt like writing up many articles.'
(Rivero, 2009, Ex 44)

(35) **Dnes po plan Ivan napisva mnogo statii.*
Today per plan, Ivan PF-write.VA.AOR.3SG many articles
'According to plan, Ivan is writing many articles.'

While in example (34) the impulsative reading is available with the imperfective affix *-va*, example (35) does not have the intended futurate reading with the same suffix. This suggests that the imperfective suffix *-va* isn't an instantiation of the imperfective operator that provides intensionality in futurates[4]. Without IMP_{OP} in this construction, the availability of the impulsative reading is unexplained.

Another indication that the imperfective operator is not involved in Bulgarian impulsatives comes from the periphrastic perfect. The periphrastic perfect entails a telic event (Anagnostopoulou, Iatridou and I 1998), as illustrated in (36).

(36) *Na Maria i se e pisalo.*
P Maria DAT.F.SG NACT has write.3SG.AOR.EV.N
'Maria had felt like writing.'

In example (36), we see that the impulsative reading exists, not only without imperfective morphology but with both the aorist tense and perfect morphology. Hence, an imperfective operator is not present in the sentence. This demonstrates that it is not necessary to have an imperfective operator to achieve an intensional impulsative reading, contrary to Rivero's account.

Furthermore, when the perfect is combined with the imperfective, the impulsative reading disappears.

(37) *Na Maria i se e pišelo.*
P Maria DAT.F.SG NACT has write.3SG.EV.N

[4] That is not to say that the suffix is not imperfective

'Something has been being written for Maria.
∗'Maria had been feeling like writing.'

Example (37) has imperfective morphology and a dative argument. Therefore, Rivero's analysis would predict this sentence to have an impulsative interpretation. However, that meaning is unavailable, and it can only be interpreted as a passive with an affected argument. Thus, the imperfective operator does not always induce the impulsative meaning when it is present. If the imperfective operator were providing the intensionality in impulsatives, example (37) should have an impulsative meaning. Nevertheless, it does not. Therefore, an imperfective operator is not sufficient to capture all the impulsatives in Bulgarian.

To summarize, the facts about the aspectual restriction on impulsatives in Bulgarian are not clear. On the one hand, an impulsative reading cannot be attained when a verb is in the simple aorist past with no other aspectual prefixes, making it appear that imperfective aspect is necessary. On the other hand, in the periphrastic perfect form, impulsative readings can only be achieved with aorist tense and disappear with the imperfect form. Therefore, an imperfective operator cannot be used to supply the intensionality in impulsatives. The restriction cannot be solely attributed to the Aspect head. Unfortunately, I do not have an explanation for this contradictory pattern, but it is clear that an imperfective operator cannot characterize it.

Finally, cross-linguistically, the imperfective is not a crucial component in impulsatives. Albanian impulsatives are very similar to Bulgarian impulsatives. They both have dative arguments and non-active morphology. However, Albanian impulsatives do not require impulsatives to be imperfective. [5]

(38) *Një mollë* *m'u* *hëng.*
A apple.INDEF.NOM DAT.1SG eat.NACT.AOR.3SG
'I felt like eating an apple.'

(39) *Një mollë* *më* *hahej*
A apple.INDEF.NOM DAT.1SG eat.NACT.3SG.IMPF.

[5] Kallulli (2006*a*) has some examples where the imperfective is necessary to achieve the impulsative meaning, however my informants did not agree with these judgments.

'I was feeling like eating an apple.'

Examples (38) and (39) show that in Albanian, impulsatives can appear with both the imperfective and perfective past tenses. This indicates that, for Albanian, the imperfective is not obligatory in impulsatives. Even if Bulgarian impulsative relied on an imperfective operator for their intensionality, the intensionality in Albanian would still be unexplained.

In addition, Slovenian impulsatives can also appear in the perfect tense (Marušič and Žaucer, 2010).

(40) *Jutr odpotujem v Potsdam. (Slovenian)*
tomorrow departPF to Potsdam
'I leave for Potsdam tomorrow.'

I conclude that the imperfective operator is not the source of intensionality in Bulgarian impulsatives. I have shown various instances where the impulsative reading can be obtained where the sentence does not have an imperfect operator that contributes intensionality. Hence, an imperfective operator is not necessary in Bulgarian impulsatives. Furthermore, I showed an example where there is an imperfective operator, however no impulsative reading exists. Therefore, an imperfective operator is not sufficient. Finally, data from Albanian and Slovenian impulsatives indicate that the imperfective is not an obligatory component of impulsatives cross-linguistically, and therefore could not be the source of the intensionality for impulsatives in either language.

3.2.5 There Must be a Null Element

Bulgarian impulsatives must contain a null element. I have shown that no overt component can be responsible for the intensionality of impulsatives. I have also shown that Rivero's analysis, which attempted to derive intensionality from the imperfective operator, fell short of predicting when an impulsative reading is available. Hence, it appears that there is nothing that can explain the intensionality or the experiencer argument in impulsatives.

This leaves two possibilities; recognizing a construction as a grammatical formative or a positing a null element. Currently in the generativist framework, constructions are unnecessary. Null elements, on the other hand, are common and unavoidable. There are well established null

elements such as little *pro* (Chomsky, 1981, 1982; Rizzi, 1986). Marušič and Žaucer were the first to propose the existence of a null element in impulsatives on the basis of, among other things, conflicting adverbs. Adverbs are event properties of type <s,*t* > and combine with event properties via Predicate Modification. That is, they adjoin to nodes of type <s,t> (Parsons, 1990; Landman, 2000). Consequently, in order for an adverb to modify the 'feeling' event, there must be a node that introduces the 'feeling' event. I agree with Marušič and Žaucer that there is such a node in impulsatives, and that nothing overt in the sentence could possibly be the node that introduces such an event. Therefore, the node must be null.

Furthermore, this null element must be intensional, introduce an event and an experiencer argument and assign the latter case. Incidentally, these are the properties attributed to the overt Impulse head in Cusco Quechua. The existence of an overt Impulse head in Cusco Quechua provides motivation to posit it covertly for languages like Bulgarian. In the following section, I will show that the Bulgarian constructionis an impulsative.

3.3 What is the Null Element?

In this section, I discuss the nature of the null element. First, I argue that it is different from a desiderative/volitional verb. Instead, I demonstrate that the construction in Bulgarian is similar to the impulsatives in Cusco Quechua. Then I demonstrate that the impulse head introduces an experiencer argument and assigns it case an additional event. By positing a null head these properties of impulsatives fall out straightforwardly.

3.3.1 The element is not a 'want' type verb, but an Impulse head

Marušič and Žaucer consider the null verb a desire/volitional predicate, class 3 under Belletti and Rizzi's (1988) classification of psych predicates. However, as stated in the introduction, impulsatives are not volitional. In the following I demonstrate why the Bulgarian construction is more like the Quechua impulsative than a volitional predicate.

(41) *Na Ivan mu se pišeše kniga.*
P Ivan DAT.M.SG NACT write.3SG.IMPF book
'Ivan felt like writing a book.'

First, its subject is non-volitional. Impulsatives are always translated with non-volitional meanings such as 'feel like' or 'have an urge to'. The feeling is often described as a yearning, an urge or an impulse. In addition, speakers say the most salient context for impulsatives are verbs that describe bodily functions, such as 'pee', 'vomit', 'cough,' 'yawn', and 'sleep'.

(42) *Na Ivan mu se spi.*
P Ivan DAT.M.SG NACT sleep.PR.3SG
'Ivan feels like sleeping.'
'Ivan is sleepy.'

Example (42) is salient in a context where Ivan is tired even though he may not want to sleep. For instance, it may be New Year's Eve and Ivan wants to be awake at midnight but is very tired. However, this sentence cannot be used when what Ivan wants is not what he is feeling. The sentence cannot be used in a context where Ivan has a busy day the next day and wants to get a good night's rest but cannot fall asleep.

Subjects of volitional desiderative predicates, on the other hand, are volitional as in (43).

(43) *Ivan iska da spi.*
Ivan want.3SG COMP sleep.PR.3SG
'Ivan wants to sleep.'

Example (43) cannot be used in the same contexts as (42). It infelicitous to say (43) when one is tired on New Year's eve. On the other hand, it is natural to say this sentence when one cannot fall asleep but wants to be rested for the next day. Whereas example (42) referred to the uncontrollable urge to sleep despite ones's desires, (43) refers to one's desire to sleep despite one's ability to sleep. Consequently there is a semantic difference between impulsatives and desideratives, namely impulsatives are not volitional while desideratives necessarily are.

A second difference between impulsatives and volitional desideratives is that subjects of impulsatives are marked with an oblique case, not the nominative that characterizes subjects generally. In the impulsative in example (41), the subject has dative case. In contrast, in the desiderative example in (43) the subject has nominative case.

Furthermore, the subject in impulsatives also fails to agree with the verb. The verb instead agrees with the logical object as in example (44).

(44) *Na Ivan mu se pišexa mnogo statii.*
P Ivan DAT.M.SG NACT write.3PL many articles.
'Ivan feels like writing many articles.'

In example (44), the verb *pišexa* 'write' carries third person plural agreement, despite the fact that the dative subject has is singular. The plural argument in the sentence is the object *mnogo stattii* 'many articles'.

In contrast, volitional desideratives do not affect agreement. The verb agrees with the subject of the volitional desiderative.

(45) *Ti ishkashe da me pokanyish.*
You.nom want to me invite.2sg
'You want to invite me.'

To summarize, the construction in Bulgarian differs from volitional desideratives both semantically and syntactically. Semantically, Bulgarian impulsatives are not volitional and are frequent with verbs associated with urges rather than volitional desire. Syntactically, subjects in Bulgarian impulsatives have oblique case, while volitional desideratives assign nominative case. Lastly, verbs in impulsatives do not agree with their subjects, while verbs in volitional desideratives do.

3.3.2 Properties of Impulsatives

In this section, I describe the event and argument structure of impulsatives in Bulgarian. First, impulsatives introduce an experiencer argument. The dative argument in impulsatives is the experiencer of the feeling event introduced by the impulse head. The impulse head introduces this argument so that it can assign it the experiencer theta role of the feeling event. In addition, it assigns it dative case. Dative case is the case for experiencers in Bulgarian.

(46) *Na Ivan mu (se) xaresvat tezi momicheta.*
P Ivan DAT.M.SG (NACT) like.3PL these girls.the
'Ivan likes these girls.'

(47) *Na Ivan mu se privizhdat tezi momicheta.*
P Ivan DAT.M.SG NACT imagine.3PL these girls.the
'Ivan has a vision of these girls.'

In example (46) and (47) the verbs *xaresvat*, 'like' and *privizhdat*, 'have a vision', take a dative subject because that argument receives an experiencer theta role. Furthermore, dative case is assigned inherently. Evidence of this is base on raising data.

(48) *Na Ivan mu se zapochva da kiha.*
P Ivan DAT DAT.M.SG NACT begin.3SG SUBJ sneeze.INF
'Ivan begins to feel like sneezing.'

In example (48), the dative case is retained on the subject *Ivan* despite the fact that it is now subject of the verb *zapochva* 'begin'. This indicates that the case assigned on the subjects of impulsatives is inherent rather than structural.By proposing that the impulse head introduces an external argument and assigns it dative case, we resolve the issue of case and theta role assignment.

Secondly, Bulgarian impulsatives introduce an event. Evidence of the presupposition generated by the adverb 'again'. Modals are not predicate over events, instead they have an event variable in the accessibility relation (Hacquard, 2006). As a result, modals in Bulgarian do not generate a presupposition when they occur with the adverb 'again', only the embedded predicate generates a presupposition. Impulsatives in Bulgarian, on the other hand, do generate a presupposition with the adverb 'again'.

(49) *As bix rabotil otnovo.*
I.NOM may.1SG work.EV.M again
'I might work again.'

The example in (49) only has one possible presupposition: that I have worked before. It does not presuppose that there was a possibility of working before (and I didn't work). This is because the modal *bix* 'might' does not introduce an eventuality. Only the verb *raboti*, 'work', does. This

contrasts with the impulsative, which does create ambiguities with the adverb 'again', as in example (50).

(50) *Na Ivan mu se pišeše kniga otnovo.*
P Ivan DAT.M.SG NACT write.3SG.IMPF book again
'Ivan felt like writing a book again.'

The example in (50) can have two possible presuppositions. The first scopes over the impulsative predicate, giving the presupposition that Ivan had the urge to write before, but may not have ever written. The second presupposition scopes over the internal predicate 'writing a book.' Ivan may have just completed his first book begrudgingly. However, now that it is done, he feels the urge 'write a book again.' This indicates that the impulse head is not a modal, because unlike modals, impulsatives can have more than one presupposition with the adverb 'again'. Thus, I conclude that the null impulsative element introduces an event. In addition, impulsatives in Bulgarian introduce and assign case to an external argument.

3.3.3 Summary

Bulgarian impulsatives are not prototypical volitional/desiderative predicates. In this section, I argue instead that this is the covert instantiation of the Quechua impulsative. Furthermore, the null impulse head introduces an event and an external argument which it assigns case.

3.4 Are Impulsatives Biclausal or Monoclausal?

Thus far, the analysis I have put forth for impulsatives in Bulgarian contains a null impulse head that introduces both an event and an argument. What remains to be determined is the nature of the structure of impulsatives. Namely, I must weigh in on the debate whether impulsatives are monoclausal or biclausal. While I have followed Marušič and Žaucer (2006) in having a null predicate, I depart from their analysis with regards to biclausality. In particular, I demonstrate that Bulgarian impulsatives are not parallel to their periphrastic biclausal counterparts. I derive the monoclausal structure by proposing that the impulsative predicate selects for an unsaturated Voice projection. The monoclausal account explains the differences between periphrastic biclausal

impulsatives and covert impulsatives in Bulgarian. Additionally, this accounts for the non-active morphology that is a characteristic of Bulgarian impulsatives.

3.4.1 Impulsatives are Not Biclausal

In this section, I show that impulsatives in Bulgarian are not biclausal. Marušič and Žaucer propose that the structures of Slovenian periphrastic impulsatives and covert impulsatives are parallel. However the difference between the two constructions would be that the Slovenian covert impulsative involves a near-synonymous phonologically null verb. Bulgarian, like Slovenian has both covert impulsatives and overt periphrastic counterparts. Examples (51) and (52) are Bulgarian counterparts to the Slovenian examples (17) and (18) introduced in the prior section.

(51) *Na Ivan mu se pišeše kniga.*
P Ivan DAT.M.SG NACT write.3SG.IMPF book
'Ivan felt like writing a book.'

(52) *Na Ivan mu se šteše da piše kniga.*
P Ivan DAT.M.SG NACT want.IMPF.3SG COMP write.3SG. book
'Ivan felt like writing a book.'

I will demonstrate that in Bulgarian, periphrastic impulsatives and covert impulsatives do not have parallel structures.[6] Furthermore, some of the differences reveal that covert impulsatives have a smaller complement and others can be explained by the monoclausal account I provide in the following section.

While periphrastic impulsatives in Bulgarian are fully biclausal, covert impulsatives in Bulgarian are not. Periphrastic impulsatives have accusative objects, can have reflexive objects, overt subjects, and passivized lower clauses, whereas covert impulsatives cannot. All of these facts indicate that rather than having the same structure, covert impulsatives instead have a different, smaller structure than periphrastic impulsatives.

[6] However, Slovenian impulsatives may be best analyzed as biclausal. Murašič and Žaucer give an example of modal ambiguity that indicates that the structure has at least two modal projections. This suggests that the structure for Slovenian impulsatives is biclausal. My informants were unable to give me clear judgements on comparable examples in Bulgarian.

The first difference between periphrastic impulsatives and covert impulsatives is that covert impulsatives cannot have an overt subject. Bulgarian does not have control sentences where an overt subject is disallowed: biclausal constructions always allow overt embedded subjects.

(53) *Na Ivan mu se šteše* **toj** *da gi pregərne.*
P Ivan DAT.M.SG NACT will.IMP he SUBJ them hug.3SG
'Ivan feels like hugging them.'

(54) *Na Ivan mu se* ***toj** *pregəšta.*
P Ivan DAT.M.SG NACT he hug.IMPF.3SG
'Ivan feels like hugging them.'

In example (53), the pronoun *toy* can be the subject of the embedded clause. However, in example (54), the addition of the pronoun makes the sentence ungrammatical. The ability to have overt subject suggests that the complement of periphrastic impulsatives has a TP projection. Moreover, the inability to have an overt subject in the complement clause indicates that covert impulsatives have a complement smaller than TP.

Furthermore, periphrastic impulsatives must have a subjunctive marker as in (56) while covert impulsatives in Bulgarian cannot.

(55) *Na Ivan (*da) mu se pišeše kniga.*
P Ivan SUBJ DAT.M.3SG SUBJ NACT write.3SG.IMPF book
'Ivan felt like writing a book.'

Example (55) is ungrammatical with the presence of the subjunctive marker. The subjunctive marker in (53) appears after the complement subject. This indicates that the subjunctive marker is the head of a mood phrase that sits below TP (Stjepanovic, 2004; Tomic, 2004). This is further evidence that covert impulsatives must have a complement smaller than a TP.

In addition, covert Bulgarian impulsatives cannot have a passive embedded clause, while periphrastic impulsatives can. If covert impulsatives were bi-clausal, they would have two voice projections and the embedded clause should be able to have the passive voice.

(56) *Na Ivan mu se šteše da bude pregurnat.*
P Ivan DAT.M.SG NACT will.IMP SUBJ be.3SG hug.PART

'Ivan wanted to be hugged.'

(57) **Na Ivan mu se da bude pregurnat.*
P Ivan DAT.M.SG NACT SUBJ be.3SG hug.PART
'Ivan felt like being hugged.'

In example, (56), the periphrastic impulsative allows the lower clause to be passivized, however the covert counterpart in (57) is ungrammatical. This suggests that there is only one voice projection. If there is only one voice projection, then the structure must be smaller than the biclausal structure Murašič and Žaucer propose. This indicates that the structure is actually monoclausal.

There are two more differences between periphrastic and covert impulsatives both dealing with the thematic object that do not straightforwardly indicate a monoclausal structure. However, I will return to these differences when I introduce my monoclausal analysis and show that they fall out of the analysis I provide. First, unlike periphrastic impulsatives, covert impulsatives assign nominative case to their logical object.

(58) *Na Ivan mu se šteše da *(gi) piše (*te).*
P Ivan DAT.M.SG NACT will.IMP SUBJ ACC.3PL write.3SG (them.NOM)
'Ivan felt like writing them.'

(59) *Na Ivan mu se (*gi) pišexa te.*
P Ivan DAT.M.SG NACT (ACC.3PL) write.3PL them.NOM
'Ivan felt like writing them.'

In example (59), the periphrastic impulsative is ungrammatical with a nominative object, but it's covert counterpart is grammatical only with a nominative object and is ungrammatical with an accusative object.

Moreover, covert impulsatives cannot have reflexive logical objects, while the periphrastic ones can. This is unexpected under any analysis where the covert version is analogous to the periphrastic version.

(60) *Na Ivan mu se šteše da pregurne sebe si.*
P Ivan DAT.M.SG NACT will.IMP SUBJ hug.3SG self CL
'Ivan wants to hug himself.'

(61) **Na Ivan mu se pregusta sebe si.*
P Ivan DAT.M.SG NACT hug.3SG.IMPF self CL
'Ivan felt like hugging himself.'

In example, (60), the embedded verb *pregurne* 'hug' takes the reflexive argument *sebesi*. However, in (61) the selection of *sebesi* results in ungrammaticality. If covert impulsatives were fully biclausal there should not be any restrictions on the type of object the embedded predicate can take. In section 4.2, I will discuss how my analysis would rule example (61) out.

To conclude, periphrastic and covert impulsatives behave very differently. The fact that a covert impulsative cannot embed a passive or have separate tense and aspect for the embedded verb indicates that covert impulsatives in Bulgarian are monoclausal with only one set of functional projections like Voice, Tense and Aspect. Furthermore, periphrastic and covert impulsatives assign different cases to their logical objects: while periphrastic impulsatives assign accusative case, covert impulsatives must assign nominative case to their logical objects and ban reflexive objects. These differences demonstrates that Bulgarian covert impulsatives are not analogous in structure to their periphrastic counterparts and that their complement is indeed smaller.

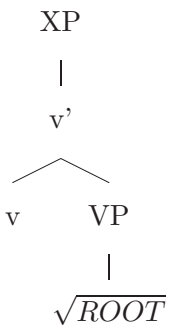
3.4.2 A Monoclausal Analysis

In this section, I provide a monoclausal structure for Bulgarian impulsatives. I extend Embick's (2004*b*) analysis of non-active morphology to impulsative constructions. This extension has many advantages. First, it accounts for the differences between covert impulsatives and periphrastic impulsatives in Bulgarian. Secondly, it explains the non-active morphology that obligatorily occurs in impulsative constructions. And lastly, this unifies the analysis with that of impulsatives in Albanian which also hosts non-active morphology.

Embick proposes an account of the morphological syncretism of the non-active voice in Greek and Albanian in the Distributed Morphology framework (Halle and Marantz, 1993). Non-Active voice morphology appears on passives, reflexives and unaccusatives. Embick suggests that non-active morphology is a reflection of unaccusative syntax. This assumes that external arguments are not introduced by the verb itself but by a higher functional head, Voice. (Kratzer, 1996) Unaccusative syntax is any syntactic structure where the external argument is not projected. At

spell-out, whenever there is a syntactic structure without the projection of the external argument, the non-active morphology is inserted. In the tree below, v' is projected but not the full vP or spec vP where the external argument would be placed.

(62)



Similar to Albanian and Greek, non-Active voice morphology in Bulgarian also appears on passives, unaccusatives and reflexives, as shown in section 2.1. Relevant examples are repeated below.

(63) *Knigata se pisa.*
book.the NACT write.AOR.3SG
'The book was written.'

(64) *Ivan se poyavi.*
Ivan NACT appear.AOR.3SG
'Ivan appeared.'

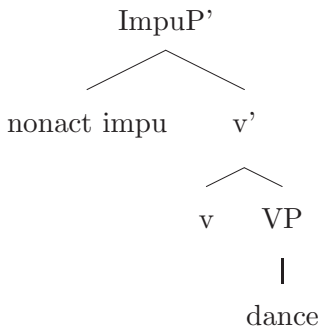
(65) *Ivan se mie.*
Ivan NACT wash.3SG.PR
'Ivan washes himself.'

These are all cases in which the external argument is not projected in Bulgarian. Passives are a clear case for unaccusative syntax because the external argument that occurs in active versions of the sentence is missing. Unaccusative verbs are verbs where the subject has been shown to be an underlying object or internal object of the verb. And lastly, Embick argues that reflexives also have unaccusative syntax in that the underlying object raises to the specifier of v, after the cliticization of an anaphoric external element.

I propose that the null impulse head selects for v'. Since the external argument of the overt

verb does not project, the non-active morphology is inserted. However, since v' is a projection of v, agenthood is introduced into the semantics.

(66)



In addition, the null impulse head passes on to its experiencer argument the agenthood of the internal predicate. This is shown in the semantic denotation I propose below.

(67) $[\![\textbf{Impulse}]\!] = \lambda P_{<e,vt>} \lambda x.\lambda e.\lambda w.\forall w'$[w' is compatible with what x has an impulse to do in e in w] $\rightarrow$[$\exists$e' in w'.P(x)(e')]

This structure captures the monoclausal nature of Bulgarian impulsatives in addition to providing a template for which non-active morphology in Bulgarian is inserted uniformly. Moreover, this unifies the analysis of both Bulgarian non-active morphology and Bulgarian impulsatives with that of their counterparts in Albanian. Albanian impulsatives like their Bulgarian counterparts, are composed of a verb with non-active morphology and an argument with dative case:

Albanian

(68) *Agimit* *kërcehet* *në zyrë.*
Agim.DAT dance.3SG.NACT.PR in office.SG.DEF
'Agim feels like dancing in the office.' [7]

In example 5.2.1, the impulsative in Albanian is formed by using the non-active form of the verb *kërcehet* 'dance' and by marking the experiencer argument *Agim* with dative case. These similarities indicate that a good analysis of Bulgarian impulsatives should also extend to impulsatives

[7] Can also be interpreted as 'There was dancing in the office and it affected Agim (e.g. it was Agim's office.)'

in Albanian. The analysis I have provided thus far extends smoothly to Albanian impulsatives.

Recall in the previous section, covert impulsatives differed from periphrastic impulsatives in that they assigned nominative case to the logical object. This falls out of this monoclausal account as impulsatives have a similar structure as a passive, which also assigns nominative case to the logical object. This is because when the full vP does not project and thus never has the ability to assign accusative case. Therefore, the object is not licensed *in situ* and moves to spec of TP where it receives nominative case (Chomsky, 1995, 2000, 2001).

Moreover, it also explains why impulsatives cannot have a reflexive object. Under Embick's analysis, reflexives consist of an underlying object in subject position that binds an anaphoric clitic that was base-generated in specifier of v but cliticizes to the v head. In an impulsative, the anaphoric clitic would not be able to be base-generated in specifier of v, since that level is never projected. Furthermore, the internal argument of the embedded predicate cannot be input as the experiencer argument. In the denotation in (57), only the argument introduced by v, can be the experiencer argument. Thus, my analysis can rule out (61).

Thus, the selection of v' grants us four benefits. Firstly, it unifies the analysis of Bulgarian impulsatives with that of Albanian impulsatives. Secondly, it accounts for the non-active morphology, thirdly it derives a monoclausal structure and finally it explains the assignment of nominative case on the logical object and the ban on reflexive objects.

One objection to this type of analysis is that X-Bar theory, as it is usually understood, stipulates that selection of a bar level category is not allowed. However, there is no principled reason for this stipulation. Moreover, the semantic selection of a predicate with an unsaturated argument has been used in analyses for reciprocals Bruening (2004) and reflexives Labelle (2008) respectively. It is independently necessary to allow the selection of an open predicate for analysis of reflexives and reciprocals. This semantic selection of an open predicate translates syntactically to a bar level category. Therefore, I argue that traditional X-Bar theory should allow for this type of selection.

3.4.3 Conclusion

In this section, I analyzed the null impulsative predicate as selecting for an unsaturated voice projection. This was motivated by the fact that Bulgarian impulsatives have non-active morphology. In addition, this analysis parallels impulsatives in Albanian. The monoclausal properties were uncovered when I compared Bulgarian impulsatives with their periphrastic analogue. This argues against the biclausal analysis proposed by (Marušič and Žaucer, 2006), despite having borrowed their suggestion of a null predicate. I have taken their suggestion and modified it to an analysis with a null impulsative predicate that selects for the unsaturated voice projection.

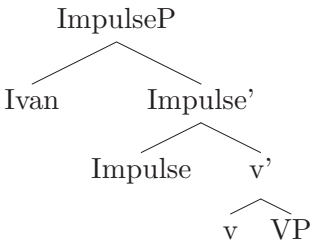
3.5 Full Derivation

I posit a null impulsative modal with the following denotation

(69) $[\![\textbf{Impulse}]\!] = \lambda P_{<e,vt>}\lambda x.\lambda e.\lambda w.\forall w'[$w' is compatible with what x has an impulse to do in e in w] $\rightarrow$[$\exists$e' in w'.P(x)(e')]

The null impulse head does the following things. It provides modality, it Introduces another event; namely the 'feeling like' event and an experiencer argument. In addition, it adds this to the assertion of the sentence. The following is a sample derivation

(70)



(71) a. $[\![\textbf{write}]\!] = \lambda$e. write(e)
$[\![\textbf{v}]\!] = \lambda x\lambda e.$ Agt(e,x)
Event Identification

b. $[\![\textbf{v'}]\!] = \lambda x.\lambda e.$write(e) & Agt(e,x)
$[\![\textbf{Impulse}]\!] = \lambda P_{<e,vt>}\lambda x\lambda e.\lambda w.\forall$w' [w' is compatible with what x has an impulse to do in e in w] $\rightarrow$ [$\exists$e' in w'.P(x)(e')]
Function Application

c. ⟦**ImpulseP'**⟧ = λxλe.λw.∀w' [w' is compatible with what x has an impulse to do in e in w] → [∃e' in w'.write(e') & Agent(e',x))]
⟦**Ivan**⟧ = Ivan
Function Application

d. ⟦**ImpulseP**⟧ = λe.λw.∀w' [w' is compatible with what Ivan has an impulse to do in e in w] → [∃e' in w' .write(e') & Agent(e',Ivan))]

3.6 Conclusion

In conclusion, Bulgarian impulsatives are best analyzed by positing a null impulse head. This null head is the same as the category seen in Cusco Quechua, namely an Impulse head. Furthermore, the differences between fully biclausal psych predicates in Bulgarian gives us evidence that Bulgarian impulsatives are monoclausal. In fact, the pattern of non-active morphology suggests that the lower clause does not have a full vP projection and instead that the impulse head selects for an unsaturated voice projection. Lastly, the impulse head introduces the experiencer argument. This analysis explains the non-active voice, the source of the intensionality and the bi-eventivity of Bulgarian Impulsatives.

Chapter 4

ALBANIAN

4.1 Introduction

Albanian is spoken by almost six million people, primarily in the country of Albania but also other areas of the Balkans (Gordon, 2005). Albanian is an Indo-European language and constitutes its own branch. Consequently, Albanian is genetically distant from other Indo-European languages. Its default word order is SVO and has a morphological fusional nature. Albanian nouns are inflected by case (nom-acc system), gender and number and Albanian verbs are inflected by person, number, tense and voice (Hubbard, 1985).

In this chapter, I discuss impulsatives in Albanian. The goal of this chapter is to provide a syntactic structure and semantic derivation for impulsatives in Albanian. Like Bulgarian impulsatives, Albanian impulsatives lack a dedicated morpheme to indicate the intensionality in the construction. In Albanian, impulsatives are composed of the non-active form of the verb and a dative argument, as shown in example (1).[1]

(1) *Agim-it i kërce-het në zyrë.*
Agim.DAT DAT.3SG. dance.3SG.NACT.PR in office
'Agim feels like dancing in the office.'
'There was dancing in the office and it affected Agim (i.e. it was Agim's office).'

In example (1) the argument *Agim* is marked with dative case *-it* and the verb is in the non-active form. Example (1) has two readings. One reading is the impersonal passive reading where there is dancing happening and Agim is somehow affected. I will refer to this type of reading as

[1] Unless otherwise stated, the examples are Albanian elicited from two speakers from Tirana, Albania.

the affected argument reading (Pylkkänen, 1999*b*; Bosse, Bruening, Yamada, Peng and Cathcart, 2008).[2] The second reading is that Agim has an urge or impulse to dance. This is the impulsative reading. Impulsatives introduce modal semantics or intensionality because in the modal world of the impulsative, the experiencer is the external argument of the verb. All potential impulsatives are ambiguous between the affected argument and the impulsative readings in Albanian.

In this chapter, I extend the analysis of Bulgarian impulsatives to Albanian impulsatives. I propose that Albanian impulsatives have a covert impulse head. The null impulse head contributes the intentionality in Albanian impulsatives. I reject analyses that treat impulsatives without a dedicated null element; specifically Rivero (2009), whose analysis uses an imperfective operator as the source of the intensionality and Kallulli (2006*b*), whose analysis involves non-active morphology to derive the impulsative reading. Albanian impulsatives have two properties that will play important roles in the analysis: they are bi-eventive and, unlike Bulgarian, require selectional restrictions. These two properties motivate the positing of a phonologically null (covert) impulse head in Albanian. Having established a null impulsative element, my next step is to determine its semantic and syntactic properties. First, I show that Albanian impulsatives are not a modal. Then, I demonstrate Albanian impulsatives abide by the definition for impulsatives I developed in chapter 1. Next, I provide a monoclausal analysis that explains both the selectional restrictions and non-active morphology. Following Ramchand (2011), I propose that the null head selects for a projection of process v. Then, I adopt Embick's (2004*a*) analysis of non-active voice in Albanian and further propose that the null head selects process v', when the external argument of the internal predicate has not yet been projected. With the syntactic structure in place, I elaborate its semantic composition. I claim that it has the following denotation.

(2) $[\![\textbf{Impulse}]\!] = \lambda P_{<e,vt>}\lambda x.\lambda e.\lambda w.\forall w'[w' \text{ is compatible with what x has an impulse to do in e in w }] \rightarrow [\exists e' \text{ in } w'.P(x)(e')]$

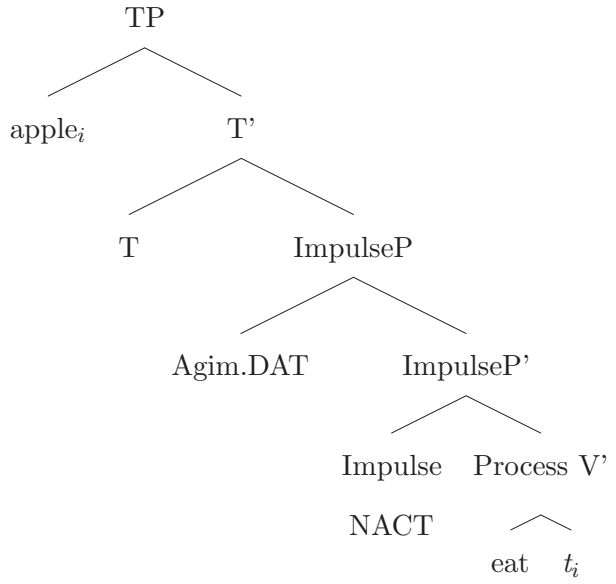
Semantically, the null impulse head will do several things. First, it will provide intensionality by quantifying over possible worlds. Secondly, it has an event argument. Finally, it introduces an

[2] English translations for affected readings are not exact, for simplicity I will use 'on/for Agim'.

experiencer argument and links it with the agent of the internal predicate in the modal world. Syntactically, the impulse head will license and case-mark an experiencer argument and select for an unsaturated process V projection. The structure for example (3) is shown in the tree below.

(3) *Një mollë (Agimit) i hahej*
A apple.INDEF Agim.DAT 3SG.DAT.cl eat.NACT.IMP.3SG
'I was feeling eating an apple.'

(4)



This chapter is organized as follows. The second section is dedicated to finding the source of the intensionality. First, I show that unlike Bulgarian, aspect plays no role in Albanian impulsatives. Therefore, I can reject Rivero's (2009) analysis. Like Rivero, Kallulli (2006*b*) presents an analysis with no null element involving non-active morphology which is present in both Bulgarian and Albanian impulsatives. However, Kallulli's treats impulsatives as undecomposible states: states that cannot be broken up into sub-events. This runs contrary to complex predicate analyses proposed (Massey, 1991) and the biclausal analysis for the Slavic languages proposed by Marušič and Žaucer (2006). I argue in favor of the latter treatment of Albanian impulsatives because of their bi-eventive properties. I argue that the source of the intensionality must come from a null element. In the third section, I argue that the null impulsative is not desiderative predicate, but rather an impulsative, as defined in chapter 1. Furthermore, the null impulsative is responsible to introducing and assigning dative case to its experiencer argument. In the fourth section, I determine the syntactic

structure of Albanian impulsatives. I show that they are not biclausal and that a monoclausal analysis accounts for both selectional restrictions and non-active morphology. With regards to selectional restrictions, I suggest that the null impulse head selects process V following (Ramchand, 2011). Then I present a monoclausal structure that derives the non-active morphology by using Distributive Morphology (Halle and Marantz, 1993). Finally, section five provides a full derivation of the analysis and concludes the paper.

4.2 The Source of the Intensionality

Like Bulgarian impulsatives, Albanian impulsatives lack a dedicated lexical or morphological element denoting the impulsative meaning. This is problematic because the source of the intensionality is mysterious. In the first section, I discuss the morphological make-up of Albanian impulsatives and show that the intensionality cannot come from any over morphological component. However, Albanian impulsatives differ from Bulgarian impulsatives in two ways. First, Albanian impulsatives do not have any aspectual restrictions. Consequently, Rivero's (2009) analysis cannot apply to Albanian. Second, Albanian impulsatives have selectional restrictions. Kallulli (1999) claims that the impulsative meaning is derived when non-active morphology is applied to process verbs. She argues that the non-active morphology reduces the event structure of a process verb to that of a stative. Kallulli's analysis ultimately fails because, like Bulgarian impulsatives, Albanian impulsatives are bi-eventive. I argue that, in fact, selectional restrictions together with bi-eventivity indicate that Albanian impulsatives have a null impulsative element responsible for the intensionality.

4.2.1 The Composition of Albanian Impulsatives

Albanian impulsatives present the same puzzle as Bulgarian impulsatives; while the impulsative construction as a whole introduces modal semantics, none of its lexical, morphological or syntactic components singularly do. The morphological makeup of Albanian impulsatives appears to only have two obligatory elements: non-active morphology and a dative argument. Non-active morphology and dative arguments are individually used elsewhere in the grammar, in non-intensional contexts. In addition, the predicate in Albanian impulsatives is restricted to a certain class of

verbs; namely unergatives and some transitives. None of these elements specifically contribute the intensionality to Albanian impulsatives.

As mentioned in the introduction, Albanian impulsatives are composed of the non-active form of the verb and a dative argument as shown in example (5).

(5) *Agimit kërcehet në zyrë.*
Agim.DAT DAT.3SG.cl dance.3SG.NACT.PR in office
'Agim feels like dancing in the office.'

Non-active voice morphology in Albanian also appears on passives(6), unaccusatives(7) and reflexives(8).

(6) *Molla hahej.*
apple.NOM eat.3SG.NACT.PST
'The apple was eaten.'

(7) *Papritmas, u duk dielli.*
suddenly NACT.cl appear.3SG.NACT.PST sun.NOM
'Suddenly, the sun appeared.'

(8) *Unë ushqehem.*
1SG.NOM feed.1SG.NACT
'I feed myself.'

In example (6), the non-active morphology makes the sentence a passive. Example (7) is an example of an unaccusative verb in Albanian. Example (8) is a verb that can be made reflexive by the addition of the non-active morphology. None of these examples (6)-(8) are intensional.

Dative arguments in Albanian can also occur in multiple constructions. In addition to occurring in ditransitive constructions, dative arguments can also appear as subjects of psych predicates and as affected arguments in applicative constructions (Pylkkänen, 2002).

(9) *Agim-i i-a dha Dritës libr-in.*
Agim-NOM DAT.3SG.-ACC.3SG give.3SG.PST Drita.DAT book.ACC

'Agim gave Drita the book.'

(10) *Kamerierit nuk i u durua më vetja.*
waiter.DAT NEG 3SG.DAT NACT endure.3S.PST.NACT more itself.NOM
'The waiter could not endure himself any longer.'
(Massey, 1991, p 69)

(11) *Agim-i i-a theu vazon Dritan-it.*
Agim-NOM 3SG.DAT-3SG.ACC break.3SG.PST vase.ACC Dritan.DAT
'Agim broke the vase on Dritan.'
= 'Agim broke the vase, and this matters to Dritan (negatively or positively).'

In example (9), the dative argument functions as the second argument in a ditransitive, while it serves as the subject of a psych predicate in example (10). Finally, in example (11) the dative argument can take a number of affected roles in applicative constructions. While (11) can be interpreted many ways, none of these interpretations are intensional. Furthermore, neither (9) and (10) are intensional.

However, unlike Bulgarian, impulsatives in Albanian cannot be used with any predicate. Impulsatives appear to be restricted to some transitive verbs and unergatives.

(12) *Më shtypeshin fara për tre orë.*
1SG.DAT.cl pound.3PL.NACT.IMP seed.PL.INDEF.NOM for three hour.PL
'I felt pounding seeds for three hours.'

(13) *Më punohet shumë.*
I.cl.DAT work.3SG many
'I feel very much like working.'

Furthermore, impulsatives in Albanian exclude certain verbs, such as unaccusatives (Hubbard, 1985)[3], and causative verbs.[4]

[3] Rivero cites Kallulli (pc) that unaccusatives are acceptable for some speakers

[4] Kallulli (2006*a*) mentions that certain verbs such as causatives cannot appear in an impulsative with perfect aspect. The speakers I consulted did not find the impulsative reading unavailable based on aspect but ruled out the impulsatives with those predicates entirely. Thus, they also judged the imperfect form to also lack the impulsative reading

(15) *Ben-it i vdis-et.*
Ben.DAT DAT.3SG die.3SG.NACT.PR
'Someone died on Ben'
∗'Ben feels like dying.'

(16) *Benit iu thye një vazo.*
Ben.DAT DAT.3SG-NACT.cl break.NACT.3SG.PST a vase.INDEF
'To Ben, a vase was broken.'
∗'Ben felt like breaking a vase.'

(17) *Ben-it i nderto-hej nje shtepi.*
Ben.DAT DAT.3SG build-NACT.3SG.IMP. a house.NOM
'For Ben, a house was built.'
∗'Ben felt like building a house.'

In example (15), the verb *vdes* 'die' is conjugated in non-active third person singular form and the argument *Ben* carries dative case *-it*, however, in this sentence the impulsative reading is unavailable, only the affected argument reading is available. Similarly, examples (16) and (17), despite having both non-active morphology on the predicate and dative case marking on the animate argument, does not yield the impulsative reading.

Thus the composition of an Albanian impulsative consists of a dative argument and a particular predicate with non-active morphology. None of these elements is intensional. Therefore, the intensionality of Albanian impulsatives is not readily apparent given its composition. In the following we will see different ways of providing the intensionality, and ultimately conclude that it comes from a dedicated covert intensional impulse head.

4.2.2 The Role of an imperfective Operator in Albanian Impulsatives

In the last chapter, I reviewed Rivero's (2009) analysis and argued that it did not work for Bulgarian impulsatives because an imperfective operator IMP^{OP} was neither necessary nor

(14) *Ben-it thy-hej nje vazo.*
Ben-theDAT himcL break-NACT,P,IMP3S a vase.NOM
(i) '∗Ben felt like breaking a vase.'
(ii)'∗Ben unintentionally broke a vase.'

.

sufficient to provide the source of intensionality in Bulgarian impulsatives. While the role of aspect in Bulgarian impulsatives is complicated and contradictory, it is clear that in Albanian, aspect plays no role in Albanian impulsatives.[5] First, imperfect morphology is not obligatory on Albanian impulsatives. Furthermore, Albanian impulsatives are not limited to imperfect readings. Finally, unlike Bulgarian imperfects, Albanian imperfects do not introduce intensionality. Therefore, even if it were present in Albanian impulsatives, it cannot be the source of the intensionality. In addition, Rivero's use of a high applicative head to introduce the experiencer argument is problematic for Albanian impulsatives. Finally, Rivero's analysis does not explain the role of non-active morphology in Albanian impulsatives. Thus, Rivero's analysis cannot account for either Bulgarian or Albanian impulsatives.

While imperfect morphology is sometimes obligatory in Bulgarian impulsatives, it is not necessary in Albanian impulsatives. Albanian impulsatives can appear in both the aorist past (perfective aspect) and the imperfect past (imperfective aspect). [6]

(18) *Një mollë m'u hëng*
A apple.INDEF 1SG.DAT.CL eat.NACT.PST.3SG
'I felt like eating an apple.'

(19) *Një mollë më hahej*
A apple.INDEF 1SG.DAT.cl eat.NACT.IMP.3SG
'I was feeling eating an apple.'

In examples (18) and (19) the tense and aspect morphology modify the 'feeling like' event and not the 'eating' event. Thus it appears that the IMP^{OP} necessary for Rivero's analysis is not obligatorily present in Albanian impulsatives.

However, it could be the case that there is a covert imperfect operator that would apply to the internal 'eating' event. If the internal event were imperfect, it would be atelic and unbounded. The imperfect is incompatible with a telic event as illustrated in example (20).

[5] I base my analysis on the judgements received from my informants. It does appear that aspect plays a role for Kallulli.

[6] Kallulli (2006*a*) mentions that certain verbs cannot appear in an impulsative with perfect aspect. The speakers I consulted did not find the sentences ungrammatical based on aspect but ruled out the impulsatives with those predicates entirely.

(20) **Haja* *një mollë* *brënda një minutë.*
eat.IMP.1SG a apple.INDEF in a minute.
'I was eating an apple in one minute.'

In example (20), the verb is inflected for the imperfect past and the event is bounded by the adjunct *brënda një minutë* 'in one minute'. Since the imperfect morphology indicates that the event is not completed, the adjunct that refers to the time of completion creates a conflict. However, Albanian impulsatives can describe a telic event, as in example (21).

(21) *Një mollë* *më* *hahej* *brënda një minute*
a apple.INDEF me.DAT eat.NACT.PST.3SG. in a minute
'I felt like eating an apple in a minute.'

In example (21), the internal event is an apple being eaten within a minute. Thus the internal event must be a completed action. The adverb 'in a minute' makes the 'eating' event bounded and therefore incompatible with a progressive reading. Therefore, the internal event in Albanian impulsative constructions is not obligatorily imperfective. Rivero's analysis for impulsatives does not account for the Albanian impulsatives because there is no evidence that the Albanian impulsatives has the IMP^{OP}.

Furthermore, the Albanian IMP^{OP} appears not to be a source of intensionality. If the imperfect is a possible source of intensionality in Albanian, the futurate should be available when there is the imperfect form and a nominative argument, as it does in Bulgarian.

(22) **Per dy jave skuadra (po) luante neser.*
For two weeks team.NOM (PROG) play.IMP.3SG tomorrow.
'For two weeks, the team was playing tomorrow.'

The imperfect past in Albanian does not yield a futurate reading. Thus, when there are two time adverbs, as in example (22), a conflict arises because they are both attempting to modify the same event, in this case the 'playing' event. Moreover, the futurate reading is still unavailable even when the progressive *po* is added. Thus neither the imperfect or the progressive forms in Albanian can introduce an intensional reading. Even if there was a covert imperfective operator in Albanian impulsatives, it would not introduce any intensionality to Albanian impulsatives.

As I mentioned in the previous chapter, Rivero's analysis also includes a high applicative. Including a high applicative in an analysis of Albanian impulsatives is also problematic. In her analysis, the dative is introduced by a high applicative phrase that is above the TP. This predicts that the nominative argument in spec of TP should not be able to c-command the dative argument projected above spec TP. However, this prediction is not borne out, and the nominative argument can c-command the dative argument.

(23) *Peshkaqenët*$_1$ *i* *hahen* *njëitjetrit*$_1$.
Shark.pl.NOM CL.pl eat.NACT.3PL each.other.DAT
'The sharks feel like eating each other.'

In example (23), the nominative argument *peshkaqenët* 'the sharks' c-commands the dative argument *njëitjetrit* 'each other'. *Njëitjetrit* 'each other' must be co-referential with the nominative argument *Peshkaqenët* 'the sharks'. Therefore, the nominative argument must be above the dative argument, contrary to Rivero's account.

Finally, as with Bulgarian impulsatives, Rivero's analysis does not explain the role of non-active morphology in Albanian impulsatives. Rivero's analysis does not predict that impulsatives in Albanian would be limited to non-active sentences. However, as mentioned in section 4.2.1, without the non-active morphology, the active sentence only has an affected argument reading.

(24) *I-a* *lexoi* *librin* *Besës.*
DAT.cl. ACC.cl read.3SG.PST book.ACC Besa.DAT
'S/he read Besa's book and it matters to her.'
∗'Besa felt like reading a book'

Moreover, just like in Bulgarian, non-active morphology applies differently to applicatives than impulsatives in Albanian. A predicate with non-active morphology associated with an affected argument still has a passive meaning; as in (25). In example (25) the agent of the overt predicate 'eat' is existentially bound. In contrast, impulsatives do not involve existential binding of the agent of the overt predicate because the dative argument necessarily receives the agent theta role. The dative argument in impulsatives doubles as the experiencer of the feeling event and the agent of

the internal predicate. In contrast, applied arguments do not carry any other theta role.

(25) *Dritanit* *i'u* *hëng* *një* *mollë*
Dritan.DAT 3SG.DAT.cl-NACT.cl eat.3SG.PST.NACT a apple.INDEF
'Dritan felt like eating an apple.'
'An apple was eaten on Dritan'

In the impulsative example in (25), *Dritan* is both the feeler and the eater. It cannot be the case that Dritan desires for anyone else to do any eating.. In the affected argument reading however, Dritan cannot have eaten an apple. The agent of eating must be someone else. Similarly to Bulgarian, Rivero's analysis fails to capture the role of non-active morphology in impulsatives in Albanian.

In this section, I have shown that Rivero's analysis cannot extend to Albanian impulsatives: there are problems with adopting both the IMP^{OP} and the high applicative, which she argues are crucial for her analysis. Furthermore, her analysis does not explain the role of non-active morphology in Albanian impulsatives.

4.2.3 Kallulli (1999)'s Non-Active Analysis

While one of Rivero's (2009) major shortcomings was the sidelined role of non-active morphology, in (Kallulli, 1999) its role is central. Kallulli (1999) claims that non-active morphology can affect the lexical meaning of a predicate, depending on the predicate type. Specifically, predicates that denote activities such as unergatives and many transitives when affixed with non-active morphology and associated with a dative argument can yield an impulsative reading.

According to Kallulli, non-active morphology in Albanian is a morphological operation which operates on event structures. There are three primitive event types (Pustejovsky, 1991). The most primitive type are states: a single event which is evaluated relative to no other event. These include such verbs as 'know' and 'believe'. The second event type are processes: a sequence of identical events identifying the same semantic expression. These include verbs like 'run' and 'work'. Lastly there are transitions: a single event identifying a semantic expression which is evaluated relative to another single event, namely, its opposition. These verbs include 'break' and 'wet'.

Kallulli argues that non-active morphology in Albanian is an event type-shifting device, applying to higher event types to yield lower event types. The highest event types are transitions while the lowest event types are states. When non-active morphology is affixed to a predicate, it shifts the event type associated with the predicate into a lower event type. When non-active morphology applies to a process predicate it becomes a stative predicate.

Essentially, Kallulli argues that in the impulsative construction, the process event is type-shifted into a stative event. The dative argument cannot be the agent because the stative has no agent. Therefore, according to Kallulli, it must be the experiencer. The impulsative reading is attained pragmatically to link the experiencer with the stative event.

4.2.4 There Must be a Null Element

This section begins by demonstrating that Kallulli (1999)'s approach is misguided precisely because the event structure of impulsatives is not that of a simple stative. On the contrary, impulsatives contain two sub-events. I agree with both Massey (1991) and Marušič and Žaucer (2006) that impulsatives have a null element. However, Kallulli's (1999) observation that only process verbs can yield impulsative readings is valid. I adopt Massey's (1991) suggestion that the verbal restrictions are due the null element selecting process verbs. Thus, by positing a null element, selectional restrictions and the bi-eventivity of impulsatives in Albanian are explained.

Kallulli's (1999) approach is attractive because it explains the obligatory presence of non-active morphology and availability of impulsative readings to only activity verbs. However, it does so at the cost of the event structure of impulsatives. Like Bulgarian impulsatives, Albanian impulsatives are bi-eventive. Marušič and Žaucer's (2006) diagnostics determine that Albanian impulsatives are bi-eventive contrary to Kallulli's event reduction analysis.

Under Kallulli's (1999) analysis, the event is the lowest event type there is and cannot be decomposed farther. This means that impulsative constructions should not be able to be decomposed into two sub-events. However, Albanian impulsatives can support two conflicting time adverbs.

(26) *Dje* *më* *kërcehej* *sot.*
Yesterday, 1SG.DAT.cl dance.NACT.PST today.
'Yesterday I felt like dancing today.'

Example (26) could be used in a context where tonight there is a party, and yesterday, I felt like dancing at the party tomorrow. Example (26) has the two sub-events. Each event, the impulse and the 'dancing', can occur at two separate times. In this case, the impulse happened yesterday, but the dancing was intended to occur today, not at the time of the impulse. This is unexpected if there is only event. Non-derived statives in Albanian cannot support two conflicting time adverbs as in (27).

(27) **Sot, Besa e dashuron (atë) dje.*
Today Besa.NOM ACC.cl love.3SG.PST him yesterday.
'Today, Besa loved him yesterday.'

Kallulli (2006) claims that some non-derived statives can support two conflicting time adverbs as in example (28).

(28) *Sot më kujtohen fjalët/rrobat e Anës dje.*
Today, me.DAT recall.NACT.PR.1SG words/clothes.NOM AGR Ann.DAT yesterday.
'Today, I recall Anna's words/clothes of yesterday.'

However, this does not invalidate Marušič and Žaucer's (2006) diagnostic for bi-eventivity. In order to have any sort of interpretation, (28) must have two event variables. In example (28) the time adverb *Sot* 'Today' modifies the time I was recalling while the second time adverb *dje* 'yesterday' modifies the time Anna's words were uttered or her clothes were worn. If both adverbs were to modify the same event, the one denoted by the predicate *kujtohen* 'recall', the sentence would lead to a contradiction. Thus, the predicate introduces two event variables: the event in which the person is doing the recalling and the event that is recalled. Hence, the verb *kujtohen* 'recall' in Albanian is different in this respect from canonical statives like *dashuron* 'love' in example (27).

Nevertheless, there is a crucial difference between a non-derived stative including *kujtohen* 'recall' and an impulsative. An impulsative introduces an event with a proposition, whereas a non-derived state does not. Adverbs such as 'again' generate a presupposition for every proposition in the sentence (von Stechow, 1984; Bale, 2006).

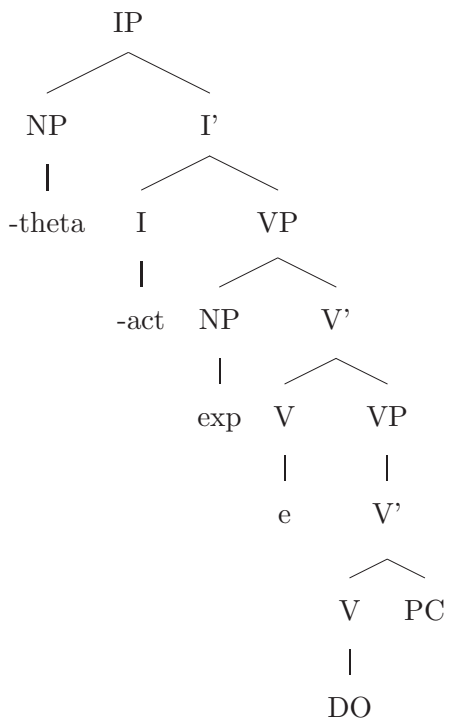
(29) *Agimit kërcehet sërish.*
Agim.DAT dance.NACT.PST.3SG again.
'Agim feels like dancing again.'

The example in (29) has two possible presuppositions. The first scopes over the impulse, generating the presupposition that Agim felt like dancing before but had never danced before. The second presupposition is where Agim may have danced before, albeit begrudgingly, however, now that he knows how to, he feels the urge to dance again. In contrast, the psychological predicate *kujtohen* 'recall' only generates one presupposition despite being bi-eventive.

(30) *Më kujtohen fjalët/rrobat e Anës sërish.*
me.DAT recall.NACT.PR.1SG words/clothes.NOM AGR Ann.DAT again.
'I recall Anna's words/clothes again.'

Example (30) only has one presupposition, that is that the recalling event took place before. It does not generate the presupposition that Anna's words were spoken or that Anna's clothes were worn again. Therefore, there is only one proposition for a stative predicate such as *kujtohen* 'recall'. Kallulli's analogy to non-derived states disintegrates when comparing examples (29) and (30). This suggests that not only are impulsatives bi-eventive but that they introduce the impulsative event via a proposition, unlike the non-derived stative *kujtohen* 'recall'.

The fact that impulsatives are bi-eventive suggests that there is a null element. There needs to be an element that introduces the impulsative event into the semantics. Massey (1991) suggests that impulsative constructions have a complex predicate. Under her analysis, non-active morphology is realized in Infl. Non-active Infl takes as its complement a VP headed by an empty verb. Then, the empty verb selects an activity verb, as shown in the structure (30) below. By positing an empty verb, Massey simultaneously accounts for both the bi-eventive nature and the verbal restrictions. While Massey did not consider event structure when she proposed this structure, the data on adverbs provide additional evidence. Abverbs are provided another node to attach to, either modifying the empty verb or the activity verb. In addition, the idiosyncratic class of verbs allowed in impulsative constructions is explained as a by-product of selectional restrictions.



Both bi-eventivity and selectional restrictions provide motivation for positing a null element in Albanian impulsatives. Despite an analysis involving the event structure of non-active constructions, Kallulli's (2006*b*) analysis ultimately fails to account for the event structure of impulsatives in Albanian. As with Bulgarian impulsatives, Albanian impulsatives are shown to be bi-eventive by adopting Marušic and Žaucer's (2006) approach. Finally, by viewing the verbal category that yields impulsatives as a result of selectional restrictions as suggested by Massey (1991), a null impulse head is further warranted. Thus, I conclude that impulsatives have a null element.

4.2.5 Conclusion

This section began by establishing there was no overt intensional element in Albanian impulsatives. Next, I reviewed two accounts that attempt to derive the impulsative reading without a null intensional element. First, was Rivero's (2009) analysis of Slavic impulsatives involving aspect. However, it was shown that Albanian impulsatives do not depend on imperfective aspect. Second was Kallulli's (2006*b*) account that derived the meaning by claiming that the non-active morphology reduced the event structure of a process verb to a state. However, following Marušič and Žaucer (2006), I demonstrated that Albanian impulsatives are more than a single state and in fact are bi-eventive. This suggests that Albanian impulsatives involve a null element. Finally, positing a

null element in Albanian impulsatives is further supported because it allows for a straightforward way to capture the class of verbs that yield impulsatives as a result of selectional restrictions as suggested by Massey (1991). In the following sections, I will elaborate what the null element looks like and provide a different account of non-active morphology from Marušič and Žaucer (2006) and Massey (1991).

4.3 What is the Null Element?

In this section, I discuss the nature of the null element. First, I show that it is not a desiderative/volitional verb. Because of its particular syntax and semantics, I argue that the null element is an impulsative as defined in Chapter 1. Then, I demonstrate that the impulse head introduces a dative experiencer argument.

4.3.1 The Element is an Impulsative

As mentioned in the Bulgarian chapter, Marušič and Žaucer consider the null verb a desire/volitional predicate, class 3 under Belletti and Rizzi (1988)'s classification of psych predicates. However, as I have outlined before, there are several systematic differences between impulsatives and traditional desideratives. I will compare the Albanian impulsative to the Albanian volitional verb *dua* 'want'. The first is a lexically semantic one; impulsatives are not volitional. Secondly, there are syntactic differences having to do with case and agreement.

Impulsatives in Albanian are not volitional. They are often translated as 'feel like' or 'in the mood to' as opposed to being translated as 'will' or 'want'. In addition, impulsative constructions are most salient with verbs that involve bodily functions such as 'cough', 'sneeze', and 'vomit' as shown in the example below.

(31) *M'u* *voll.*
1SG.cl.DAT-NACT vomit.PST.
'I felt like vomiting.'
'A vomit came over me.'

It is semantically salient to have an urge or impulse to vomit; however, vomiting is something few people desire to do in the volitional sense. Furthermore, it is possible for the desire and impulse to be two separate things. Consider the following example.

(32) *Agimit i fli-het.*
Agim.DAT DAT SIeep.3SG.NACT
'Agim feels like sleeping.'
'Agim is sleepy.'

Example (32) is salient in a context where Agim is tired even though he may not want to sleep. For instance, it may be New Year's Eve and Agim wants to be awake at midnight but is very tired. However, this sentence cannot be used when what Agim wants is not what he is feeling. The sentence cannot be used in a context where Agim has a busy day the next day and wants to get a good night's rest but cannot fall asleep.

Moreover, syntactic properties of Albanian impulsatives are different from those of volitional desideratives. The volitional verb *dua* 'want' in Albanian takes nominative case, the canonical subject case in Albanian.

(33) *Jani do të blejë një makinë.*
Jan.NOM want.3SG COMP buy.3S.SUBJ a car
'Jan wants to buy a car/will buy a car.'

In addition, the verb *dua* 'want' also agrees with its subject.

(34) *Dua të blej një makinë.*
want.1SG COMP buy.1SG.SUBJ a car
'I want to buy a car.'

In example (33), the subject *Jan* takes the nominative marking *i*. In addition, the verb *do* is conjugated in the third person singular form in contrast to example (34) where the verb is conjugated with the first person singular form *dua*[7].

[7] Citation form in Albanian is the first person singular form.

In contrast, subjects in impulsatives carry dative case and do not trigger agreement with the predicate.

(35) *Agimit i hahet një mollë.*
Agim.DAT DAT.cl eat.3SG.NACT a apple.
'Agim feels like eating an apple.'

(36) *Agimit dhe Dritanit u hahet/*hahen një mollë.*
Agim.DAT and Dritan.DAT 3PL.DAT eat.NACT.3SG/eat.NACT.3PL a apple.
'Agim and Dritan feel like eating an apple.'

Despite having different subjects, both examples (35) and (36) have third person singular agreement on the verb. Furthermore, in example (36), where third person plural is expected, this form is ungrammatical. Hence, the plural subject is not triggering plural agreement, unlike a canonical desiderative.

Consequently, from both the semantic and syntactic perspective, impulsatives are distinct from volitional desideratives or 'want' type verbs. Therefore, I argue that impulsatives are a grammatical category of their merit.

4.3.2 Introducing an Experiencer

The impulse head is responsible for introducing an argument and assigning that argument dative case. The dative argument in impulsatives is the experiencer of the feeling event introduced by the impulse head. The impulse head introduces this argument so that it can assign it the experiencer theta role of the feeling event. Furthermore, the impulse head must assign its argument case because the case on the argument is not a structural one. If it were structural, it would be affected by a raising verb, as subject of a raising verb it would receive nominative case. This prediction is not borne out.

(37) *Më fillohet të kërcej.*
me.DAT begin.NACT COMP dance.INF
'I feel like beginning to dance.'

In example (64), the argument *më* is dative not nominative. This suggests that the case is marked lexically as opposed to structurally. Consequently, it must be the null element assigning the lexical case. If the null element were modal, it would be unable to assign case, therefore the null element is not a modal.

In addition it assigns it dative case. Dative case is the case for experiencers in Albanian.

(38) *Kamerierit nuk i u durua më vetja.*
waiter.DAT NEG him.DAT NACT endure.3SG.PST more itself.NOM
'The waiter could not endure himself any longer.'
(Massey, 1991, p 69)

(39) *Sot më kujtohen fjalët/rrobat e Anës dje.*
Today, me.DAT recall.NACT.1SG words/clothes.NOM AGR Ann.DAT yesterday
'Today, I recall Anna's words/clothes of yesterday.'

In example (38) and (39) the verbs *durua* 'endure' and *kujtohen*, 'recall', take a dative subject because that argument receives an experiencer theta role. Therefore, the impulse head introduces an experiencer argument and assigns it inherent dative case.

4.4 What is the Syntactic Structure?

Thus far, I have established that there is a null impulse head. However, I must develop an analysis for the syntactic of the impulsative construction as a whole. First, I show that impulsatives in Albanian, unlike Marušič and Žaucer's (2006) analysis for Slovenian are not biclausal but are monoclausal.[8] Furthermore, selectional restrictions indicate that a monoclausal analysis would be best suited for impulsatives as mentioned in section 4.2.4. Specifically, I suggest that the impulse head selects for (2011)'s Process v Projection. Then, I propose a monoclausal analysis that account for the non-active morphology. Finally, I show that this analysis makes the correct predictions regarding c-command relations mentioned in section 4.2.2.

[8] It should be noted that Marušič and Žaucer (2006) do present a tentative typology, suggesting that Albanian impulsatives select vP.

4.4.1 Impulsatives are Not Biclausal

Albanian impulsatives are not biclausal. Albanian impulsatives only have one tense and aspect. Furthermore, the tense and aspect modify the impulsative event and not the internal predicate.

(40) *Një mollë më hahet një mollë.*
a apple 1SG.DAT eat.3SG.NACT
'I feel like eating an apple.'

(41) *Një mollë m'u hëng.*
A apple 1SG.DAT eat.3SG.NACT.PST
'I felt like eating an apple.'
∗'I feel like I ate an apple.'

(42) *Një mollë më hahej*
A apple 1SG.DAT eat.3SG.NACT.PST.IMP.
'I was feeling like eating an apple.'
∗'I feel like I was eating an apple.'

Examples (40) and (41) differ in tense, present and past respectively. The tense modifies the impulsative event, as opposed to the eating event. Example (41) cannot mean 'I felt like I ate an apple.' In fact, the sentence gives no indication whether an apple was eaten or not. Similarly, aspect also modifies the impulsative event and not the internal predicate. Example (42) differs from example (41) in aspect and cannot mean 'I feel like I was eating an apple.'

Finally, impulsatives in Albanian cannot have complementizers.

(43) *Më vjen (që) të kërceja.*
me.DAT come.3SG COMP MOOD dance.1SG
'I feel like dancing.'

(44) **Që më (që) kërcehej*
COMP me.DAT dance.NACT.PR
'I feel like dancing.'

While the periphrastic example in (43) can have a complementizer, the covert impulsative in (44) does not allow the presence of an impulsative. Based on evidence from complementizers, tense, and aspect I conclude that Albanian impulsatives are not biclausal.

4.4.2 Selectional Restrictions

Recall in section 4.2.1, impulsatives in Albanian are restricted to certain verbs. Examples are repeated below.

(45) *Ben-it i vdis-et.*
Ben.DAT 3S.DAT die.3SG NACT
'Someone died on Ben.'
∗'Ben feels like dying.'

(46) *Benit iu thye një vazo.*
Ben.DAT DAT.cl-NACT.cl break.NACT.3SG.PST a vase.INDEF
'To Ben, a vase was broken'.
∗'Ben felt like breaking a vase.'

(47) *Ben-it i nderto-hej nje shtepi.*
Ben.DAT DAT.cl build-NACT.3SG.IMP. a house.NOM
'For Ben, a house was built.'
∗'Ben felt like building a house.'

This is not due to lack of semantic salience as suggested by some (Rivero (2004) cites Kallulli and Arnaudova (p.c.)), as all of the above predicates can be used in the periphrastic impulsative form.

(48) *Më vinte të vdes.*
I.cl.DAT come.3SG.PST MOOD die.SUBJ.
'I feel like dying.'

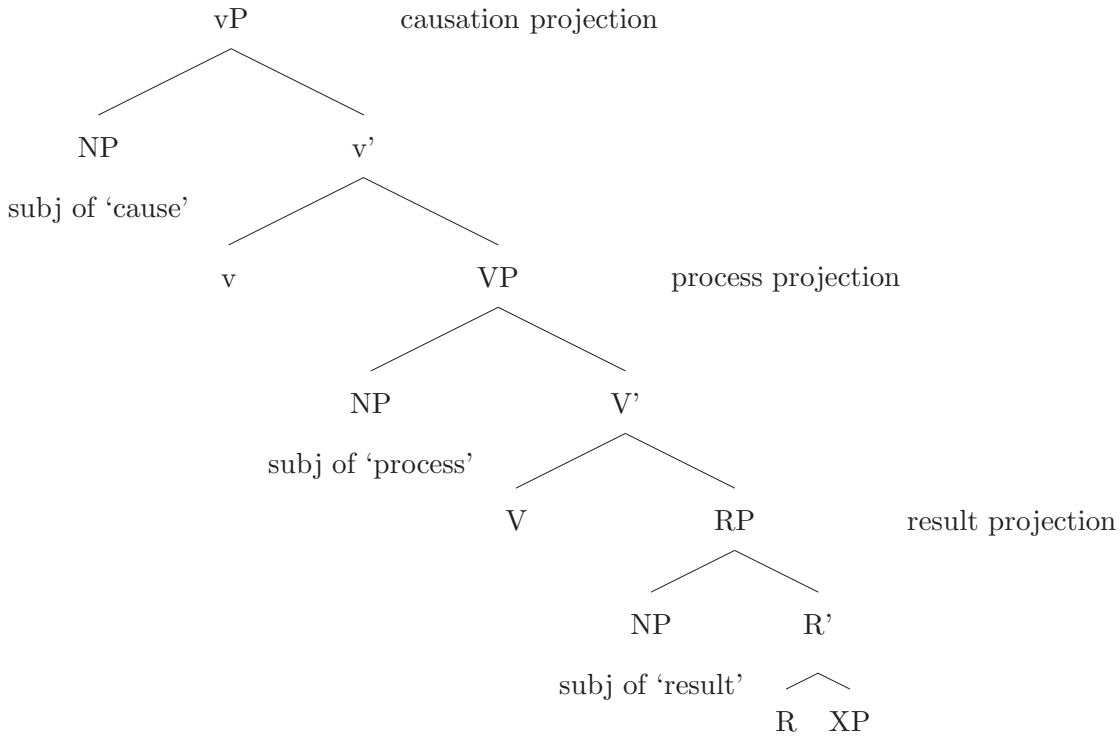
(49) *Më vjen të thyej një vazo.*
I.cl.DAT come.3SG.PR MOOD break.SUBJ a vase
'I feel like breaking a vase.'

(50) *Më vjen të ndërtoj shtëpi.*
1SG.DAT.cl come.3SG.PR MOOD build.SUBJ a house.
'I feel like building a house.'

Examples (48)-(50) demonstrate that it possible to have an urge or impulse 'die', 'break a vase', or 'build a house', despite how rarely these feelings may occur. Thus, it is not an issue of pragmatics. Instead it appears to be a syntactic constraint. Even (Kallulli, 2006*b*) treated the class of verbs as process verbs. However, instead of an indication of the non-active morphology decomposing the event structure, I propose that it is an indication of the impulse head selecting for the process phrase VP in Ramchand's (2011) First Phase Syntax.

Under Ramchand's (2011) framework, the verb phrase is made up of three sub-event projections. Ramchand's (2011) structure is presented below.

(51)



In the structure in (51) above there are three sub-events each with their own projection. The vP introduces the causation event. The VP introduces the process event, and finally, the RP provides the result state.

If the impulse head were to only select the VP which correlates to the process event, then it would correctly predict that only process verbs could form impulsatives. Furthermore, this would prevent causative and unaccusative verbs from being able to form impulsative constructions. However, for those speakers who do allow unaccusatives, then one could postulate that for those speakers, the impulse head can select for both Process VP and RP. These selectional restrictions indicate that the impulse head has direct control over the verb class that it selects. Therefore, a monoclausal analysis is necessary to account for these selectional restrictions.

4.4.3 A Monoclausal Analysis

In this section, I provide a monoclausal structure for Albanian impulsatives. I account for the presence of non-active morphology by extending Embick's (2004*b*) analysis of non-active morphology to impulsative constructions. Finally, this analysis correctly predicts the c-command relationship between the dative argument and the nominative object.

Embick proposes an account of the morphological syncretism of the non-active voice in Greek and Albanian in the Distributed Morphology framework (Halle and Marantz, 1993). Non-active voice morphology appears on passives, reflexives, and unaccusatives as shown in section 4.2.1 repeated below.

(52) *Molla hahej.*
apple.NOM eat.3SG.NACT.PST
'The apple was eaten.'

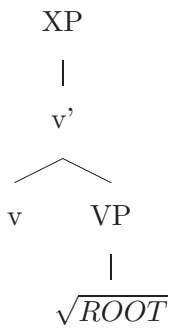
(53) *Papritmas, u duk dielli.*
suddenly NACT.cl appear.3SG.NACT.PST sun.NOM
'Suddenly, the sun appeared.'

(54) *Unë ushqehem.*
1SG.NOM feed.1SG.NACT
'I feed myself.'

Embick suggests that non-active morphology is a reflection of unaccusative syntax. This assumes that external arguments are not introduced by the verb itself but by a higher functional head, Voice (Kratzer, 1996). Unaccusative syntax is any syntactic structure where the external

argument is not projected. At spell-out, whenever there is a syntactic structure without the projection of the external argument, the non-active morphology is inserted. In the tree below, v' is projected but not the full vP or spec vP where the external argument would be placed.

(55)

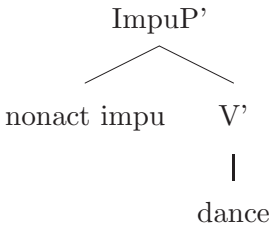


These are all cases in which the external argument is not projected in Albanian. Passives are a clear case for unaccusative syntax because the external argument that occurs in active versions of the sentence is missing. Unaccusative verbs are verbs where the subject has been shown to be an underlying object or internal object of the verb. And lastly, Embick argues that reflexives also have unaccusative syntax in that the underlying object raises to the specifier of v, after the cliticization of an anaphoric external element.

However, in Ramchand's (2011) First Phase Syntax there are several projections that introduce external arguments. Nevertheless, the analysis can still be carried over. In Ramchand's (2011) framework, non-active morphology is inserted whenever either v or V fail to project their argument. Thus an XP with a process V' as a complement would also represent unaccusative syntax.

I propose that the null impulse head selects for V'. Since the external argument of the overt verb does not project, the non-active morphology is inserted.

(56)



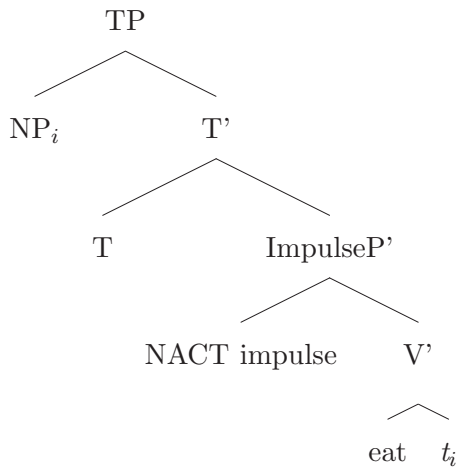
In addition, the null impulse head passes on to its experiencer argument the agenthood of the internal predicate. This is shown in the semantic denotation I have proposed below.

(57) $[\![\textbf{Impulse}]\!] = \lambda P_{<e,vt>} \lambda x.\lambda e.\lambda w.\forall w'$[w' is compatible with what x feels like in e in w] $\rightarrow$[$\exists$e' in w'.P(x)(e')]

This structure captures the monoclausal nature of Albanian impulsatives in addition to providing a template for which non-active morphology in Albanian is inserted uniformly. Moreover, it also explains why impulsatives cannot form with an unaccusative verb.

Finally, this monoclausal structure correctly predicts the c-command relationship between the dative argument and the nominative object. Under this analysis, a transitive impulsative would be unaccusative, and thus not be able to assign accusative case to an object. Thus, the object must move to spec of TP to receive nominative case as shown in the tree below.

(58)



In Albanian impulsatives, the nominative argument can bind the dative argument.

(59) *Peshkaqenët*$_1$ *i* *hahen* *njëritjetrit*$_1$.
Shark.pl.NOM CL.pl eat.NACT.3PL each.other.DAT
'The sharks feel like eating each other.'

In (59), the dative argument *njëitjetrit* 'each other' is c-commanded by the nominative argument *peshkaqenët* 'the sharks'. Thus this analysis can explain the correct c-command relationship. Furthermore, this analysis explains why the object receives nominative case.

Thus, the selection of V' grants us four benefits. First, it prevents both causatives and unaccusatives from forming impulsatives. Secondly, it accounts for the non-active morphology.

Thirdly, it derives a monoclausal structure. Finally, it accounts for the correct c-command relations between the experiencer subject and the nominative logical object.

4.4.4 Conclusion

In this section, I have detailed the syntactic structure of Albanian impulsatives. First, I showed the Albanian impulsatives are not biclausal. Next, I demonstrated that selectional restrictions motivated a monoclausal analysis. And finally, I provided a monoclausal analysis that incorporated both non-active morphology and selectional restrictions. With the exception of the selectional restrictions, this analysis parallels the analysis for Bulgarian impulsatives.

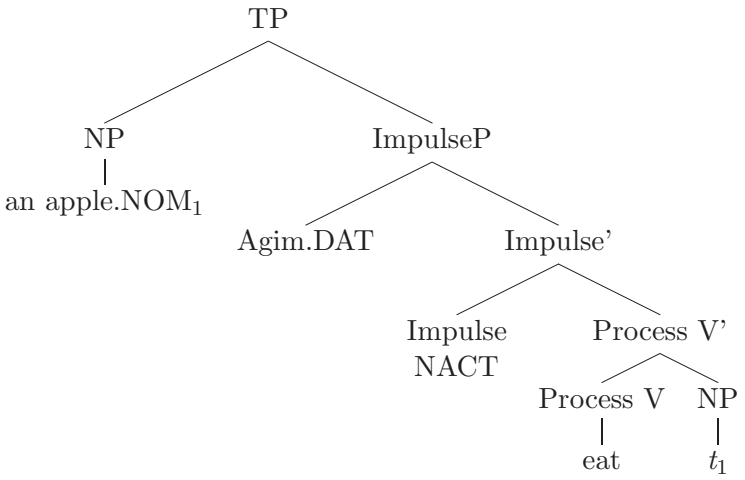
4.5 Full Derivation and Conclusion

I posit a null impulsative modal with the following denotation

(60) $[\![\textbf{Impulse}]\!] = \lambda P_{<e,vt>} \lambda x.\lambda e.\lambda w.\forall w'[$w' is compatible with what x has an impulse to do in e in w] $\rightarrow$[$\exists$e' in w'.P(x)(e')]

The null impulsative modal does the following things. First, It provides modality. In addition, it introduces another event– namely the 'feeling like' event and an experiencer argument. In addition, it adds this to the assertion of the sentence. The following is a sample derivation.

(61)



(62) a. $[\![\textbf{V}]\!] = \lambda y.\lambda x.\lambda e.$ eat(e) & Agt(e,x) & Thm(e,y)
$[\![\textbf{NP}]\!]$ = an apple
Functional Application

b. $[\![\textbf{V'}]\!] = \lambda x.\lambda e.$ eat(e) & Thm(e, an apple) & Agt(e,x)
$[\![\textbf{Impulse}]\!] = \lambda P_{<e,vt>}\lambda x\lambda e.\lambda w.\forall w'$ [w' is compatible with what x has an impulse to do in e in w] $\rightarrow$ [$\exists$e' in w'.P(x)(e')]
Functional Application

c. $[\![\textbf{Impulse'}]\!] = \lambda x\lambda e.\lambda w.\forall w'$ [w' is compatible with what x has an impulse to do in e in w] $\rightarrow$ [$\exists$e' in w'.eat(e') & Thm(e', an apple)& Agent(e',x))]
$[\![\textbf{Agim}]\!]$ = Agim
Function Application
, $[\![\textbf{ImpulseP}]\!] = \lambda e.\lambda w.\forall w'$ [w' is compatible with what Agim has an impulse to do in e in w] $\rightarrow$ [$\exists$e' in w' .eat(e') & Thm(e', an apple) & Agent(e',Agim))]

First, the predicate combines with its bar projection. If the verb is a transitive, such as 'eat', here is where it semantically combines with its object. Then, the Impulse head selects with V'. This triggers the insertion of non-active morphology because the process V has an unsaturated argument. Next, it combines with its argument. Here, it assigns it the experiencer theta role and assigns it dative case. In addition, the experiencer receives the agent theta role in the possible world. Finally, the object moves to spec of TP to receive nominative case.

In conclusion, Albanian impulsatives are best analyzed by positing a null impulse head. This null head assigns dative case to its argument and selects for process V'. By selecting a category of process V, this limits the construction to unergative and transitive verbs that are activities. By selecting a bar projection, this triggers the non-active morphology to be inserted following Embick's (2004*a*) Distributed Morphology analysis. This analysis explains the non-active voice, the source of the intensionality, the bi-eventivity and selectional restrictions of Albanian Impulsatives. It also unifies the analysis with the analyses of other impulsatives in other languages, such as Bulgarian, Finnish, and Quechua.

Chapter 5

FINNISH

5.1 Introduction

Finnish is spoken by approximately 5 million speakers (Gordon, 2005). It is a member of the Finnic language family and morphologically between fusional and agglutinating. Nouns are inflected for number and case while verbs are inflected for number, person, and tense.

In this chapter, I will discuss Finnish impulsatives. The goal of this chapter is to provide a syntactic structure and semantic derivation for impulsatives in Finnish. Like their Albanian and Bulgarian counterparts, a dedicated impulsative morpheme is absent from the construction. In Finnish, impulsatives are composed of a partitive argument and an unergative verb with the causative morpheme.

(1) *Maija-a laula-tta-a.*
Maija-PART sing-CAUS-3SG
'Maija feels like singing.'

In example (1), the argument *Maija* is marked with partitive case and the verb *laula* 'sing' is marked with the causative morpheme *tta*. The sentence has the unexpected intensional meaning that Maija feels like singing. This is the impulsative reading. The impulsative reading is intensional because Maija does not actually have to sing in order for this sentence to be true. Finnish Impulsatives introduce a modal world wherein the experiencer is also the external argument of the internal predicate.

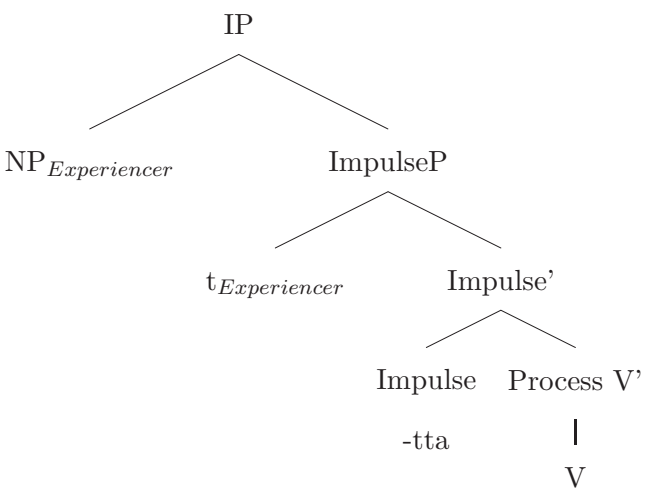
Finnish impulsatives share properties of impulsatives in Quechua, Albanian and Bulgarian. I show that they can be definitionally classified as impulsatives. However, impulsatives in Finnish do

not have a dedicated morpheme to contribute the impulsative meaning and intensionality. Therefore, like Albanian and Bulgarian impulsatives, I conclude that there is a null impulsative element. Previous analyses of impulsatives in Finnish have analyzed them as causative (Pylkkänen, 1999*b*; Nelson, 2004). However, I show that impulsatives in Finnish do not involve a causative event. Instead I argue that the morpheme *tta* is rather a reflection of unaccusative syntax. Thus the null impulse head in Finnish, like Albanian and Bulgarian, selects for an unsaturated predicate. Furthermore, like Albanian impulsatives, Finnish impulsatives ban unaccusatives from forming impulsatives. More specifically, the Finnish impulse head selects for Process V' (Ramchand, 2011). Nevertheless, there is one major difference between Finnish impulsatives and its Balkan counterparts. Finnish impulsatives do not allow for the logical objects of the internal predicate. In Albanian and Bulgarian impulsatives, logical objects of the internal predicate are allowed to receive nominative case; in Finnish, logical objects are blocked from receiving nominative case. Despite these differences, the semantic denotation of the Finnish impulse head is the same as its cross-linguistic counterparts. The denotation is repeated below.

(2) $[\![\textbf{Impulse}]\!] = \lambda P_{<e,vt>} \lambda x.\lambda e.\lambda w.\forall w'[w' \text{ is compatible with what x feels like in e in w}] \rightarrow [\exists e' \text{ in } w'.P(x)(e')]$

Semantically, the null impulse head will do several things. First, it will provide intensionality by quantifying over possible worlds. Secondly, it has an event argument. Finally, it introduces an experiencer argument and links it with the agent of the internal predicate in the modal world. Syntactically, the impulse head will license and case-mark an experiencer argument and select for an unsaturated Voice projection. The structure for example (1) is shown in the tree below.

(3)



The chapter is organized as follows. In the second section, I establish that Finnish impulsatives are not desideratives and that they lack a dedicated intensional element. In section three, I investigate the role of the causative morphology in Finnish impulsatives. I review previous analyses of impulsatives in Finnish that focus on the fact that impulsatives carry morphology associated with causatives in Finnish. Then, I demonstrate that contrary to both Pylkkänen (1999*b*) and Nelson (2004), impulsatives in Finnish have no causing event. Then, I show that Finnish impulsatives are parallel to their Balkan counterparts by elaborating on Nelson (2004)'s initial intuition and argue that *tta* is a reflection of unaccusative syntax. In section four, I show that the null impulse head is not a modal, like its cross-linguistic counterparts. Moreover, Finnish impulsatives are like their Albanian counterparts in that unaccusatives cannot be used impulsatives. Thus, I extend the proposal for Albanian, and suggest the Finnish impulsatives also select for Process V'. Finally, in section six I provide a complete analysis and derivation.

5.2 Preliminaries

5.2.1 Impulsatives vs. Volitional Desideratives

Impulsatives in Finnish differ from volitional desiderative predicates in Finnish. Semantically impulsatives differ from volitional desideratives in that they are not volitional and are often translated as 'feel like'. Finnish impulsatives are very salient with verbs involving bodily functions, such as 'sneezing' and 'coughing'.

(4) *Minu-a aivastu-tta-a.*
I-PART sneeze-CAUS-3SG
'I feel like sneezing.'

(5) *Minu-a yski-ttä-ä*
I-PART cough-CAUS-3SG
'I feel like coughing.'

Examples (4) and (5) are impulsatives formed with verbs that are commonly associated with impulses rather than desires. One generally does not desire to sneeze or to cough unless one has an uncomfortable bodily sensation. In addition, impulse and desire can be two separate feelings.

(6) *Maija-a nuku-tta-a.*
Maija-PART sleep-CAUS-3SG.
'Maija feels like sleeping.'

Example (6), is felicitous in a context where its New Year's Eve and Maija wants to stay up until midnight, but is tired. However, (6) cannot be used in the context where Maija is unable to fall asleep despite wanting to get a good night's rest for the busy day ahead of her. For the latter context, the volitional desiderative predicate is more appropriate.

(7) *Maija halua-a nukku-a.*
Maija.NOM want-3SG sleep-INF
'Maija wants to sleep.'

Example (7) describes Maija's desire to sleep, whether or not her body is tired. In contrast to (6), (7) cannot be used in the New Year's Eve context. Finally, impulsatives in Finnish cannot occur with a purpose adverb.

(8) **Maija-a nuku-tta-a tahallaan*
Maija-PART sleep-CAUS-3SG on.purpose
'Maija feels like sleeping on purpose.

In example (8), the sentence is ungrammatical because of the addition of the purpose adverb *tahallaan* 'on purpose' (Pylkkänen, 1999*b*). In contrast, volitional desiderative predicates can appear with a purpose adverb.

(9) *Maija halua-a nukku-a tahallaan.*
Maija.NOM want-3SG sleep-INF on.purpose
'Maija wants to sleep on purpose.'
(Pylkkänen, 1999*b*, Ex 35)

Impulsatives are not volitional because of the following properties: a) they are used saliently with bodily functions b) can be different than one's volition c) cannot be used with purpose adverbs. Because of these properties, I conclude that semantically impulsatives are not volitional desideratives.

Syntactically, subjects in impulsatives carry experiencer case. In Finnish, partitive case can be assigned to experiencer arguments.

(10) *Maija-a palel-s-i.*
Maija-PART cold-CAUS-.PST.3SG
'Maija feels cold.'

(11) *Maija-a häve-tt-i.*
maija-PART be.ashamed-CAUS-PST.3SG
'Maija felt ashamed.'

In examples (10) and (11), the subject *Maija*, as the experiencer of cold or shame, is marked with partitive case. This contrasts with the volitional desiderative predicates in Finnish, as in (7), where *Maija* is marked with nominative case. Furthermore, verbs in impulsatives do not agree with their subject while volitional desiderative verbs do.

(12) *Jussia ja Maijaa laula-tta-a/*laula-tta-vat*
Jussi-PART and Maija-PART sing-CAUS-3SG/sing-CAUS-3PL
'Jussi and Maija feel like singing.'

(13) *Maija ja Jussi halua-vat/*halua-a laula-a.*
Maija.NOM and Jussi.NOM want-3PL/want-SG sing-INF
'Maija and Jussi want to sing.'

In example (12), the verb must carry third person singular agreement despite the fact that the subject is plural. In example (13), on the other hand, the verb *halua* 'want' does carry third person plural agreement and is ungrammatical with singular agreement. Therefore, case and agreement

are different for impulsatives than for desideratives both semantically and syntactically.

5.2.2 Morphological Make-up

Like Albanian and Bulgarian impulsatives, Finnish impulsatives pose a problem for the mapping between syntax and semantics. There is a discrepancy because Finnish impulsatives, like Albanian and Bulgarian, lack a dedicated morpheme to provide the intensionality. Finnish impulsatives have two obligatory morphological elements, namely partitive case and the causative morpheme. Neither of these elements is responsible for the introduction of the intensionality in impulsatives. Furthermore, Finnish impulsatives, like Albanian impulsatives, are limited to unergative verbs.

Partitive case in Finnish is used on both themes and experiencers. It is a structural case for objects (Vainikka, 1989; Vainikka and Maling, 1996).

(14) *Hän luk-i kirja-a.*
he read-PST.3SG book-PART
'He was reading a/the book.'

In example (14), the object *kirjaa* 'book' receives partitive case. Partitive case is also used for experiencer arguments as shown in section 5.2.1, examples are repeated below.

(15) *Maija-a palel-s-i.*
Maija-PART cold-CAUS-3SG.PST
'Maija feels cold'

(16) *Maija-a häve-tt-i.*
maija-PART be.ashamed-CAUS-PST.3SG
'Maija felt ashamed.'

In examples (15) and (16), the subject *Maija*, as the experiencer of cold or shame, is marked with partitive case. In neither of the instances where partitive case is used is there intensionality. Partitive case on its own does not introduce intensionality into the semantics.

Experiencer case in Finnish is typically not nominative; the type of case used for experiencers, however, is not uniform. In addition to partitive, Finnish also uses the elative and adessive

as experiencer cases. Notably, these cases are inherent or 'quirky' cases rather than structural case.

(17) *Minu-sta tuntu-u että nyt alka-a sata-a.*
I-ELA feel-3SG that now begin-3SG rain-INF
'I feel that it is beginning to rain now.'

(18) *Minu-lla on nälkä.*
I-ADE 3SG hunger
'I'm hungry.'

Partitive case appears on experiencers when they occur with the morpheme *-tta*. The causative morpheme *-tta* has several uses. In addition to impulsatives, it is used for causatives and on many psych predicates. Canonical causatives are formed with an unergative verb and a nominative and a partitive argument.

(19) *Jussi laula-tt-i Maija-a.*
Jussi-NOM sing-CAUS-3SG.PST Maija-PART
'Jussi made Maija sing.'

In example (19), the causative morpheme *-tta* is affixed to the verb *laula* 'sing', the external argument of *laulaa* 'sing' receives partitive case and a nominative argument *Jussi* is introduced as the causer of the event. Despite appearing very similar to impulsatives, causatives have no intensionality. In order for example (19) to be true, Maija had to have actually sung (and not in some possible world). Additionally, the causative morpheme may appear on psych predicates.

(20) *Minu-a sure-tt-i.*
I-PART grieve-CAUS-PST.3SG.
'I felt grief./saddened.'
(Nelson, 2004, ex 11)

(21) *Pekka-a raivo-stu-tta-a.*
Pekka-PART fury-INCH-CAUS-3SG
'Pekka feels infuriated.'
(Nelson, 2004, ex 12)

In examples (20) and (21) the causative morpheme *tta* is affixed to psychological states such as *suru* 'grief' and *raivo* 'fury' and an experiencer argument is introduced with partitive case. Even though this usage is not obviously causative, Finnish literature still calls this morpheme causative. I will adopt this nomenclature, even for non-causative uses. However, despite these two very different uses of the causative morpheme, neither introduce intensionality into the semantics. A diagnostic for intensionality is the truth condition when there is a non-existent term in the sentence. For example, the following sentence must be false (Larson, 2002).

(22) #I saw a unicorn.

Example (22) must be false because it is common knowledge that unicorns do not exist. In contrast when a sentence is intensional, the sentence is not necessarily false.

(23) I want to see a unicorn.

Irrespective of whether unicorns exist, example (23) can still be true. Therefore, the occurrence of a non-existent term can diagnose an intensional sentence. The morpheme *tta* does not introduce intensionality to its sentences.

(24) #*Jussi laulatti Maijaa Valhallassa.*
Jussi-NOM sing-CAUS-3SG.PST Maija-PART Valhalla.INESS
'Jussi made Maija sing in Valhalla.'

(25) #*Minu-a sure-tt-i Valhallassa.*
I-PART grieve-CAUS-PST.3SG Valhalla.INESS
'I felt grief./saddened in Valhalla.'

Examples (24) and (25) are necessarily false because Valhalla is a fictional place in Scandanavian folklore. Therefore, these sentences are not intensional. Using this test, it can be shown that the *-tta* morpheme does not add intensionality in either canonical causatives or psychological causatives.

Finally, Finnish impulsatives are restricted to unergative verbs such as *laulaa* ''sing' in (1), *aivastaa* 'sneeze' (4) and *nukkua* 'sleep' (6). None of these verbs are intensional. Aditionally, the

impulsative reading is unavailable with unaccusative verbs.[1]

(26) **Maija-a kuole-tta-a.*
Maija-PART die-CAUS-3SG
'Maija feels like dying.'

(27) **Maija-a saavu-tta-a.*
Maija-PART arrive-CAUS-3SG
'Maija feels like arriving.'

(28) **Maija-a pudo-tta-a.*
Maija.PART fall-CAUS-3SG
'Maija feels like falling.'

Examples (26)- (28) are ungrammatical with unaccusative verb *kuolla* 'die', *saapua* 'arrive', and *pudota* 'fall' respectively, despite having a partitive argument and the causative morpheme *-tta*. Furthermore, while Finnish impulsatives can appear with transitive verbs, their objects are not allowed.

(29) **Maija-a laula-tta-a laulu.*
Maija-PART sing-CAUS-3SG song.
'Maija feels like singing a song.' [2]

(30) *Hän-tä kirjoitu-tt-i (*kirje).*
s/he-PART write-CAUS-PST.3SG (letter)
'She felt like writing (letter).'

Examples (29) and (30) are ungrammatical when they appear with the objects *laulu* 'song' and *kirjee* 'letter'. Finnish impulsatives have some restriction on allowing the internal predicates to occur with their logical objects.

Thus, while Finnish impulsatives do require certain morphological and syntactic components, none of these components individually contribute intensionality to the impulsative. Since

[1] These verbs can be used with the causative morpheme to elicit idiosyncratic meanings, such as *kuolettaa* means 'to cancel' and *saavuttaa* means 'to reach'.

[2] Possibly grammatical with causative reading 'A song makes Maija feel like singing.'

there is no apparent source for the intensionality of impulsatives in Finnish, I conclude that like Albanian and Bulgarian, there must be a null element.

5.3 The Role of Causative Morphology

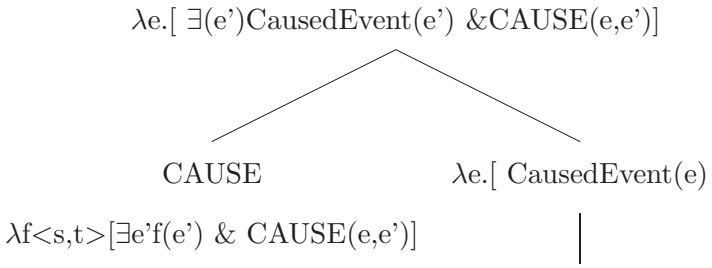
5.3.1 Impulsatives as Causatives

Pylkkänen (1999*b*) and Pylkkänen (1999*a*) develop an analysis of Finnish impulsatives, which she calls causative desideratives. Pylkkänen's analysis centers around motivating the separation between the causative head and the external argument that it is assumed to introduce. She analyzes the impulsatives as an instance of a causative that lacks an external argument. Pylkkänen (1999*b*)'s account assumes a null modal element to derive the impulsative meaning. She analyzes *-tta* as the homophonous causative morpheme and claims that the causative morphology introduces a causing event. This is supported by the fact that causing event can be sluiced.

(31) *Minu-a laula-tta-a mutt-en tiedä mikä.*
I-PAR sing-CAUSE-3SG but-not.1SG know what.NOM
'Something makes me feel like singing but I dont know what. (makes me feel like singing)'[3]
(Pylkkänen, 1999*a*, Example 21a)

In example (31), the sluiced interpretation is 'what makes me feel like singing' as opposed to 'what to sing'. This indicates there is an underlying causing event in Finnish impulsatives. Under Pykkänen's analysis, impulsatives are causatives that have no external argument and select for a null desiderative head. She provides this partial structure.

(32)



[3] The Finnish speakers I have consulted have given mixed judgements on this data point.

Finally, Pylkkänen analyzes the partitive argument as an affected argument of CAUSE which is also thematically related to the caused event. She claims that it receives partitive case as the object of CAUSE. This is because partitive case is the objective case when the verb is atelic or stative, like with impulsatives.

5.3.2 Psych Causatives

In addition to its canonical causative use, the affix *-tta* is also used to derive psych predicates. Some Finnish grammarians Hakulinen and Karlsson (1979) and Sulkala and Karjalainen (1992) have analyzed *-tta* as having two homophonous morphological processes. Nelson (2004), however, provides a unified analysis of all uses of the causative morpheme *-tta*. She concentrates on psychological predicates that are affixed with the causative *-tta*, dubbed Psych Causatives. Additionally, she differentiates what she calls stative psych causatives and inchoative psych causatives. She claims that despite their surface similarities, causative morphology affixing to stative and inchoative bases results in different syntactic structures.

When causative morphology is attached to inchoative psych bases, the nominative argument receives objective (partitive or accusative) case instead.

(33) *Koira raivo-stu-i (minu-Ile).*
dog.NOM fury-INCH-PST.3SG me-ALL
'The dog became infuriated (because of me).'
(Nelson, 2004, Ex 14)

(34) *Asia raivo-stu-tt-i minu-a / minu-t.*
matter.NOM fury-INCH-CAUS-PST.3S me-PART / me-ACC
'The matter was infuriating / infuriated me.'
(Nelson, 2004, Ex 15)

Example (33) is the inchoative base and example (34) is an inchoative psych causative, the base with causative morphology. The experiencer argument in the base is nominative, however it can be either partitive or accusative in the causative. In addition, what appears to be the theme appears as a nominative argument in the inchoative psych causative example (34). Nelson argues that in contrast to stative psych causatives, the nominative argument in inchoative psych

causatives is projected above the experiencer argument. This means that the nominative argument is introduced by the causative head above the internal inchoative psych predicate.

Superficially, stative psych predicates look like inchoative psych causatives. When causative morphology affixes to a stative base, the nominative argument receives partitive case.

(35) *Mina sur-i-n hän-tä.*
I-NOM grieve-PST-lSG him/her-PART
'I grieved for him/her.'
(Nelson, 2004, Ex 9)

(36) *Minu-a sure-tt-i koira-ni kuolema.*
I-PART grieve-CAUS-PST.3SG dog-lsPx death.NOM
'I felt grief about my dog's death.'
(Nelson, 2004, Ex 11)

Example (35) is the stative base and example (36) is the base augmented with the causative morphology producing a stative psych causative. The nominative argument in (35) appears with partitive case in example (36). In addition, the theme of *surra* 'grieve' appears with nominative case in the psych causative (36) instead of partitive as in (35). Nelson argues that in stative psych causatives the partitive experiencer argument is projected above the nominative theme. This means that the nominative argument is base generated as the theme of the internal predicate and moves to subject position to receive case; thus stative psych causatives behave like an unaccusative predicate. Nelson supports this with data from binding, passivization case, and agreement.

In both inchoative psych causatives and stative psych causatives, the causative morphology takes the experiencer argument and assigns it objective case rather than the nominative they receive in the base. Under Nelson's analysis, causative morphology suppresses the external argument of the internal predicate. Then it can add an external argument as with canonical causatives and inchoative causatives. However, it can also internalize the input external argument to derive a predicate with no external argument, as with impulsatives and stative psych predicates. She further asserts that if the partitive argument is in surface subject position, the event is interpreted as being internally caused. This is how she unifies all the uses of the causative morphology in Finnish.

5.3.3 Impulsatives are Not Causatives

In this section, I will demonstrate that there is no causative event in Finnish impulsatives. Both Pylkkanen's and Nelson's analyses portray impulsatives as causatives without an external causing argument. Nelson's analysis takes it a step further and says that it is internally caused and therefore no causing event is interpreted. However, if a causative head is projected with a causative denotation, it appears incongruous to assert that no causative event be interpreted.

Although Nelson never addresses the source of the intensionality in impulsatives, Pylkkänen suggests there is a null desiderative element. While Pylkkänen's analysis explicitly states that impulsatives do not have an external 'causer' argument, it is unclear what exactly would prevent one from projecting. If CAUSE can select for the null impulsative, then it should be able to notwithstanding an external argument. Therefore, Pylkkänen's analysis predicts that all morphologically causative sentences would be ambiguous between the causative and the impulsative meanings.

(37) *Jussi laula-tt-i Maija-a.*
Jussi.NOM sing-CAUS-PST.3SG Maija-PART
'Jussi made Maija sing.'
∗'Jussi caused Maija to feel like singing.'

Example (37), only has the direct causative meaning. It is only true if Maija sang. It cannot mean that Jussi caused Maija to feel like singing. Thus this indicates that the CAUSE head cannot always select for the impulse head.

Under Pylkkänen's analysis, the structure of impulsatives and causatives would be the same except for the lack an external argument and the addition of a null head that provides the intensionality. Causatives can have resultative structures as in (38). Thus a causative analysis would predict that impulsatives would also be able to form resultatives. However, this prediction is not borne out as impulsatives cannot have resultative structures.

(38) *Jussi laula-tt-i Maija-a pyörryksiin.*
Jussi.NOM sing-CAUS-3SG.PST Maija.PART dizzy.
'Jussi made Maija sing (until she's) dizzy.'

(39) **Maija-a* *laula-tt-i* *pyörryksiin.*
Maija-PART sing-CAUS.3SG.PST dizzy.
'Maija is caused to feel like singing dizzy.'

In example (38), Jussi makes Maija sing and this results in her being dizzy. However, example (39) is completely ungrammatical. It cannot have a resultative interpretation or structure. This fact is unexplained if there indeed is an underlying causing event.

Lastly, if a causative event is present, it should be able to be negated. While, this is the case with canonical causatives, impulsatives do not behave in a parallel fashion.

(40) *Jussi* *e-i* *laula-tta-nut* *Maija-a* *mutta* *Maija*
Jussi.NOM not-3SG.PST sing-CAUS-INF Maija-PART but Maija.NOM
laulo-i *muuten* *vain.*
sing-3SG.PST anyway.
'Jussi didnt make Maija sing but she sang anyway.

(41) *Maija-a* *e-i* *laula-tta-nut* *mutta....#* *Maija* *halus-i*
Maija-PART not-3SG.PST sing-CAUS-INF but Maija.NOM want-3SG.PST
laula-a *muuten vain.*
sing-INF anyway
∗'Nothing made Maija feel like singing, but she wanted to sing anyway.
'Maija didn't feel like singing, but she wanted to sing anyway.'

In example (40), the negation targets the causing event. Thus, even though Maija was not caused to sing, she sang. Example (41) on the other hand means that 'Maija didn't feel like singing' as opposed to 'Nothing caused Maija to feel like singing.' The negation targets the impulse to sing rather than an event that causes an impulse, resulting in a contradiction with the continuation 'Maija wants to sing anyways.'[4] This is unexplained by Pylkänen's analysis because the negation should target the causative event as it does in (40).

Another problem with Pykkänen's analysis is the mechanism in which case is assigned to the experiencer argument. Under Pylkkänen's analysis, the experiencer argument receives structural partitive case. If this were correct, then when it undergoes raising the case should become

[4] The continuation is not quite sufficient because it is a desiderative as explain in section 2, and would not be a contradiction in contexts described in that section.

nominative. However, this predictions is not borne out.

(42) *Maija-a näyttä-ä laula-tta-va-n.*
Maija-PART seem-3SG sing-CAUS-INF-ACC
'Maija seems to feel like singing.'

In example (42) the argument *Maija* receives partitive case rather than nominative. This indicates that the case marking is inherent rather than structural.

I conclude based upon the interpretation of canonical causatives, resultatives, and negation that there is no causative event in impulsatives in Finnish. Furthermore, the experiencer argument receives inherent rather than structural case as object of CAUSE. In these two regards, Pylkänen's analysis fails to capture the syntactic structure of impulsatives in Finnish. In addition, Nelson fails to unite all the possible uses of Finnish causative morphology.

5.4 *-tta* Attaches to Unaccusative Structures

In this section, I present a new way to analyze the morpheme *-tta*. I have shown, contrary to Pylkkänen and Nelson, that not all uses of Finnish causative morphology is truly causative; more specifically, impulsatives are not causatives. Consequently, the unified analysis of the uses of *-tta* is undermined. However, I argue that a unified analysis of *-tta* can be attained if we abandon the notion that *-tta* is causative. I provide an alternative analysis that analyzes *-tta* as the reflection of unaccusative syntax in Finnish, similar to non-active morphology in Bulgarian and Albanian (Embick, 2004*a*). Both the causative and impulse heads are null, but select for unaccusative complements that trigger the insertion of *-tta*.

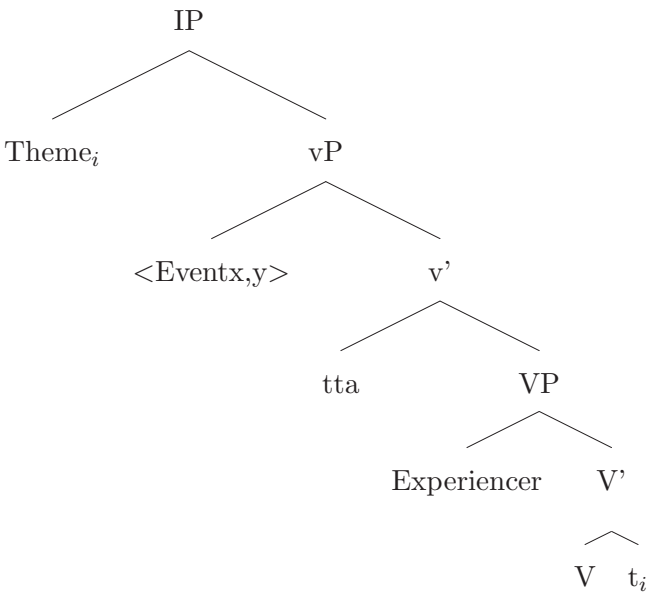
Thus far four different instances of - *tta* affixation have been identified: canonical causatives, stative psych causatives, inchoative psych causatives and impulsatives. In each of these constructions, I argue that *-tta* is affixing to an unaccusative predicate, a predicate that cannot assign objective[5] case. This is because either the verb is unaccusative already as with inchoative psych predicates, or the addition of the *-tta* morpheme renders the verb unable to assign objective case.

[5] Generally unaccusative predicates are those that cannot assign accusative case. However it is argued that Finnish verbs can assign either partitive or accusative case to its internal argument depending on factors such as telicity(Vainikka and Maling, 1996; Kiparsky, 2001).

First, I will review psych causatives. Inchoative bases are by definition unaccusative verbs.[6] These are verbs that cannot assign case to their internal arguments. The internal argument instead raises to spec IP to receive nominative case. When the verb is augmented by the causative morpheme *-tta*, the internal argument then becomes the object of the causing event and receives objective case from the cause head.

In the case of stative psych causatives, Nelson argues that once the *-tta* is affixed the predicate, it can no longer assign objective case to its theme. Consequently, the theme moves to spec of IP to receive nominative case. Nelson's structure for stative psych causatives is shown below.

(43)



In addition, canonical causatives and impulsatives cannot have thematic arguments with objective case.

(44) **Maija-a* *laula-tta-a* *laulu-t.*
Maija-PART sing-CAUS-3SG song-PL.ACC
'Maija feels like singing songs.

[6] I do not know any unaccusative diagnostics for Finnish intransitives, but the class of verbs Nelson identifies as inchoatives have the meaning 'become X', similar to the class of verbs that generally participate in inchoative alternations in other languages.

(45) **Jussi* *laula-tt-i* *Maija-a* *laulu-t*
Jussi.NOM sing-CAUS-PST.3SG Maija-PART song-PL.ACC
'Jussi made Maija sing songs.'

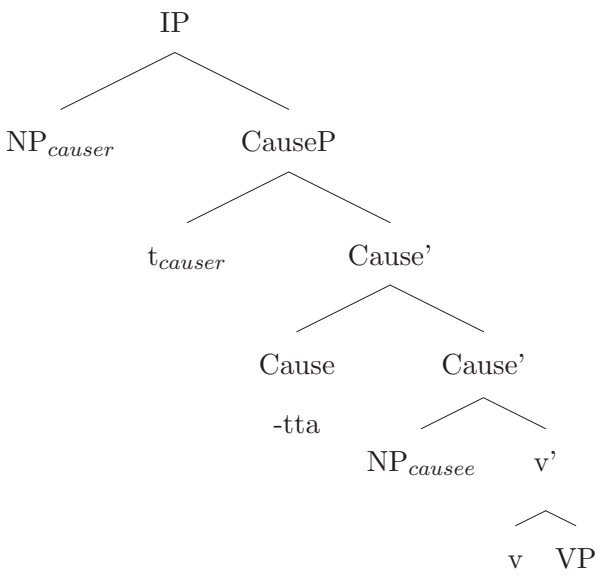
Examples (44) and (45) are ungrammatical because they occur with the object *laulu*. In simple sentences, the verb *laula* licenses objective case to its object. When it occurs in either a causative or impulsative construction, however, it loses its ability to license this case. Therefore causatives and impulsatives in Finnish are unaccusative in that they do not allow their internal predicate to assign accusative case.

Thus it appears that in all constructions, the complement of *-tta* cannot assign objective case, whether the predicate starts out as unaccusative like the inchoative causatives or becomes unaccusative as a result of the *-tta* affixation as in stative causatives, canonical causatives and impulsatives.

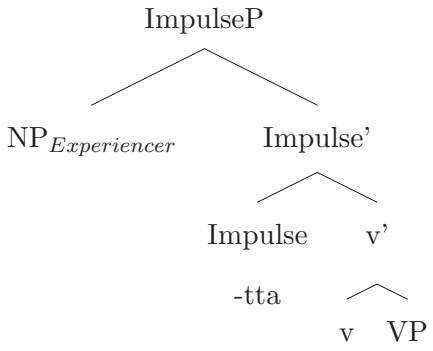
Based on this data, I propose that *-tta* is not a causative morpheme at all. I propose an account in the Distributed Morphology framework (Halle and Marantz, 1993). I suggest that *-tta* is a reflection of unaccusative syntax, parallel to the non-active morphology in Bulgarian and Albanian (Embick, 2004*a*). The unaccusative syntax is created by the selection of an unsaturated predicate. The major difference is that, while in Albanian and Bulgarian non-active morphology can be inserted directly under tense and aspect, Finnish only allows certain functional heads to select for unsaturated predicates, such as causative and impulse heads. Under this analysis, the causative head would be a null functional head. Thus when the null causative or impulse heads select for an unsaturated predicate, this triggers the insertion of *-tta*. The trees are provided below.[7]

[7] I am not sure what type of functional head the subjectless stative psych causatives would involve, possibly a bleached out experiencer head as in Brisson (1998).

(46)



(47)



In the structures in (46) and (47) the null heads CAUSE and IMPULSE select for either v'. This blocks the external argument from projecting and thus v' remains unsaturated. This syntactic structure triggers the insertion of *-tta*.

However, unlike Albanian and Bulgarian, Finnish does not insert *-tta* in traditionally unaccusative structures such as passives. This is because Finnish passives are not unaccusative at all, and are fully capable of assigning objective case.

(48) *Hänet esitel-tiin Juka-lle.*
He.ACC introduce-PASS Jukka-ALL
'He was introduced to Jukka.'

In example (48), even though the logical object appears preverbally, it still retains accusative case as the object of the verb *asiteltiin* 'introduce'. This demonstrates that the Finnish passive is not a

reflection of unaccusative syntax because it can still assign accusative case.

In this section I have provided a novel way to look at the instances of the morpheme *-tta*. I demonstrated that in each of the cases shown to use the morpheme *-tta*, unaccusative syntax was involved. Thus I suggested a DM account of *-tta* as a reflection of unaccusative syntax. In addition, this unifies impulsatives in Finnish with impulsatives in Albanian and Bulgarian which also select for an unsaturated predicate.

5.4.1 Partitive Arguments in Impulsatives are Subjects

Stative causatives differ from canonical causatives and impulsatives in that it allows its theme to move out and receive nominative case. However, in canonical causatives and impulsatives the theme does not have this option and is ungrammatical with nominative case as well.

(49) **Jussi* *laula-tt-i* *Maija-a* *laulu*
Jussi.NOM sing-CAUS-PST.3SG Maija-PART song.NOM
'Jussi made Maija sing a song.'

(50) **Maija-a* *laula-tta-a* *laulu.*
Maija-PART sing-CAUS-3SG song.NOM
'Maija feels like singing a song.'

Examples (50) and (49) are ungrammatical despite the nominative case on *laulu* 'song'. Example (49) already has a nominative argument *Jussi*, hence spec IP is already filled and not available to the object. Even though, example (50) does not have any other nominative arguments, I propose that the partitive argument moves to spec IP and consequently blocks the theme from moving to that position. Koskinen (1999) argues that all subjects in Finnish, whether nominative or quirky, covertly raise to subject position (Topic/AgrP in his framework). The partitive argument in canonical causatives, however, stays *in situ* and does not move. This is supported by the following facts about extraction and control.

The first diagnostic for subjectivity is that only complement objects can be extracted while complement subjects cannot (Huhmarniemi, 2011).

(51) *Minkä Jussi ajattel-i että Maija oli osta-nut?*
what.ACC Jussi.NOM think-3SG.PST that Maija PST buy-INF
'What did Jussi think Maija bought?'

(52) **Kuka Jussi ajattel-i että oli ostanut talo-n?*
Who.NOM Jussi think-3SG.PST that PST buy-INF house-ACC?
'Who does Jussi think bought a house?'

In example (51) the object is extracted from the embedded clause to form a grammatical question. However, example (52) where the complement subject is extracted is ungrammatical. Thus, if an element cannot be extracted it patterns like a subject. The prediction is that the partitive argument in impulsatives can not be extracted like a complement subject. This prediction is borne out.

(53) **Ketä Jussi ajattel-i että laula-tt-i?*
Who.PART Jussi.NOM think-PST.3SG that laugh-CAUS-PST.3SG
'Who did Jussi think felt like laughing?'

Example (53) is ungrammatical. This indicates that the partitive argument is a subject in an impulsative. Conversely, the partitive argument in a canonical causative can be extracted in an embedded clause.

(54) *Keta Maija ajattel-i että Jussi laula-tt-i?*
Who.PART Maija.NOM think.PST.3SG that Jussi.NOM laugh-CAUS-PST.3SG
'Who does Maija think Jussi made laugh?'

In example (54) the partitive argument can be extracted in contrast to example (53). This is because, unlike the argument in (53), the partitive argument does not move to Spec IP.

A second test for subjectivity is control in adjunct clauses. Subjects can control adjunct clauses while objects cannot.

(55) *He nauro-ivat laula-essa-nsa*
3pl.NOM laugh-3PL.PST sing-while-3PX
'They laughed while singing.'

(56) **Jussi näk-i heidät laula-essa-nsa.*
Jussi.NOM see-3SG.PST 3PL.ACC sing-while-3PX
'Jussi saw us while singing.'

In example (55) the subject of the matrix clause *he* 'they' controls the subject in the adjunct clause. However in example (56), the object of the matrix clause cannot control the subject in the adjunct clause. In impulsatives the partitive argument can control the subject of an adjunct clause, acting like a subject.

(57) *Lapsi-a naura-tt-i katselle-ssa-nsa oma-a laulamista-an.*
children-PART laugh-CAUS-3SG.PST watching-WHILE.3PX own singing.3PX
'The children felt like laughing while watching themselves sing.'

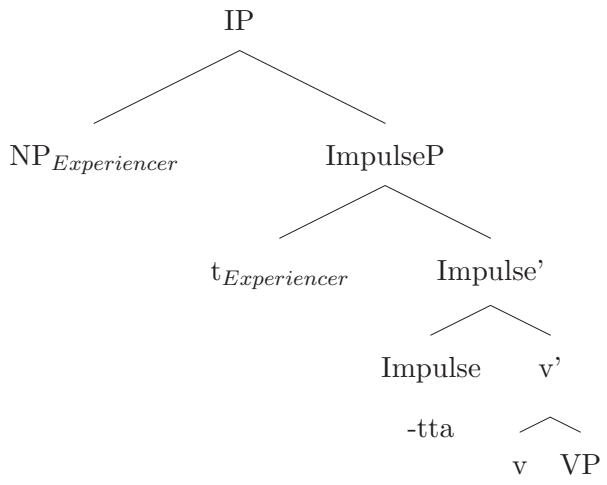
In example (57) the subject of the adjunct must be *meita* 'we'. This is also evident in the agreement on the verb in the adjunct clause which carries third person plural agreement. This indicates that the partitive argument moves to the spec of IP. In contrast, in a canonical causative, the partitive argument cannot control the subject of an adjunct clause, patterning more like an object.

(58) **Jussi naura-tt-i heita laula-ssa-nsa*
Jussi.NOM laugh-CAUS-3SG 3PL.PART sing.while.3PX
'Jussi made them laugh while singing.'

In example (58) the partitive argument *heita* 'them' cannot control the subject of the adjunct clause. Instead the nominative argument *Jussi* controls the subject of the adjunct clause. The interpretation is that Jussi made them laugh while Jussi was singing. This indicates that the nominative argument is the true subject of the sentence while the partitive argument is an object.

The structure for canonical causatives therefore is still the same as in the structure given in (46). However, structure for impulsatives has changed in that now, the experiencer argument moves to spec of IP. The proposed structure is provided below

(59)



5.4.2 Conclusion

In this section, I reviewed previous accounts that relied heavily on the assumption that *-tta* was a causativizing morpheme. Then I demonstrated that impulsatives do not involve causation. This not only created problems for a causative analysis of impulsatives, but also for the assumption that *-tta* was always associated with a causative construction. Therefore, I suggested that *-tta* is not causative but rather a reflection of unaccusative syntax.

5.5 Properties of the Impulse Head

In the previous section, I posited a null impulse head that selects for an unsaturated Voice projection. However, in order to establish a semantic denotation of the null impulse head, we must uncover other properties of the impulse head. In this section, I will demonstrate that the null impulse head is a predicate over events, introduces an argument and has selectional restrictions.

Finnish impulsatives introduce an event. Evidence of the presupposition generated by the adverb 'again'. Modals are not predicates over events, instead they have an event variable in the accessibility relation (Hacquard, 2006). As a result, modals in Finnish do not generate a presupposition when they occur with the adverb 'again'; only the embedded predicate generates a presupposition. Impulsatives in Finnish, on the other hand, do generate a presupposition with the adverb 'again'.

(60) *Maija-n tayty-y opiskella uudestaan.*
Maija-GEN must-3SG study.inf again.
'Maija must study again.'
Presupposition: Maija studied before.
Maija had to study before.

(61) *Maija-a laula-tt-i uudestaan (taas).*
Maija-PART sing-CAUS.PST-3SG again
'Maija felt like singing again.'
Presupposition: Maija felt before.
Maija sung before.

In example (60), only the embedded verb *opiskella* 'study' generates a presupposition, while the modal *tayty* 'must' does not. Thus the sentence presupposes that Maija studied before, but she may not have had to. However, in example (61), only the impulsative generates a presupposition. Thus the sentence presupposes that Maija had an urge to sing previously but may have not sung.[8] This indicates that the impulse head is a predicate over events.

A second property of Finnish impulsatives is that they introduce an argument. Consequently, it is incompatible with weather predicates because weather predicates do not have any arguments. In contrast, modals in Finnish do not introduce arguments and are therefore compatible with weather predicates.

(62) *Huomenna tayty-y sata-a / ol-la kaunis-ta.*
tomorrow must-3SG rain-TA / be-TA beautiful-PART
'It has to rain / be beautiful tomorrow.'
(Laitenen and Vilkuna, 1993)

(63) **Pian sada-tta-a.*
Soon rain-CAUS-3SG
'It's about to rain.'

Example (62) is grammatical because the modal *tayty* 'must' does not introduce an external argument. On the other hand, example (63), is ungrammatical because there is no argument even

[8] Due to independent factors, Finnish does not allow the internal predicate to generate presuppositions. In fact the internal predicate cannot be modified in any way. Canonical causatives pattern the same way.

though the impulse head necessarily introduces an argument. Since weather predicates do not have an argument this renders the impulsative ungrammatical.

Furthermore, the impulse head assigns its argument inherent partitive case. This is supported by evidence from raising. If the impulse head assigned structural case, the partitive argument should not retain its case when it raises to the subject position of a raising predicate (Sigurdsson, 2002).

(64) *Maija-a näyttä-ä laula-tta-van*
Maija-PART seem-3SG sing-CAUS-INF
'Maija seems to feel like singing.

In example (64), the partitive case on *Maija* is retained. Therefore, the case assignment is not structural but rather 'quirky'.

In addition, as shown in section 5.2.1, impulsatives are limited to unergatives and attempting to form impulsatives with unaccusatives results in ungrammaticality. Examples are repeated below.

(65) **Maija-a sapua-tta-a.*
Maija.PART arrive.CAUS.3SG
'Maija feels like arriving.'

(66) **Maija-a pudo-tta-a.*
Maija-PART fall.CAUS.3SG
'Maija feels like falling.'

To account for selectional restrictions, I propose that the Impulse head in Finnish selects for Ramchand (2011)'s process v', parallel to Albanian impulsatives.

In this section, I have illustrated various properties of Finnish impulsatives. Impulsatives in Finnish are predicates of events. Additionally, impulsatives in Finnish introduce their own argument and are responsible for assigning it inherent or quirky case. Lastly, impulsatives select a very specific complement, Process V'. This limits the verbs that can form impulsatives in Finnish to unergatives and some transitive verbs.[9]

[9] Although they are detransitivized.

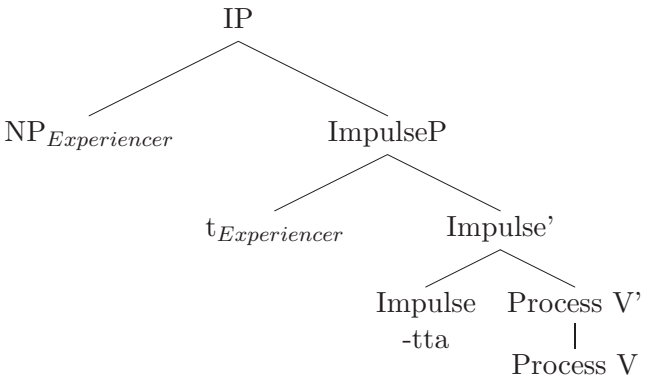
5.6 Conclusion

I posit a null impulsative modal with the following denotation.

(67) $[\![\textbf{Impulse}]\!] = \lambda P_{<e,vt>}\lambda x.\lambda e.\lambda w.\forall w'$[w' is compatible with what x has an impulse to do in e in w] $\rightarrow$[$\exists$e' in w'.P(x)(e')]

The null impulsative modal does the following things. It provides intensionality, it introduces an event, namely the 'feeling like' event, and it introduces an experiencer argument. In addition, it adds this to the assertion of the sentence. The following is a sample derivation.

(68)



(69) a. $[\![\textbf{Process V'}]\!] = \lambda x.\lambda e.$ sing(e) & Agt(e,x)
$[\![\textbf{Impulse}]\!] = \lambda P_{<e,vt>}\lambda x\lambda e.\lambda w.\forall w'$ [w' is compatible with what x has an impulse to do in e in w] $\rightarrow$ [$\exists$e' in w'.P(x)(e')]
Functional Application

b. $[\![\textbf{Impulse'}]\!] = \lambda x\lambda e.\lambda w.\forall w'$ [w' is compatible with what x has an impulse to do in e in w] $\rightarrow$ [$\exists$e' in w'. sing(e') & Agent(e',x))]
$[\![\textbf{Maija}]\!]$ = Maija
Function Application

c. $[\![\textbf{ImpulseP}]\!] = \lambda e.\lambda w.\forall w'$ [w' is compatible with what Maija has an impulse to do in e in w] $\rightarrow$ [$\exists$e' in w'. sing(e') & Agent(e',Maija))]

First, the predicate combines with its bar projection. Then, the Impulse head selects for Process V'. This triggers the insertion of the "causative" morphology because the Process V' has an unsaturated argument. Next, it combines with its argument. Here it assigns its argument the

experiencer theta role and dative case. In addition, the experiencer receives the agent theta role in the possible world.

In conclusion, Finnish impulsatives are best analyzed by positing a null impulse head. This null head assigns partitive case to its argument and selects for Process V'. By selecting a category of Process V, this limits the construction to unergative and transitive verbs that are activities. By selecting a bar projection, this triggers the insertion of *-tta* following (Embick, 2004*a*) Distributed Morphology analysis. This analysis explains the "causative" morphology, the source of the intensionality, and the selectional restrictions of Finnish impulsatives. It also unifies the analysis with the analyses of other impulsatives in other languages, such as Bulgarian, Albanian, and Quechua.

Chapter 6

CONCLUSION

6.1 Summary

In this dissertation, I discussed the syntax and semantics of impulsatives. I argued that we need to distinguish between two types of desideratives, volitional and non-volitional. The non-volitional desideratives behaved differently both syntactically and semantically from volitional desideratives. The former, impulsatives, can be divided into two types, overt and covert impulsatives. The existence of overt impulsatives motivates the positing of a null impulse head in the languages that lack a dedicated impulsative morpheme. Additionally, these languages provide independent evidence for positing a null impulse head, such as bi-eventivity and selectional restrictions. Furthermore, by positing a null impulse head in Bulgarian, Albanian and Finnish, I am able to provide a unified analysis for impulsatives cross-linguistically.

This investigation began with the observation that impulsatives shared semantic and morpho-syntactic properties. I defined impulsatives as constructions that denoted a non-volitional desire with an oblique experiencer argument and a verb that does not agree with this argument. However, as the investigation continued, impulsatives revealed deeper commonalities. As a result of shared event and argument structure, I was able to provide a unified semantic denotation for the impulse head. The impulse head introduces intensional or modal semantics. In the modal world, the experiencer is the agent of the internal predicate. The experiencer argument is also introduced by the impulse head. In addition, it is responsible for assigning the oblique case to the experiencer argument. In Bulgarian and Albanian, the impulse head assigns dative case, in Finnish it assigns partitive case and in Cusco Quechua, it assigns accusative. The impulsative is also an event introducer. In Bulgarian, Albanian Finnish and Cusco Quechua, this event is syntactically independent from the event introduced by the internal predicate.

6.2 The Nature of Impulsatives

The fact that impulsatives cross-linguistically share semantic and morpho-syntactic properties raises an important question about the nature of impulsatives. Is it necessary that these two properties always come together as a predesignated package? In other words, are the non-canonical case and agreement pattern and expression of involuntary desire inextricably linked?

As discussed in the introduction, it is common for experiencer predicates to assign 'quirky' case to their arguments (McCawley, 1976; Aikhenvald, Dixon and Onishi, 2001; Sigurdsson, 2002). This can be linked to various properties such as stativity, affectedness and volition. Volition is exclusively recognized as the determining factor in non-canonical subject marking in the South Asian languages by Klaiman (1980); Bhatt (1993). Therefore, it would be reasonable to postulate that the semantic and morpho-syntactic properties in impulsatives come hand in hand. Furthermore, in the cases of covert impulsatives, if there were canonical subject case and agreement, then there would be no cues for the impulsative interpretation. The impulsative would look like an ordinary non-active sentence and consequently make many more sentences ambiguous. Therefore, not only do the semantic and morpho-syntactic properties coincide, they are indispensable in covert impulsatives.

However, if the impulsative meaning is linked to the case and agreement configuration, then it should not be possible for a language to have a impulsative construction with a nominative subject. Nevertheless, it is possible to achieve an impulsative meaning without non-canonical case and agreement. For instance, English is a language that always assigns nominative case to its subjects. Thus in English, in order to express an impulsative meaning, the predicate must take a nominative subject.

(1) I feel like dancing.

Because of cases like English, it is not desirable to inextricably link the impulsative meaning with non-canonical case and agreement. . If the impulsative meaning and the syntax were not linked, it would predict that it should be possible for a language to have a dedicated impulsative affix with a nominative subject. Unfortunately, much of the literature on desideratives does not explicitly

discuss whether the constructions express a volitional or involuntary desire. Thus it is difficult to determine whether the prediction is borne out or not.

In essence, there is a contradiction. On the one hand, to allow for cases like English, impulsative meaning and syntax cannot be linked. On the other hand, it seems there must be a link between the two to allow for languages with covert impulsatives. The answer to this problem may lie in the properties of the languages themselves. Languages with covert impulsatives are languages which exhibit a variety of case marking as well as verbal agreement; these languages are "pre-equipped" in a sense to express an impulsative meaning using a non-canonical case and agreement configuration. English, however, has a limited case marking system and exhibits comparatively less verbal agreement. Thus, the only way to express an impulsative meaning in English is through a canonical case and agreement configuration. On the other end of the spectrum, isolating languages such as Mandarin Chinese have no overt case and agreement marking at all. Like English, Mandarin does not have a system which allows for an impulsative meaning to be expressed through the syntax. The general pattern suggests that, languages that assign oblique cases to experiencer arguments are candidates for monoclausal impulsatives. At the same time, languages that do not assign oblique case to experiencer arguments or do not have any overt case and agreement at all, will not have monoclausal impulsatives. I conclude then that there is no need to posit any external requirement linking the syntax and the semantics; rather the link can be viewed as a natural consequence of the properties of the languages themselves.

In sum, even though impulsatives frequently appear with similar semantic and morpho-syntactic properties, nothing explicitly forces these properties to always come together. While cross-linguistically, it is common for languages to assign non-canonical case marking to the subject of experiencer predicates, many languages like English or Mandarin Chinese treat experiencer predicates like canonical predicates in the language. Consequently, the link between the impulsative meaning and its case and agreement patterns are not universal. Rather, the link can be viewed as a result of the syntactic properties of the languages which have impulsatives.

6.3 Other Possible Impulsatives

While almost every language has a periphrastic way of expressing non-volitional desire, dedicated impulsative morphemes appear quite rare. Many of the Quechua languages, including Imbabura, Huanca, Ancash and Cusco have an attested form (Hermon, 1985), however, as far as I know, there is only one other attested case, Tohono O'odham (Zepeda, 1987).

Tohono O'odham

(2) *S-n0-bisc-* **im**-*c* *at*
s-object-sneeze-DES-CAUSE Aux
'I feel like sneezing' or 'Something makes me feel like sneezing'
(Zepeda, 1987)

In example (2) the desiderative morpheme in Tohono O'odham is *-im-*. Interestingly, impulsatives in Tohono O'odham come accompanied by the causative morpheme *c* which makes it appear similar to Finnish impulsatives (Pylkkänen, 1999*b*). Although Zepeda (1987) claims that these are truely causative, she does not provide any syntactic tests such as those I have provided with Finnish impulsatives.

6.4 Further Implications

When positing a new grammatical category it is necessary to consider what other possible interpretations may overlap with the category. Semantic meaning across languages is rarely entirely uniform and semantic shifts are inevitable. Therefore, it is logical to conclude that categories with similar meanings would appear with the same morpho-syntactic realizations. As far as I can discern, there are two possible overlaps: the proximate and necessity readings.

As shown in Cusco Quechua, the impulsative morpheme can sometimes generate proximate readings with weather predicates. This is unsurprising, given that volitional desideratives often extend to future interpretations. If a non-volitional desire were to extend to a future reading it would be that of a non-volitional future. Proximate readings are precisely that: they indicate the future without positing any volition on the part of the subject (Romaine, 1999).

The necessity reading, like the impulsative reading, is also intensional and non-volitional. This can observed in Hindi (Bhatt, 1998).

(3) *mujhe pad-na he*
1sg.DAT study-NOM PR
'I need to study.'

Example (3) has an oblique argument and a verb that does not agree with the subject, thus, morpho-syntactically behaving like a covert impulsative. In addition, native speakers report that salient contexts are those involving bodily functions as in (4).[1]

(4) *mujhe bohot zoor se muut-na he*
me.DAT a.lot force with pee-NOM PR
'I really need to pee.'

When it comes to bodily functions, there is not much difference between an uncontrollable urge and necessity. Thus, in addition to both being non-volitional and intensional, the meanings overlap in some contexts. Therefore, the category of impulsatives may extend to necessity constructions.

6.5 Further Issues

One major unresolved issue in this dissertation is the role of aspect, particularly in Bulgarian, where impulsative readings could not be attained in the imperfect form. Hacquard (2006)'s dissertation is dedicated to the intersection of aspect and modality. She argues that aspect can bind the event variable in the accessibility relation in modals. In addition, she argues that the possible combinations of event binders and accessibility relation is limited by restrictions on event type. A further look might reveal what is restricting the imperfective aspect in Bulgarian impulsatives. I will leave this as future research.

A second unresolved issue is whether the impulsatives undergo restructuring. It is quite possible that impulsatives start out as truly bi-clausal and undergoes a process uniting the two clauses to yield one clause. While established diagnostics for restructuring in the Romance and Germanic languages exist (Burzio, 1986; Kayne, 1989; Rizzi, 1982; Wurmbrand, 2001), restructuring

[1] Data received from Karthik Durvasula and friends.

in the languages covered in this dissertation has been less studied. Thus more work needs to be done to determine whether impulsatives are a restructured construction or not.

Lastly, a related issue is whether the impulse head is functional or lexical. Functional categories do not assign theta roles to arguments, are subject to rigid ordering and co-occurence restrictions and allow only one type of complementation. Lexical categories on the other hand, establish thematic relationships with arguments, are not subject to syntactic ordering and show optionality in complementation (Wurmbrand, 2001). Impulsatives behave like a functional head in that they only have one type of complementation in each language, and have rigid ordering. However, they establish a thematic relationship with their argument like a lexical category. Additionally, they introduce their own event like a predicate rather than a modal. Therefore, it is not clear whether impulsatives are lexical or functional.

BIBLIOGRAPHY

Aikhenvald, A., Dixon, R. M. and Onishi, M., eds (2001), *Non-Canonical Marking of Subjects and Objects*, John Benjamins Publishing Company.

Anagnostopoulou, E., Iatridou, S. and Izvorski, R. (1998), On the morpho-syntax of the perfect and how it relates to its meaning, *in* P. N. Tamanji and K. Kusumoto, eds, 'Proceedings of the north east linguistic society', Graduate Linguistic Student Association, University of Toronto, pp. 15–32.

Baker, M. (1985), 'The mirror principle and morphosyntactic explanation', *Linguistic Inquiry* **16**(3), 373–416.

Bale, A. (2006), Quantifiers, 'again' and the complexity of verb phrases, *in* E. Georgala and J. Howell, eds, 'Proceedings of SALT XV'.

Belletti, A. and Rizzi, L. (1988), 'Psych verbs and theta-theory', *Natural Language and Linguistic Theory* **6**(3), 291–352.

Benedicto, E. (1995), 'Mne ne čitaetsja: (relativized) modality, datives and reflexive suffixes', *Penn Working Papers in Linguistics* **2(2)**, 1–16.

Bhatt, R. (1993), The case of quirky constructions, *in* A. Davison, N. Maier, G. Silva and W. S. Yan, eds, 'Fourth Annual Meeting of the Formal Lingusitics Society of MidAmerica', University of Iowa, pp. 20–34.

Bhatt, R. (1998), 'Obligation and possession', *he Proceedings of the UPenn/MIT Workshop on Argument Structure and Aspect,* **32**.

Bobaljik, J. D. and Jonas, D. (1996), 'Subject positions and the roles of TP', *Linguistic Inquiry* **27**(2), 195–236.

Boeckx, C. (2003), Intricacies of icelandic agreement. University of Maryland/Harvard University.

Bosse, S., Bruening, B., Yamada, M., Peng, A. and Cathcart, M. (2008), Affected arguments cross-linguistically, *in* 'FASSBL 6 The Sixth International Conference on Formal Approaches to South Slavic and Balkan Languages'.

Brisson, C. (1998), Distributivity, Maximality, and Floating Quantifiers, PhD thesis, Rutgers University.

Bruening, B. (2004), Verbal reciprocals, *in* T. S. B. Lyngfelt and M. F. Krave, eds, 'Demoting the Agent: Proceedings of the Oslo Workshop on Passive and Other Voice-Related Phenomena', University of Oslo, pp. 3–12.

Burzio, L. (1986), *Italian Syntax*, Reidel Publishers.

Bybee, J. L. (1985), *Morphology: A study of the relation between meaning and form. Amsterdam: John Benjamins. Morphology: A study of the relation between meaning and form*, John Benjamins, Amsterdam.

Chomsky, N. (1981), *Lectures on government and binding*, Foris Publications, Dordrecht, The Netherlands.

Chomsky, N. (1982), *Some concepts and consequences of the theory of government and binding*, MIT Press, Cambridge, Massachusetts.

Chomsky, N. (1986), *Barriers*, MIT Press, Cambridge, Massachusetts.

Chomsky, N. (1995), *The minimalist program*, MIT Press, Cambridge, Massachusetts.

Chomsky, N. (2000), Minimalist inquiries: The framework, *in* R. Martin, D. Michaels and J. Uriagereka, eds, 'Step by step: Essays on minimalist syntax in honor of Howard Lasnik', MIT Press, pp. 89–156.

Chomsky, N. (2001), 'Beyond explanatory adequacy'.

Cipria, A. and Roberts, C. (2000), 'Spanish imperfecto and pretérito: truth conditions and aktionsart effects in a situation semantics', *Natural Language Semantics* **8**(4), 297–347.

Cole, P. (1985), *Imbabura Quechua*, Croom Helm.

Copley, B. (2002*a*), A linguistic argument for indeterministic futures, *in* M. Hirotani, ed., 'Proceedings of North East Linguistic Society 32', Vol. 1, pp. 53–72.

Copley, B. (2002*b*), The Semantics of the Future, PhD thesis, Massachusetts Institute of Technology.

Cresswell, M. J. (1990), *Entities and indices*, Kluwer Dordrecht.

Crystal, D. (1985), *A dictionary of linguistics and phonetics*, 2nd edition edn, Basil Blackwell Ltd., New York, New York.

Cusihuaman, A. (2001), *Gramática Quechua: Cuzco-Collao*, Centro de Estudios Regionales Andinos "Bartolomé de las Casas".

den Dikken, M. (1996), The minimal links of verb (projection) raising, *in* W. Abraham, S. D. Epstein, H. Thráinsson and C. J.-W. Zwart, eds, 'Minimal ideas', John Benjamins Publishing Company, Amsterdam, pp. 67–96.

Dimitrova-Vulchanova, M. (1999), *Verb Semantics, Diathesis and Aspect*, LINCOM EUROPA.

Dowty, D. R. (1979), *Word meaning and Montague grammar*, Vol. 7, Kluwer Academic Publishers, Dordrecht, The Netherlands.

Embick, D. (2004*a*), 'On the structure of resultative participles in English', *Linguistic Inquiry* **35**(3), 355–392.

Embick, D. (2004*b*), Unaccusative syntax and verbal alternations, *in* A. Alexiadou, E. Anagnostopoulou and M. Evereart, eds, 'The Unaccusativity Puzzle: Explorations of the Syntax-Lexicon Interface', Oxford University Press, Oxford, pp. 137–158.

Fintel, K. v. and Heim, I. (2002), Notes on intensional semantics. unpublished manuscript, MIT, Cambridge.
URL: *www.phil-fak.uni-duesseldorf.de/summerschool2002/fintel.pdf*

Franks, S. (1995), Parameters of Slavic morphosyntax, *in* 'Oxford Studies in Comparative Syntax.', Oxford University Press.

Franks, S. and King, T. (2000), *A handbook of Slavic clitics*, Oxford University Press.

Freeze, R. (1992), 'Existentials and other locatives', *Language* **68**(3), 553–595.

Gordon, R., ed. (2005), *Ethnologue: Languages of the World*, SIL International.

Hacquard, V. (2006), Aspects of Modality, PhD thesis, Massachusetts Institute of Technology.

Hakulinen, A. and Karlsson, F. (1979), *Nykysuomen lauseoppia*, Helsinki:SKS.

Halle, M. and Marantz, A. (1993), Distributed morphology and the pieces of inflection, *in* K. Hale and S. J. Keyser, eds, 'The View from Building 20', MIT Press, Cambridge, Massachusetts, pp. 111–176.

Haspelmath, M. (2008), 'Want' complement subjects, *in* M. Haspelmath, M. S. Dryer, D. Gil and B. Comrie, eds, 'The World Atlas of Language Structures Online.', Max Planck Digital Library, chapter 124.
URL: *http://wals.info/feature/124*

Heim, I. and Kratzer, A. (1998), *Semantics in generative grammar*, Blackwell, Malden, MA.

Heine, B. (1994), 'On the genesis of aspect in african languages: The proximative', *Berkeley Linguistics Society* **20**(35-46).

Hermon, G. (1985), *Syntactic Modularity*, Foris Publications.

Hintikka, J. (1969), Semantics for propositional attitudes, *in* D. H. J.W. Davis and W. Wilson, eds, 'Philosophical Logic', Dordrecht: Reidel.

Hopper, P. (1992), Grammaticalization, *in* W. Bright, ed., 'International encyclopedia of linguistics', Oxford University Press.

Hubbard, P. L. (1985), *The Syntax of the Albanian Verb Complex*, Garland Publishers Inc, London ; New York.

Huhmarniemi, S. L. (2011), Edges and Islands, PhD thesis, University of Helsinki.

Jake, J. and Cole, P. (1978), 'Accusative subjects in imbabura quechua', *Studies in the Linguistic Sciences* .

Kallulli, D. (1999), 'Non active morphology and event decomposition', *Crossing boundaries; advances In the theory of Central and Eastern European languages* pp. 263–292.

Kallulli, D. (2006*a*), Argument demotion as feature suppression., *in* T. S. B. Lyngfeldt, ed., 'Demoting the Agent', John Benjamins, pp. 143–166.

Kallulli, D. (2006*b*), Unaccusatives with dative causers and experiencers: a unified account, *in* A. M. . W. A. e. D. Hole, ed., 'Datvies and other cases'.

Kayne, R. S. (1989), Null subjects and clitic climbing, *in* O. Jaeggli and K. J. Safir, eds, 'The Null Subject Parameter', Kluwer Academic Publishers, Dordrecht, Holland, pp. 239–262.

Kiparsky, P. (2001), 'Structural case in finnish', *Lingua* pp. 315–376.

Klaiman, M. (1980), 'Bengali dative subjects', *Lingua* **51**(4), 275–295.

Koskinen, P. H. (1999), 'bject-verb agreement and covert raising to subject in finnish', *Toronto working papers in linguistics* .

Kratzer, A. (1991), Modality, *in* A. von Stechow and D. Wunderlich, eds, 'Semantik: Ein internationales Handbuch zeitgenoessischer Forschung.', De Gruyter.

Kratzer, A. (1996), Severing the external argument from its verb, *in* J. Rooryck and L. Zaring, eds, 'Phrase Structure and the Lexicon', Kluwer Academic Publishers, Dordrecht, The Netherlands, pp. 109–137.

Kratzer, A. (2003), 'Scalar implicatures: Are there any?', *Lecture at Workshop on Polarity, Scalar Phenomena and Implicatures. University of Milan-Bicocca* .

Labelle, M. (2008), 'The french reflexive and reciprocal se', *Natural Language and Linguistic Theory* .

Laitenen, L. and Vilkuna, M. (1993), 'Case-marking in necessive constructions and split intransitivity.', *Case and other functional categories in Finnish syntax* pp. 23–47.

Landman, F. (2000), *Event and Plurality*, Kluwer.

Larson, R. K. (2002), The grammar of intensionality, *in* G. Preyer and G. Peter, eds, 'Logical Form and Language', Oxford University Press.

Larson, Richard, M. d. D. and Ludlow, P. (1997), Intensional transitive verbs and abstract clausal complementation. http://semlab5.sbs.sunysb.edu/ rlarson/.

Marušič, F. and Žaucer, R. (2010), 'The involuntary state/feel-like construction: What aspect cannot do', *Formal Description of Slavic Languages* .

Marušič, F. and Žaucer, R. (2006), 'On the intensional feel-like construction in Slovenian: A case of a phonologically null verb', *Natural Language and Linguistic Theory* **24**, 1093–1159.

Masica, C. (1976), *Defining a Linguistic Area: South Asia*, University of Chicago Press.

Massey, V. (1991), Experiencers, themes, and c-command in Albanian, PhD thesis, University of North Carolina at Chapel Hill.

McCawley, J. D. (1979), *On Identifying the Remains of Deceased Clauses*, University of Chicago Press.