The Copula in Malayalam

by

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(Under the Direction of María Pilar Chamorro Fernández)

Abstract

In this dissertation, I explore the internal compositional nature of the Malayalam copula, *aaNu*, and the morpho-syntactic and morpho-semantic contributions of the existential morpheme, *uNTu*. Prior research on these morphemes has labeled them both as COPULA, because they seem to appear in overlapping distribution in locative and property concept constructions. The goal of this research is to develop a formal analysis that describes the apparent overlapping distribution that *aaNu* and *uNTu* share.

Temporal, aspectual, and modal (TAM) inflectional agreement morphology are either available on a main verb stem, or they are hosted by the copular auxiliary, *aaNu*. Since *uNTu* is unable to host TAM morphology without the help of *aaNu*, its role as a copula is impeded. Additionally, constructions with *uNTu* contribute existential meaning to the clause. If *aaNu* and *uNTu* occupy the same syntactic slot while contributing different semantic meanings and exhibiting different morpho-syntactic restrictions, a new explanation is needed to account for this so-called overlapping distribution phenomenon.

I analyze *aaNu* as a semantically vacuous copula that can host TAM morphology for specificational and predicational clauses, or it can take on a role as an auxiliary and host TAM information for main verbs. Unlike morphological ordering theories proposed about *aaNu* in the prior literature, my analysis of *aaNu* is that the TAM morphological concatenation is compositional in nature - specifically that tense, aspect, and other verbal morphology attach in particular, variable order depending on the syntactic and semantic requirements of the clause. I analyze *uNTu* as an EXISTENTIAL PIVOT AUXILIARY that does not occupy the same syntactic slot as *aaNu* in the derivation. I hypothesize that *uNTu* contributes existential semantic meaning based on the information structure of a clause, and it signals that there is a syntactic landing site for existentially focused pivots.

Index words: Malayalam, Morphology, Semantics, Syntax, Typology, Predication, Existentialism, Copular Constructions, Case Assignment, Possession, Dative Subject, Property Concept Lexemes, Exhaustive Restriction

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The Copula in Malayalam

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May 2020

Dedication

This dissertation is dedicated to my family

for supporting all of my dreams,

no matter how wild.

എന്റെ ഭാഷാ സന്നദ്ധപ്രവർത്തകർക്ക് -
നിങ്ങളുടെ സഹായത്തിനും പിന്തുണയ്ക്കും നന്ദി.

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This dissertation is dedicated, very lovingly, to my family. Their patience and continual support during my graduate career is the only reason I was able to succeed. Thanks to my parents' willingness to make huge personal sacrifices for my education, I was able to achieve what I thought was an unreachable goal.

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ABL	Ablative
ACC	Accusative
ADE	Adessive
ADJ	Adjective
ADV	Adverbial
ALL	Allative
ART	Article
AUX	Auxiliary
COMP	Complementizer
COND	Conditional
CONJ	Conjunction
CONT	Continuous
COP	Copula
DAT	Dative
DEF	Definite
DEM	Demonstrative
DET	Determiner
DUR	Durative
E	Epenthesis
EMPH	Emphatic
EXCL	Exclusive
EXIST	Existential
EXPL	Expletive
F	Feminine
FUT	Future
GEN	Genitive
HAB	Habitual
HUM	Human
IMP	Imperative
INCL	Inclusive
INES	Inessive
INF	Infinitive
IPFV	Imperfective
IRR	Irrealis
L	Linking
LAM	Lexical aspect modifier
LOC	Locative
LV	Linking verb
M	Masculine
MOD	Modal
NEG	Negative
NMLZ	Nominalizer
NOM	Nominative
NPST	Nonpast
PASS	Passive
PL	Plural
PLUR	Pluractional
POSS	Possessive
PRF	Perfect
PROF	Proform
PROG	Progressive
PRS	Present
PST	Past
PTCP	Participle
Q	Question particle
QUANT	Quantifier
REL	Relative
SBJ	Subject
SG	Singular
SOC	Sociative
VOC	Vocative

Malayalam	/IPA/	Transcription	Malayalam	/IPA/	Transcription
അ	a	a	ഠ	ʈʰa	Tha
ആ	aː	aa	ഡ	ɖa	Da
ഇ	i	i	ഢ	ɖʰa	Dha
ഈ	iː	ii	ണ	ɳa	Na
ഉ	u	uu	ത	ta	ta
ഊ	uː	uu	ഥ	tʰa	tha
ഋ	rɨ	r	ദ	da	da
എ	e	e	ധ	dʰa	dha
ഏ	eː	ee	ന	na	na
ഒ	o	o	പ	pa	pa
ഓ	oː	oo	ഫ	pʰa	pha
ഐ	a͡i	ai	ബ	ba	ba
ഔ	a͡u	au	ഭ	bʰa	bha
അം	am	am	മ	ma	ma
അഃ	aɦ	ah	യ	ja	ya
ക	ka	ka	ര	ɾa	ra
ഖ	kʰa	kha	ല	la	la
ഗ	ga	ga	വ	ʋa	va
ഘ	gʰa	gha	ശ	ʃa	sha
ങ	ŋa	nga	ഷ	ʂa	Sa
ച	ʧa	ca	സ	sa	sa
ഛ	ʧʰa	cha	ഹ	ɦa	ha
ജ	ʤa	ja	ള	ɭa	La
ഝ	ʤʰa	jha	ഴ	ɻa	zha
ഞ	ɲa	nya	റ	ra	rra
ട	ʈa	Ta	ച്ച	ʧː a	cca
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Map

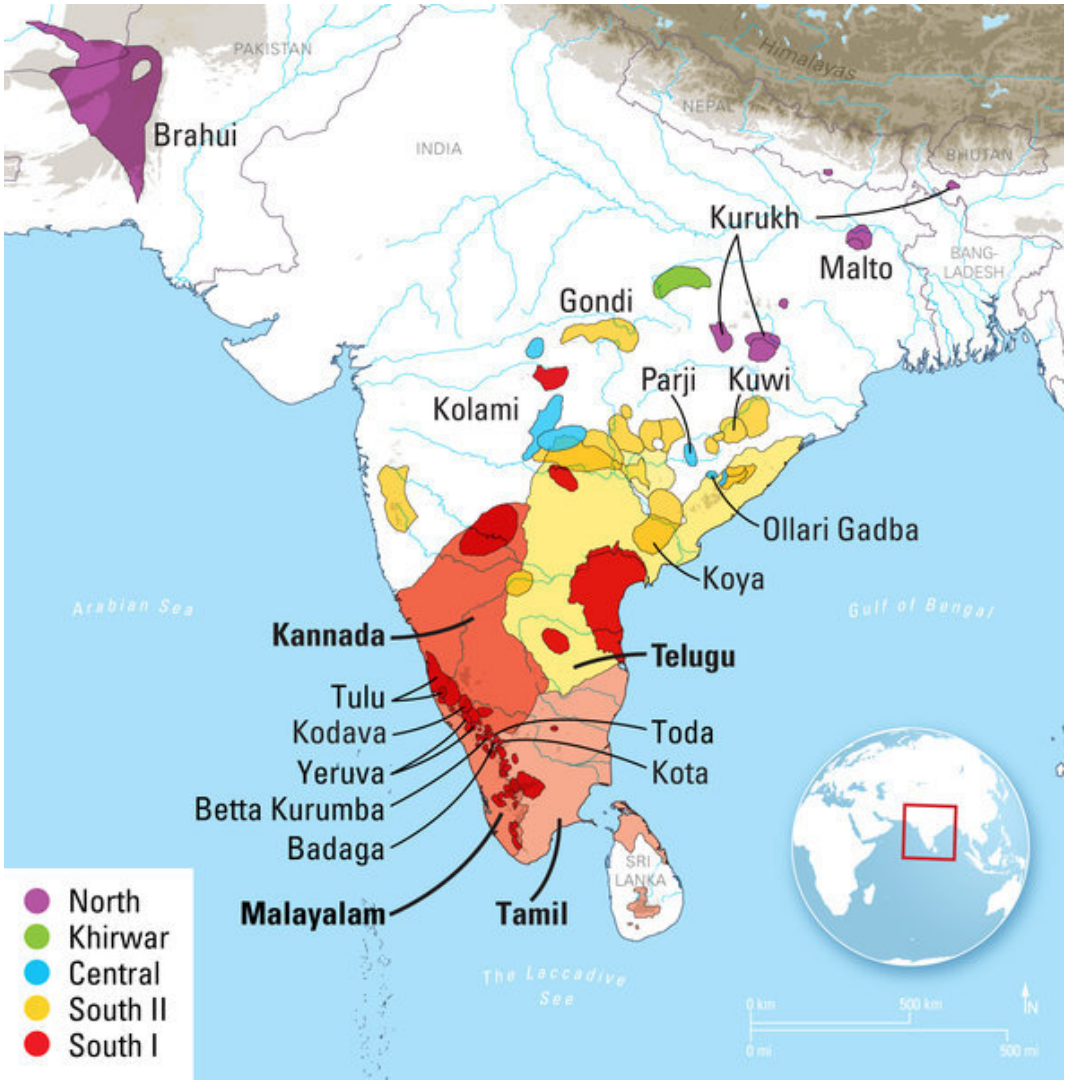

Figure 1: Dravidian Language Map

Dravidian Languages Map. Kolipakam et al. A Bayesian phylogenetic study of the Dravidian language family. Royal Society Open Science (2018). Accessed via Max-Planck-Gesellschaft.

Chapter 1

Introduction

This dissertation argues that Malayalam only has one copular morpheme: *aaNu*. However, proving a mono-copular system for Malayalam is not without its potential pitfalls. Almost all of the literature agrees that the language uses two copulas: *aaNu* as the elsewhere copula, and *uNTu* as the existential copula. These two morphemes seem to overlap in locative and property concept[1] clause distribution, which can be difficult to explain. After a brief discussion about the language and my data collection, I will define the terms that are used in this dissertation, and I will discuss the upcoming problems that need to be addressed. Solving these issues will be the focal point of the research that follows, and I provide a very condensed snapshot of my proposed solutions at the end of this chapter.

1.1 About Malayalam

Malayalam is a language in the Tamil-Malayalam subgroup of the Southern Dravidian branch of the Dravidian language family[2]. It is primarily spoken in Kerala, India, and has a current speaker population of about 35 million according to the 2011 census provided by the Office of the Registrar General & Census Commissioner of India. It is the official state language of Kerala and in territories Lakshadweep and Puducherry. The oldest evidence of Malayalam script is a collection of copper plates from 832 and 849 A.D.

There are twelve distinct dialects of Malayalam: Malabar, Nagari-Malayalam, South Kerala, Central Kerala, North Kerala, Kayavar, Namboodiri, Nair, Moplah/Mapilla, Pulaya,

[1]Property concept constructions are sometimes referred to as experiencer predicates or experiential clauses.

[2]See Figure 1.

Nasrani, and Kasargod (Eberhard and Fennig 2020). Because of the heavy linguistic contact that Kerala experiences, Malayalam's lexical borrowings show evidence that Sanskrit was a major source of loan words and some grammatical elements, but also that there has been contact with Pali, Prakrit, Urdu, Hindi, Chinese, Arabic, Syriac, Dutch, and Portuguese (Kunjan Pillai 1965). Notably, English has been a huge source of contact due to the East India Company invasion, and subsequently, British forced-occupation of Kerala from the late 1700s through the mid 1900s, as well as media influence from the United Kingdom and the United States in the modern day. Due to the large amount of contact and variation that the language experiences, dialectal variations in word choice, preferred word order, pronunciation, and syntacto-semantic acceptability judgments are expected.

The phonological inventory consists of 15 phonetically contrastive vowels (11 monophthongs, 4 diphthongs) and 37 phonetically contrastive consonants. Malayalam uses a syllabic alphabet in a reformed version of Brahmic script. It is non-tonal, has syllable initial stress, case marking with seven morphologically overt cases, tense marking with one morphologically overt tense, uses post-positions, and prefers SOV word order in most declarative clauses. Although Malayalam does mark gender on some nouns, like professions, it does not mark person or number agreement on verbal stems, which makes its verbal morphology quite different from its closest sister language, Tamil. Other close family members include Kannada and Telugu.

1.2 Methodology

For this project, speaker data from five individuals was gathered via in-person interview sessions. Speakers provided judgments on Malayalam utterances in contexts, provided translations to and from English, translations to and from Malayalam, and gave alternative semantically equivalent utterances for given example sentences or phrases. The data collection methodology used with our speakers followed the elicitation methods outlined in Matthewson (2019); Cover and Tonhauser (2015); Cover (2015); Bohnemeyer (2015); Matthewson (2004).

The speaker population consisted of four women who are all native speakers of Malayalam, had learned English as children, are between the ages of 20-30 years old, are originally from the Thiruvananthapuram region of Kerala, and are now living in the North Georgia area in the United States. The speaker population also includes one man who is between 50-65 years old and had spent most of his adult life in Kerala. He is a native speaker of Malayalam and is near-fluent in English. All speakers have had at least some college education and are non-linguists. Four speakers command a third or fourth language, which included some combination of Tamil, Hindi, Spanish, and French. Each speaker's judgments were then anonymized and reviewed by other speakers for corroboration.

1.3 Roles of the Copula

A copula is a semantically vacuous syntactic element that hosts TAM/Agree information for the predicate of a clause. This dissertation follows the analysis from Mikkelsen (2006), which claims that there are two types of copular constructions: specificational and predicational. Specificational copular constructions involve two DPs which enter into an equative identity relationship where the DP subject is the topic of the sentence. Predicational copular constructions are every other kind of copular clause. Typically, predicational copular clauses involve some subject DP and some XP whose referent is the subject. So, in the following example, (1a) is specificational and (1b) is predicational:

(1) Copular Clause Types
    a. The songwriter was Selena Quintanilla.
    b. Selena Quintanilla was a songwriter.

Example (1a) places two DPs in an identity relationship with each other where the entity that is the songwriter and the entity that is Selena Quintanilla are the same entity. Example (1b) shows that the subject is being described as a songwriter, and the non-specific nature of that referential description prevents an identity relationship from forming in the same way that it does in (1a).

I will expound upon copular sub-types including locative predication (2a), existential constructions (2b), property concept constructions (2c), and possessive constructions (2d). All of these sub-types fall under the predicational type of copular clause. I ultimately argue that, in Malayalam, all of these copular subtypes fall into the existential category when used with *uNTu*.

(2) Copular Clause Sub-Types
   a. The cat is in the house.
   b. There is a cat in the house.
   c. The cat is fat.
   d. The cat has four paws.

Locative predicates situate some subject DP in a spatio-temporal location as in (2a). Example (2b) asserts the existence of some cat such that it is located in the house[3]. In (2c), the cat is an experiencer or affectee subject of the property of its fatness, and in (2d) the cat and its four paws are two DPs in an ownership relation where the cat is the possessor and its four paws is the possessee. As this dissertation continues, I will use these descriptors in order to label and explain the copular phenomena that surrounds *aaNu* and *uNTu* in Malayalam.

1.4 The Problems

What has been called the "elsewhere copula" *aaNu* and the "existential copula" *uNTu* are treated in most of the current literature[4] as being in overlapping distribution in locative and property concept predicates, motivated by semantic or pragmatic changes and not by syntactic differences. I will provide evidence that *aaNu* and *uNTu* do not occupy the

[3]It should be noted at existentials without overt locative phrases can occur in both English and Malayalam as in, *There is a cat*, where the existence of some specific cat is being focused in the discourse. It is still spatio-temporally constrained by a context that has been pre-established in the prior discourse; it is just not overtly expressed.

[4]See Asher and Kumari (1997); Mohanan and Mohanan (1999); Babu and Madhavan (2003); Babu (2006); Nair (2012); Swenson (2017, 2019).

same morphosyntactic position in the verbal string, nor do they share concatenation allowance/restriction rules. The existential morpheme *uNTu* is unable to host TAM/Agree information and requires support from *aaNu* for overt bound inflectional morphology.

The following sections will include information on the supposed overlapping distribution in locative and property concept constructions of *aaNu* and *uNTu* in §1.4.1, and the morphological ordering situations that arise from my classification of *uNTu* as a non-copular morpheme in §1.4.2. These are not the only problems about Malayalam predication that arise with my mono-copular hypothesis for the language, but they are the biggest and are worth mentioning ahead of time.

1.4.1 Overlapping Distribution of *aaNu* & *uNTu*

To begin, I will provide some basic examples of *aaNu* and *uNTu* in complementary distribution. Where there is an equative interpretation on (3a) with *aaNu*, there is an existential interpretation on (3b) with *uNTu*. Note the ungrammaticality that is caused by attempting to use the morphemes in each other's environments:

(3) Complementary Distribution[5]

a. *nyaan* *bhaaSaashaastrajnyan* *aaNu/*uNTu*
nyaan bhaaSaashaastrajnyan aaNu
1SG.NOM linguist COP
'I am a linguist.'

b. *dhaaraaLam* *bhaaSaakaL* *uNTu/*aaNu*
dhaaraaLam bhaaSaa-kaL uNTu
many language-PL EXIST
'There are many languages.'

In (3b), *uNTu* is contributing to an existential clause. It can also provide a possessive interpretation where *aaNu* cannot, as shown in (4):

[5]The first line of any given language datum has been transcribed to the best of my ability using the chart provided on the Transcriptions page in the front matter of this dissertation. However, if data has been cited from another source, the authors' segmentation choices and morphemic glossing choices have been preserved as they were given in the source text to the best of my ability. Any data without a trailing citation has been gathered by me.

(4) *uNTu* as a Possessive Marker

a. *enikku oru veLutta kaar uNTu*
enikku oru veLutta kaar uNTu
1SG.DAT DET white car EXIST
'I have a white car.'

b. **enikku oru veLutta kaar aaNu*
enikku oru veLutta kaar aaNu
1SG.DAT DET white car COP
Intended: 'I have a white car.'

The copula *aaNu* does not contribute any possessive meaning to the structure and it cannot stand alone in external possessive sentences. I will show, in subsequent examples, that *aaNu* does exist in some possessive-esque clauses - specifically in property concept constructions.

The environments where *aaNu* and *uNTu* are said to overlap are locative and property concept clauses, as in (5) and ((6):

(5) Locative Constructions

a. *nyaan viiTil aaNu*
nyaan viiT-il aaNu
1SG.NOM home-LOC COP
'I am at home.'

b. *nyaan viiTil uNTu*
nyaan viiT-il uNTu
1SG.NOM home-LOC EXIST
'I am at home.'

(6) Property Concept Constructions

a. *aanakku pani aaNu*
aana-kku pani aaNu
elephant-DAT fever COP
'The elephant has a fever.' (Mohanan and Mohanan 1999: 2)

b. *aanakku pani uNTu*
aana-kku pani uNTu
elephant-DAT fever EXIST
'The elephant has a fever.' (Mohanan and Mohanan 1999: 2)

In the above example (5), both *aaNu* and *uNTu* have the same translation. But, as argued by other authors[6], there are underlying semantic or pragmatic variables that allow for one morpheme to be targeted over the other in particular contextual environments. However, my dissertation offers a solution that aims to unify the structure of both locative and property concept constructions with that of existential copular predication.

1.4.2 Morphological Ordering Issues

According to Asher and Kumari (1997) and Swenson (2017, 2019), among others, tense morphology in Malayalam affixes in the final position of the verbal stem, as shown in (7) below.

(7) Tense-Final Account on Malayalam Verb Stems

a. *avaL muttam thuutthiTTuu*
avaL muttam thuutth-iTT-uu
she compound sweep.PTCP-LV-PST
'She swept the compound.'
(Swenson 2017: 231) from (Gopalkrishnan 1985: 180)

b. *nyaan ii paper ezhuuthiikondirikkuunnuu*
nyaan ii paper ezhuuth-ii-kond-irikk-uunnuu-∅
I this paper write-PTCP-LAM-AUX-IPFV-PRS
'I am writing and writing this paper.' (Swenson 2017: 231)

My hypothesis conflicts with these conclusions about morphological ordering, because I claim that tense is not the final morphological element on a verb stem. Instead, much like the analysis provided by Mohanan and Mohanan (1999: 2), I argue that tense morphology affixes closer to the verb root - not at the end of the stem - followed by aspect, and then mood. My preliminary proposed ordering structure is provided below:

(8) VERB -COP/AUX -TENSE -ASPECT -MOOD/NEGATION

This ordering is tested in (9) with the copula *aaNu* and with the existential morpheme *uNTu* in (10):

[6](Asher and Kumari 1997; Mohanan and Mohanan 1999; Swenson 2017, 2019)

(9) Copula

a. *nyaan* *doktor* *aaNu*
nyaan doktor aaNu-∅
1SG.NOM doctor COP-NPST
'I am a doctor.'

b. *nyaan* *doktor* *aayiiruunnuu*
nyaan doktor aa-y-ii-r-uunnuu
1SG.NOM doctor COP-E-PST-E-IPFV
'I was a doctor.'

(10) Existential Morpheme

a. *enikku* *doktor* *uNTu*
enikku doktor uNTu (aaNu-∅)
1SG.DAT doctor EXIST COP-NPST
'I have a doctor.'

b. *enikku* *doktor* *uNTaayiiruunnuu*
enikku doktor uNTu-aa-y-ii-r-uunnuu
1SG.DAT doctor EXIST-COP-E-PST-CONT-IPFV
'I had a doctor.'

This preliminary morphological ordering analysis raises a few questions: (i) does the order of tense-aspect-mood adhere to the MIRROR PRINCIPLE[7], (ii) does *aaNu* need to be present underlyingly in utterances like (10a) to provide a landing site for tense or other inflection, and (iii) what does *uNTu* contribute to the predicate? Before I address the answers to these questions, I will briefly outline what is already known about the tense, aspect, and modal system - paying special attention to how the copula *aaNu* and the existential morpheme *uNTu* affect them. I will also cover other predicate phenomena, like negation.

[7]This is described in Baker (1985), which argues that words are generated in a derivation and a word's root merges lower than all subsequent affixes that attach to that word. These affixes enter into a c-command relationship with the root, and then they are put in order via the principle of semantic scope - so, morphemes scope over other morphemes in the same word. To achieve surface structure realizations, movement is applied via recursion to contain all of the morphemes within the c-command relationship with that same root.

1.5 Preliminary Assumptions

For the purposes of theoretical exploration, much of the syntactic literature concerning Malayalam is done in the generativist tradition. I assume that there is a theta criterion where roles are assigned to particular arguments in a clause, and I assume structural case is an active morpho-syntactic application that is semantically driven. I have tried to respond to each piece of literature in the same framework that they outline, all of which are minimalist frameworks here. But, as far as exact head projections are concerned - particularly as they are expanded above the TP/IP - I do not make any definitive assumptions, only that there are projections there. I do assume a Neo-Reichenbachian framework (also Klein (1994); Dahl (2015) and others) for the concept of temporal and aspectual relations where UT (utterance time) is the speech time of a particular utterance, ET (event time) is the run time of some event denoted by the predicate, and TT (topic time) is the time being spoken about. Under these definitions, temporalities like the simple past express that event time is included in topic time and precedes utterance time, whereas in the present temporality topic time and utterance time overlap.

1.5.1 Assumptions about Malayalam

In order to proceed with my argument for *aaNu* being the sole copula in Malayalam, there must be some preliminary assumptions made about the language. These assumptions may be widely accepted, but I am not claiming that all of them are true - only that they must be true in order for my hypothesis to be successful.

The first is that the copula (in its bare, uninflected form) *aak-* must be compositional and available for active concatenation with tense, aspect, mood, and other verbal morphology, depending on the requirements of its given clause. In much of the literature, as will be shown in the upcoming chapters, *aaNu* is glossed BE.PRES and *aayiiruunnuu* is glossed BE.PST. I am not claiming that researchers who have glossed these morphemes in this manner are claiming that they are frozen elements. In fact, the literature displays a wealth of

information surrounding the variation shown in copular constructions. My main claim hinges on the internal makeup of this morpheme and the compositional nature of its stem. Each concatenation on *aak-* contributes to the compositional semantics of an utterance, and the overt display of that provides minimal pair examples that show how - depending on said composition - meaning and interpretation changes are possible.

Second, I assume that tense is obligatorily marked in Malayalam. This claim is shared by some researchers in the field, but counter-arguments that propose a tenseless analysis for Malayalam are available in Jayaseelan (2004a); Amritavalli and Jayaseelan (2005) and others. For a counter-argument to Jayaseelan & Amritavalli's findings, see Swenson (2019).

While these topics do appear in my dissertation, explaining them here would require a large amount of background to cover that which is readily available in other key literature (Asher and Kumari 1997; Swenson 2017, 2019). However, without mentioning these assumptions ahead of time, the chapters that follow would make little sense.

1.6 Preview of Proposed Solutions

In the chapters that follow, I show that Malayalam only uses one copular verb, *aaNu*. Syntactically, I argue that copular clauses use a lower PredP phrase which allows for a small-clause interpretation on lower DP constituents. I ultimately conclude that the syntax for clauses with *uNTu* does not match that of non-existential copular clauses. I claim *uNTu* only occurs in existential constructions in order to signal the presence of an existential pivot, which is focused to a low FocP in the syntax. I unify the possessive, property concept, and locative constructions that use *uNTu* under the existential clause type. In the case of clauses with possessive meaning, I argue that there is a dative-marked existential coda phrase, which is the possessor, that provides a spatio-temporal contextual domain for the pivot, which is the possessee. It receives dative case assignment from the PP head which generates in the PredP phrase. Semantically, I argue that all clauses with *uNTu* contain a meaning of [[EXIST]] whose existential pivot predicate is licensed by a contextual domain provided by a coda PP

phrease, and that, in the case where an existential clause does not have a coda PP modifier, the pivot participates in contextual closure where it can provide a contextual relation for itself.

1.7 Chapter Map

Chapter 1 is an introduction that includes information about Malayalam (§1.1), a brief description of the methodology of data collection (§1.2), the roles in which the copula functions (§1.3), an overview of the problems that this dissertation will be addressing (§1.4), some preliminary assumptions required to continue with my analysis (§1.5), a snapshot of my proposal (§1.6), and this chapter map (§1.7).

Chapter 2 provides an overview of the relevant morphology involved in the dual copula problem, including a preliminary morphological ordering proposal (§2.1), an overview of case morphology (§2.2), temporal morphology and restrictions (§2.3), aspectual morphology (§2.4), modal morphology (§2.5), and negation (§2.6). These are followed by a summary conclusion of the discussed morphological facts (§2.7).

Chapter 3 includes information about specificational and predicational copular clause types. Discussed in the chapter are specificational clauses (§3.1), predicational clauses (§3.2), copula drop mechanics in Malayalam (§3.3), cleft constructions in Malayalam (§3.4), how *aaNu* is used in auxiliary constructions (§3.5), and a summary conclusion (§3.6).

Chapter 4 covers existential (§4.1) and possessive (§4.2) copular clauses in Malayalam and other languages. Then, there is a brief conclusion (§4.3).

Chapter 5 covers property concept (§5.1) and locative (§5.2) copular clauses with a conclusion of those findings (§5.3).

Chapter 6 discusses possible theoretical solutions for the problem at hand by covering the categorization of *uNTu* and its status as an independent morpheme (§6.1), syntactic analysis (§6.2), semantic analysis (§6.3), a new morphological ordering proposal (§6.4), and conclusions (§6.5).

Chapter 7 provides a list of issues for further research (§7.1), a discussion about future research opportunities (§7.2), and a chapter summary (§7.3) with general conclusions about the contribution of this dissertation.

Chapter 2

Overview of Relevant Malayalam Morphology

This chapter contains descriptions of morphology in Malayalam that are relevant to the problems addressed by this dissertation. While most of the work here has been done by previous authors on the subject of tense, aspect, mood, and negation in the language, my main contribution is to show that TAM concatenation is actively productive[1] and compositional on the Malayalam copula verb. The preliminary morphological ordering that is proposed therein is not wholly unique, but my categorization portrays key distinctions between the restrictions of *aaNu* and *uNTu* that is not present elsewhere in the literature that I have found. Without defining the internal structure of the inflectional elements of these morpheme strings, there can be confusion due to the heavy amount of affixation that takes place on the verbal stem, so this chapter serves to provide a foundation for the rest of this dissertation.

The sections that follow include a brief discussion of nominal case morphology in §2.2, the assignment of which is sometimes affected by the syntactic structure of different predicates. This chapter also includes an overview of the tense morphology in Malayalam in §2.3 which contains information on past temporal morphology in §2.3.1, non-past covert morphology in §2.3.2, aspect morphology in §2.4, modal morphology in §2.5, and negation in §2.6.

2.1 Morphological Ordering Proposal

For Malayalam, I propose that the morphological order of TAM morphemes in a verbal string is as follows:

[1]While most of the literature analyzes the entire copular morphological string as a single, uninterpretable cluster of bound suffixes, I argue in this dissertation that each internal morpheme of the copular string is actively productive and interpretable in the clause.

(11) VERB - TENSE - (ASPECT) - (MOOD/NEGATION)

According to Baker (1985: 375), THE MIRROR PRINCIPLE states that "morphological derivations must directly reflect syntactic derivations (and vice versa)." The Mirror Principle is used by Swenson (2017) to show that the past tense *-ii/-uu* is not perfective aspect as claimed by Jayaseelan (2004a). Swenson (2017: 91) argues that the morphological order of the "past imperfective form of 'write' is *ezhuth-uka(y)-aayirunn-u*" where *ezhuth-* is 'write', and the *-u* on the rightmost edge is the tense morpheme in question. The Mirror Principle supports Swenson's analysis because, if Malayalam follows that principle, tense should be marked verb-final. Data like (12) and (13) have the potential to make my account problematic if we assume a productive relationship between the verb and its affixes.

(12) TAM Ordering on Verbs

a. *nyaan* *pookuunnuu*
nyaan pook-uunnuu
1SG.NOM go-IPFV
'I am going.'

b. *nyaan* *pooyii*
nyaan pooy-ii
1SG.NOM go-PST
'I went.'

c. *nyaan* *pooyiiruunnuu*
nyaan pooy-ii-r-uunnuu
1SG.NOM go-PST-E-IPFV
'I was going.'

(13) TAM Ordering on *aaNu*

a. *mantravaaDi* *puucca* *aayii*
mantravaaDi puucca aa-y-ii
witch cat COP-E-PST
'The witch became a cat.'

b. *mantravaaDi* *puucca* *aayiiruunnuu*
mantravaaDi puucca aa-y-ii-r-uunnuu
witch cat COP-E-PST-E-IPFV
'The witch was a cat.'

Example (13) is especially interesting, because the past tense form of the copula in (13a) shows that there is a default perfective reading, which means that copular past tense forms thus default to change-of-state readings. But, when the imperfective aspect marker provides aspectual information, the change-of-state reading becomes dynamic. If tense is not stem-final in these cases, and it has the potential to be followed by aspect and modality, this view may violate the conclusions made by Baker (1985) concerning The Mirror Principle.

The issues that surround this ordering proposal require quite a bit of treatment - particularly at the morphosyntactic level - and while the internal ordering of the verbal concatenative string is important to the overall theoretical understanding of Malayalam verbs, it is my aim to address the relationship of *aaNu* and *uNTu* in such a way that, although my proposed ordering would be a beneficial reality, my ultimate conclusions do not hinge on its validity. There is a good deal of data that does not involve the morphological ordering proposal that still supports a mono-copular system, so while this morpheme string will remain a prominent topic, its impact on my hypothesis is (potentially) negligible. For more information on this, see §6.4.

2.2 Case Morphology

Malayalam has seven cases, or possibly up to ten cases according to some grammars (Gundert 1868; Ayyar 1936; Prabhākara Vāriyar 1979; Asher and Kumari 1997). Asher and Kumari (1997: 191) provide the full nominal paradigm of the main seven cases below:

Table 2.1: Asher and Kumari (1997) Case System of Malayalam

Case	Marker	'tree'	'children'
Nominative	-∅	maram	kuTTikaL-∅
Accusative	-e/-ine	maratt-e	kuTTikaL-e
Dative	-kku/-nuu	maratt-inuu	kuTTikaL-kku
Sociative	-ooTu	maratt-ooTu	kuTTikaL-ooTu
Locative	-il	maratt-il	kuTTikaL-il
Instrumental	-aal	maratt-aal	kuTTikaL-aal
Genitive	-uTe/-inde	maratt-inde	kuTTikaL-uTe

Other cases that have been suggested include the ablative, allative, and the vocative. Some examples are provided below via Asher and Kumari (1997: 192, 196, 224):

Table 2.2: Asher and Kumari (1997) Other Proposed Cases in Malayalam

Case	Marker	Example
Ablative	-ilninnu	viiT-ilninnu | home-ABL
Allative	-ileekku	viiT-ileekku | home-ALL
Vocative	-aa/-ee/-ii/-uu/-mm	kuTTikaL-ee | children-VOC

For the purposes of this research, I will mainly be concerned with the dative, because dative subject constructions in Malayalam can provide some insight into how possession is handled in the language. The dative case can occur on either subject or object nominals. Sentences without nominative subjects will mark subjects as dative, as shown in (14) below:

(14) Dative Subjects

a. *avaLkku* *ramuvine* *viSvaasam* *illa*
avaL-kku Ramu-v-ine viSvaasam illa
3SG.F-DAT Ramu-E-ACC trust be-NEG
'She has no trust in Ramu.' (Nair 2012: 17)

b. *addeehattinu* *kaaryam* *manassilaayii*
addeehatt-inu kaaryam manassilaay-ii
3SG.M-DAT matter understand-PST
'He understood the matter.' (Nair 2012: 17)

Here, we see that Nair (2012) displays the two different morphological variations for the dative case, *-kku* in (a) and *-(i)nu* in (b).

Nizar (2010) shows that Malayalam requires dative subject constructions in instances of experiencer[2] predicates and possession. For experiencer clauses, Nizar (2010: 7) claims that the verbs "convey semantic notions such as experiencing, feeling, wanting and liking, all of which characterize the subject as nonvolitional." Some examples of these predicates are below:

[2]These types of predicates are referred to as PROPERTY CONCEPT constructions in this dissertation, based on the work provided by Dixon (1982).

(15) Dative Subjects in Experiencer Predicates

a. *enikku* *viSakkuunnuu*
eni-kku viSakkuunnuu
1SG-DAT be.hungry.PRS
'I am hungry.' (Nizar 2010: 7)

b. *kuuttikku* *panikuunnuu*
kuutti-kku panikuunnuu
child-DAT have.fever.PRS
'The child has a fever.' (Nizar 2010: 7)

The two examples above show that, in Malayalam, predicates like 'be hungry' or 'have fever' are experiences that happen to the subject, thus preventing a nominative marking. However, Nizar (2010: 8) shows that in simple predicates, some experiencer constructions allow for nominative case where in complex predicates (where a copula is used to host verbal inflection) it is not acceptable:

(16) Simple Predicate

a. *avaL* *santooshiccuu*
avaL-∅ santooshiccuu
3SG.F-NOM be.happy.PST
'She became happy.' (Nizar 2010: 8)

b. * *avaLkku* *santooshiccuu*
avaL-kku santooshiccuu
3SG.F-DAT be.happy.PST
Intended: 'She became happy.' (Nizar 2010: 8)

(17) Complex Predicate

a. *avaLkku* *santoosham* *aayii*
avaL-kku santoosham aayii
3SG.F-DAT happiness become.PST
'She became happy.' (Nizar 2010: 8)

b. * *avaL* *santoosham* *aayii*
avaL-∅ santoosham aayii
3SG.F-NOM happiness become.PST
Intended: 'She became happy.' (Nizar 2010: 8)

According to Nizar (2010: 9), apparently "despite the fact that the two constructions are generally considered to be semantically equivalent, there is evidence to suggest that the

nominative-marked NP can be interpreted with a greater degree of volition than the corresponding dative NP." But, the author notes that in the case of physical experience, which below are shown with *uNTu*, the dative is required:

(18) Experiencer Constructions of Physical Experience

a. *enikku viSappu uNTu*
eni-kku viSappu uNTu
1SG-DAT hunger be.PRS
'I am hungry.' (Nizar 2010: 9)

b. * *nyaan viSappu uNTu*
nyaan-∅ viSappu uNTu
1SG-NOM hunger be.PRS
Intended: 'I am hungry.' (Nizar 2010: 9)

Above, Nizar (2010) claims that even though there is a complex predicate structure in (18), the nominative case is unallowable on the experiencer subject.

Nizar (2010: 11) provides data to explain that the dative subject also occurs in cases of possession (as in (19)) and in certain modal permissive constructions (as in (20)).

(19) Dative Subject in Possessive Sentences

a. *enikku valiya viiTu uNTu*
eni-kku valiya viiTu uNTu
1SG-DAT big house be.PRS
'My house is big.' (Nizar 2010: 11)

b. *avaLkku bhangii uNTu*
avaL-kku bhangii uNTu
3SG.F-DAT beauty be.PRS
'She is beautiful.'
Literally: 'She has beauty.' (Nizar 2010: 11)

(20) Dative Subject with Permissive Modality

a. *avar naaLe pookaam*
avar-∅ naaLe pook-aam
3SG.M-NOM tomorrow go-may
'They may go tomorrow.'
NB: It is possible that they will go tomorrow. (Nizar 2010: 11)

b. *ninakku naaLe pookaam*
nina-kku naaLe pook-aam
2PL-DAT tomorrow go-may
'You may go tomorrow.'
NB: You have permission to go tomorrow. (Nizar 2010: 12)

Although the dative-in-modal constructions are not a topic of discussion in this dissertation, the dative provides compelling evidence for the effect of *uNTu*, and will be covered in the upcoming chapters concerning existential constructions and possession. For more information on dative subject constructions in Malayalam, see Chapter 5.

2.3 Tense Morphology

In agreement with John (1987); Babu and Madhavan (2003); Babu (2006); Menon (2011); Swenson (2017, 2019), Malayalam has a two-tense system[3] with overt past and covert non-past tense morphology. The past tense morpheme has two allomorphs: *-ii/-uu*, depending on the phonological environment of the verb root, as shown in (21). The non-past morpheme is null, as in (22).

(21) Past Tense Allomorphy

a. *nyaan viiTil pooyii*
nyaan viiT-il pooy-ii
1SG.NOM house-LOC go-PST
'I went home.'

b. *nyaan miinukal vaiccuu*
nyaan miinu-kal vaicc-uu
1SG.NOM fish-PL buy-PST
'I bought (many kinds of) fish.'

In (21a), the verb *pookaan* 'to go' requires past tense inflectional allomorph *-ii*, and in (21b) *vaikkaan* 'to buy' requires the *-uu* allomorph. Although the motivation for the alternation is ultimately attributed to phonological conditioning, Asher and Kumari (1997: 317) discuss

[3]Asher and Kumari (1997) provide an analysis for a tripartite morphological tense system, and Jayaseelan (2004a,b); Amritavalli and Jayaseelan (2005) provide arguments in favor of a tenseless system.

the different verbal classes and how each class motivates different phonological alternations in past tense morphology and stem changes.

In affirmative specificational constructions - without past tense, aspectual, or modal morphology - the only temporal reference that can be interpreted is the present, as in (22):

(22) *loran* *ticar* *aaNu*
loran ticar aaNu-∅
Lauren teacher COP-NPST
'Lauren is a teacher.'/*'Lauren was a teacher.'/*'Lauren will be a teacher.'

In (22), without the past tense morpheme - even if there is prior context - past temporality cannot be interpreted. Without modal morphology, future temporality cannot be interpreted on a non-past stem.

2.3.1 Past Tense *-ii/-uu*

The past tense morpheme has two allomorphs: *-ii/-uu*. As noted above in (21), the selection relies on phonological contributions from the verb stem based on historical verb class distinctions[4]. Another example of the past tense allomorphic variation is provided in (23):

(23) Past Tense Allomorphy

a. *avan* *kattukaL* *ezhuutii*
avan kattu-kaL ezhuut-ii
3SG.M letter-PL write-PST
'He wrote letters.'

b. *peij* *endo* *paranyuu*
peij endo parany-uu
Paige something say-PST
'Paige said something.'

Just like with *pookaan* 'to go' in (21a), the verb *ezhuutaan* 'to write' in (23a) shows the *-ii* alternation, and the verb *parayaan* 'to say' in (23b) matches the same pattern as the prior (b) example.

[4]See Kunjan Pillai (1965); Asher and Kumari (1997) for more on Malayalam verb classes.

By contrast, some verbs show a stem change when in the past tense, as shown with *arriyaan* 'to know' in (24b):

(24) Verbal Stem Change

a. *pitar uuttaram arriyaam*
Peter uuttaram arri-y-aam
Peter answer know-E-MOD
'Peter knows the answer.'

b. *pitar uuttaram arrinyuu*
Peter uuttaram arrin-y-uu
Peter answer know-E-PST
'Peter knew the answer.'

In (24b), the stem contains a nasal whereas in (24a), in its non-past form, it does not. This stem change is a marker of a particular class of verbs and does not affect the compositional meaning.

2.3.2 Non-Past Tense -∅

The non-past tense morpheme in Malayalam is null, represented in this dissertation as -∅, and either present or future temporal reference can be interpreted on verbs that are marked for non-past tense. As shown in (25), the null morpheme allows for Malayalam to utilize copula drop mechanics:

(25) Copula Drop with Non-Past Tense

a. *loran ticar aaNu*
loran ticar aaNu-∅
Lauren teacher COP-NPST
'Lauren is a teacher.'

b. *loran ticar aa*
loran ticar aaNu-∅
Lauren teacher COP-NPST
'Lauren is a teacher.'
NB: This has the exact same interpretation as the utterances in (25).

c. *loran ticar*
loran ticar aaNu-∅
Lauren teacher COP-NPST
'Lauren is a teacher.'

As shown in (25), in non-past affirmative copular clauses, the copula can be reduced or dropped in colloquial speech. For more on copula drop mechanics, see §3.3.

Non-past tense also occurs with full verbs, but present temporal reference requires some aspectual modification. This is usually accomplished in two ways: (i) with the imperfective morpheme *-uunnuu* as in (26a), or (ii) verbs can appear in the participle form and be supported by tense hosted with the auxiliary form of the copula, *aaNu*, as in (26b).

(26) Non-Past Tense on Main Verbs

a. *biL kutirakaLe ooTikkuunnuu*
biL kutira-kaL-e ooTikk-∅-uunnuu
Bill horse-PL-ACC ride-NPST-IPFV
'Bill rides horses.'

b. *biL ippoL kutirakaLe ooTikkuukayaaNu*
biL ippoL kutira-kaL-e ooTikk-uuka-y-aaNu-∅
Bill now horse-PL-ACC ride-PTCP-E-AUX-NPST
'Bill is riding horses right now.'

In (26a), there is a present temporal reading that has a characterizing property, such that it is a trait of *Bill* that he *rides horses*. Speakers noted that utterances like (26a) have a story-telling type of interpretation where the hearer would be on the outside looking in at Bill's life in stasis.

Deo (2009: 2) shows that imperfective aspect can provide three different kinds of interpretations: events in progress (or progressive), continuous (with lexically stative predicates), and characterizing (or generic). Deo (2009) displays these in Gujarati, provided in (27) below:

(27) Gujarati

a. Event-in-Progress

niśā	*(atyāre)*	*rasoḍāmā*	*roṭli*	*banāve*	*che*
niśā	(atyāre)	rasoḍā-mā	roṭli	banāv-e	ch-e
Niśā.NOM.SG	now	kitchen-LOC	bread.NOM.SG	make-IPFV.3SG	PRS.3SG

'Niśā is making bread in the kitchen (right now).' (Deo 2009: 2)

b. Characterizing

niśā	*(roj)*	*roṭli*	*banāve*	*che*
niśā	(roj)	roṭli	banāv-e	ch-e
Niśā.NOM.SG	every.day	bread.NOM.SG	make-IPFV.3SG	PRS.3SG

'Niśā makes bread (every day).' (Deo 2009: 2)

c. Continuous

niśā	*navsārimā*	*rahe*	*che*
niśā	navsāri-mā	rah-e	ch-e
Niśā.NOM.SG	Navsari-LOC	live-IPFV.3SG	PRS-3SG

'Niśā lives in Navsari.' (Deo 2009: 2)

Deo (2009: 5) unifies the imperfective and progressive aspects with the argument that both the imperfective and the progressive aspects "contain a universal quantifier, whose domain is a regular partition (i.e. a set of collectively exhaustive, non-overlapping, equimeasured subsets) of some interval." Deo goes on to claim that the contrast between the imperfective and the progressive "has to do with whether the quantifier domain is a regular partition of the reference interval (in the case of PROG) or of a superinterval of the reference interval (in the case of IPFV)" (Deo 2009: 4). Ultimately, the progressive communicates a bound reference time interval that contains an ongoing event, but the imperfective communicates an ongoing event that does not have those same boundary restrictions. Although Malayalam handles imperfective aspect with an overt morpheme, the progressive is accomplished with a PTCP + COP construction, as shown in (26b).

The non-past tense morpheme in Malayalam also occurs with future temporal reference interpretations, as in (28).

(28) *nyaan* *viiTil* *pookuum*
nyaan viiT-il pook-∅-uum
1SG.NOM home-LOC go-NPST-MOD
'I will go home.'

Typically, basic future temporal verb forms are marked with *-uum*. What some scholars analyze as the future tense, *-uum*, is better classified as a modal morpheme[5]. There are syntactic and semantic inconsistencies that show that *-uum* is (i) not a tense morpheme, and (ii) does not necessarily produce future temporal interpretations.

Swenson (2017: 152) shows that there is a co-occurrence restriction between *-uum* and the negative morpheme, *illa*. This is displayed in the following examples:

(29) Negation & *-uum*

a. **jan* *var-uum* *illa*
John come-FUT NEG
Intended: 'John will not come.' (Swenson 2017: 152)

b. *jan* *var-uuka* *illa*
John come-IPFV NEG
'John will not come.' (Swenson 2017: 152)

c. *jan* *var-illa*
John come-NEG
'John will not come.'/'John does not come.' (Swenson 2017: 152)

In (29a), the negative *illa* cannot co-occur with the modalized *varaan-uum* because the modal and the negation form are in conflicting semantic realizations. Where *-uum* makes a prediction about accessible possible worlds, *illa* makes the opposite proposition that no such worlds exist. Note that in (29b), Swenson labels *-uuka* as the imperfective aspect morpheme, but this dissertation categorizes it as a participle marker[6]. In (29c), there is an ambiguity when this utterance is produced without context. If the context is situated with future temporality, speakers will understand that it is future, but without context, no such assumption exists.

[5]See John (1987); Babu (1997, 2006); Swenson (2017, 2019) for alternate analyses of *-uum*.
[6]For more on the participle, see §2.4.2.

Additionally, Swenson (2017: 154) shows (along with Babu (1997: 83)) that *-uum* can occur in past temporal environments with auxiliary support from *aaNu*:

(30) *...pook-uum aayiirunnu*
...go-MOD be.PST
'...would have gone.' (Swenson 2017: 154)

Note that, even though the glossing is different, the past tense morpheme *-ii* is visible on the auxiliary stem, and the auxiliary is interacting directly with the main verb *pookaan* 'to go.' Although the evidence presented in (30) is not enough to prove that *-uum* is not a future tense morpheme, the combination of (i) the co-occurrence restriction with negation, (ii) evidence that past temporality can co-occur with *-uum*, and (iii) the duality of the modal morpheme when it provides a habitual reading instead of a future temporal reading, as in (31), all show evidence that *-uum* is not a tense morpheme.

(31) CONTEXT: In answer to the question 'What does your mother do every day?'

ellaa	*divasavuum*	*amma*	*puustakam*	*vaikkuum*
ellaa	divasavuum	amma	puustakam	vaikk-∅-uum
every	day	mother	book	read-NPST-MOD

'Mother reads a book every day.'

In (31), the modal morpheme *-uum* affixes to the verb *vaikkan* 'to read' but does not provide a future temporality reading. Instead, the reading is habitual or characterizing.

In cases of negation, the modal *-uum* is unallowable as in (32). However, for cases of past temporal reference, the past tense morpheme persists in spite of negation, as in (33):

(32) Modal/Negation Co-occurence Restriction

a. *nyaangngaL parasparam marakkilla*
nyaangngaL parasparam marakk-∅-illa
1PL.NOM each.other forget-NPST-NEG
'We won't forget each other.'

b. * *nyaangngaL parasparam marakkuumilla*
nyaangngaL parasparam marakk-uum-illa
1PL.NOM each.other forget-MOD-NEG
Intended: 'We won't forget each other.'

(33) *ninnu* *keralatilekku* *pooyiiTTilla*
ninnu Kerala-til-ekku poo-y-ii-TT-illa
2SG.NOM Kerala-LOC-DAT go-E-PST-PRF-NEG
'You have not gone to Kerala.'

Babu (2006) claims that *-uum* functions as a universal quantifier. The reason for the clash between negation and modality in (33) is due to the quantificational nature of the modal morpheme *-uum*, which triggers a semantic clash with the negative *alla/illa*; where *-uum* quantifies over a set of possible worlds, *illa* implies that those worlds do not exist. This topic is explored further in §2.5.

2.4 Aspect Morphology

This section will briefly display and discuss relevant aspectual morphology in Malayalam, which is limited to the imperfective (§2.4.1), participle (§2.4.2), durative and continuous (§2.4.3).

2.4.1 Imperfective *-uunnuu*

Babu (2006: 1) makes the assertion that *-uunnuu* is "an imperfective aspect marker [that] licenses a situation argument which is the characteristic property of an episodic predicate." Like Deo (2009), Babu (2006: 1) claims that the imperfective reading is bound by an existential operator - and in the case of Malayalam, it is "signaled by the existential copula, *uNTu*." Although much of Babu (2006) is concerned with *-uum* both as a genericity marker and a modal morpheme, the author argues that the *-uunnuu* which is the imperfective aspect morpheme can co-occur with *uNTu* and its negative counterpart *illa*, while the *-uunnuu* that occurs with generic constructions cannot. Examples displaying this divergence are explored below:

(34) Imperfective

a. *bassu varuunnuu*
bassu var-uunnuu
bus come-IPFV
'The bus is coming.' (Babu 2006: 15)

b. *bassu varuunnuNTu*
bassu var-uunnuu-uNTu
bus come-IPFV-EXIST
'The bus is coming.' (Babu 2006: 15)

c. *bassu varuunnilla*
bassu var-uunnuu-illa
bus come-IPFV-NEG.EXIST
'The bus is not coming.' (Babu 2006: 15)

(35) Generic

a. *suuryan kizhakku udikkuunnuu*
suuryan kizhakku udikk-uunnuu
sun east rise-UUNNUU
'The sun rises in the east.' (Babu 2006: 16)

b.# *suuryan kizhakku udikkuunnuNTu*
suuryan kizhakku udikk-uunnuu-uNTu
sun east rise-UUNNUU-EXIST
Intended: 'The sun rises in the east.'
Literally: 'The sun is rising in the east.' (Babu 2006: 16)

c. * *suuryan paTinynyaaru udikkuunnilla*
suuryan paTinynyaaru udikk-uunnuu-illa
sun west rise-UUNNUU-NEG.EXIST
Intended: 'The sun does not rise in the west.' (Babu 2006: 16)

For the above examples, *-uunnuu* is not glossed as imperfective since Babu (2006: 16) claims it does not function as such in these generic instances. It is also important to note that (35b) is not syntactically ungrammatical in Malayalam, but the meaning cannot be as intended. The literal meaning provided is closer to the actual meaning of the phrase (i.e. not characterizing but progressive).

This dissertation labels *-uunnuu* as an imperfective marker (in line with Swenson (2016, 2017)), although Swenson (2019) claims that *-uunnuu* is the iterative pluractional progressive

morpheme. Iterative pluractionals are event-external (via Wood (2007); Henderson (2011, 2012, 2017)), in that these types of pluractionals "denote plural events whose repetitions are more easily individuable as separate happenings" (Swenson 2019: 143). Notably, iterative pluractionals allow for lenient temporal contiguity between the repetitions of the action. Swenson (2019: 146) uses the following examples to show that the gaps between events can vary from hours to mere moments in time:

(36) Pluractionality Hypothesis for *-uunnuu*

a. *suuryan kizhakku udikkuunnuu*
suuryan kizhakku udikk-uunnuu-∅
sun east rise-PLUR-PRS
'The sun rises in the east.' (Swenson 2019: 146) via (Babu 2006)

b. *nyaan veeNappooL avaL tummuunnuu uNTaayiiruunnuu*
nyaan veeN-appooL avaL tumm-uunnuu uNTaayiiruunnuu
I slip.PST-when she sneeze-PLUR be.PST
'She was sneezing when I slipped on the floor.' (Swenson 2019: 146)

c. *NangaL sinima kaaNumpooL avaL cirikkuunnuu uNTaayiiruunnuu*
NangaL sinima kaaN-um-pooL avaL cirikk-uunnuu uNTaayiiruunnuu
we.EXCL movie see-UM-when she laugh-PLUR be.PST
'When we saw [watched] the movie, she was laughing.' (Swenson 2019: 146)

Swenson (2019) explains that the reason why *-uunnuu* seems to provide some habitual/characterizing property in (36) is that these types of iterative pluractionals repeat sub-events across some part of a larger pluractional event, and this type of reading can be interpreted in a generic/habitual/characterizing way as it is in (36a) in particular.

Swenson notes that Henderson (2012) claims this type of reading is ultimately due to universal quantification. Henderson (2012: 191) argues that "the generalization is that pluractional distributivity is greedy, but not picky. It requires an object to be interpreted distributively when it can be, but when it can't be, repetition is fine." The author displays this type of reading via Kaqchikel in the following example, where *la'* is a pluractional:

(37) Kaqchikel

Xuk'utula'	*ri*	*po't*	*chwe'*
X-Ø-u-k'ut-ula'	ri	po't	ch-w-e'
COM-A3S-E3S-show-la'	the	blouse	P-E1S-DAT

'She showed me the blouse repeatedly.'
Speaker Comment: She showed me all the various designs in the weaving.
(Henderson 2012: 191)

Swenson (2019: 144-147) provides multiple diagnostics that support the conclusion that *-uunnuu* is the iterative pluractional progressive aspect marker. For brevity, I will avoid going through each of her diagnostics and instead display her concluding assertions (from her example (31) on p.148) below:

(38) Iterative Pluractional Properties of *-uunnuu*

a. compatible with 'for x time' adverbials, i.e. are atelics
b. compatible with a variety of lexical aspect classes (coerces telics and statives to atelics)
c. allows temporally discontinuous repetitions
d. often has habitual-like meanings (though they are the result of ∀ quantification, not a GEN operator)
e. no shared telos needed; the event can be split into parts and distributed over different participants
f. a large capacity is not needed and the exact cardinality is vague
g. often entail a corresponding sentence without the pluractional marker

According to Swenson (2019), if *-uunnuu* is progressive, it should not be compatible with individual-level verbs. But, the examples below show that speakers may be able to coerce an individual-level predicate into having a stage-level reading:

(39) Paradigm for *arriyaan* 'to know'

a.

ii	*kaNakku*	*uuttaram*	*Peter-inu*	*arriyaam*
ii	kaNakku	uuttaram	Peter-inu	arriy-Ø-aam
DEM	math	answer	Peter-DAT	know-NPST-MOD

'Peter knows the answer to this math (problem).'
NB: *kaNakku* literally translates to 'math.'

b.# *ii* *kaNakku* *uuttaram* *Peter-inu* *arriyuunnuu*
ii kaNakku uuttaram Peter-inu arriy-∅-uunnuu
DEM math answer Peter-DAT know-NPST-IPFV
Intended: 'Peter knows the answer to this math (problem).'
Literally: Peter is knowing the answer to this math (problem).
NB: This utterance is only acceptable if Peter can see the future, like a fortune-teller.

c. *ii* *kaNakku* *uuttaram* *Peter-inu* *arriyaamaayiiruunnuu*
ii kaNakku uuttaram Peter-inu arriy-aam-aa-y-ii-r-uunnuu
DEM math answer Peter-DAT know-MOD-AUX-E-PST-E-IPFV
'Peter knew the answer to the math (problem).'
NB: As in, Peter had been aware of the answer the entire time the group was discussing the problem.

Example (39b) is only available in a coerced reading where some type of knowledge acquisition is taking place (e.g. a fortune-teller is actively gazing into a crystal ball and watching the future unfold, acquiring knowledge about the math problem as it happens). So, instead of being an individual-level predicate, *arriyaan* is actually coerced into a stage-level predicate instead - similar to what would happen in English, given a particular context:

(40) CONTEXT: Observation in response to a child putting a lab coat on and listening to her parents' heartbeats.

a. You're being a doctor.

b.# You're a doctor.

Even though the copula 'be' is typically stative, it can be coerced to a stage-level predicate when there is some procedural context provided. In (40), the (b) example is dispreferred because the child's medical profession is temporary and surreal. By dressing up and pretending to be a doctor, (40a) may be observed by an outside third party while (40b) is only accessible to those who are participants in the metaphor. If the observer entered into the discourse with (40b), they could ask for a shot or to have their blood pressure taken, but if they enter into the same scenario with (40a), they would then need to take a separate step to enter into the realm of pretend in order to ask for any doctor-patient interactions to take place. In question form, (41a) addresses the child where (41b) addresses the child-as-doctor pretend persona:

(41) Same context as (40)

a. Are you being a doctor?

b. Are you a doctor?

As another example, one would address a child's impolite actions in some context with a comment like 'You're being rude!' while 'You're rude!' would seem harsh or at least pragmatically inappropriate in the same context. This type of coercion of a stative to a stage-level predicate may also be the reason why *-uunnuu* is preferred in (42a) and dispreferred in (42b), where there is some process or eventive reading in (a), but not in (b):

(42) *-uunnuu* vs. *-uukayaaNu*

a. *nyaan* *graamatilekku* *pookuunnuu*
nyaan graama-til-ekku pook-∅-uunnuu
1SG.NOM village-LOC-DAT go-NPST-IPFV
'I am going to the village.'

b. *nyaan* *kolejil* *pookuukayaaNu*
nyaan kolej-il pook-uuka-y-aaNu-∅
1SG.NOM college-LOC go-PTCP-E-AUX-NPST
'I am going to college.'
NB: As in, I am attending college, not travelling there.

All this to say that more evidence is needed to uncover what the aspectual mechanism is for *-uunnuu*, but as a key point for the purposes of this dissertation, the only requirement that I have is that *-uunnuu* is an aspectual morpheme that expresses imperfectivity.

2.4.2 Participle *-uuka*

In opposition to almost all of the Malayalam literature, this dissertation labels *-uuka* as the participle marker. When *-uuka* occurs, there must be an auxiliary present on the same verbal stem to spell out inflectional morphology or else it will result in ungrammaticality. This means that the stem VERB-*uuka* lacks the obligatory tense it needs to act as a full verb on its own. Importantly, since it is the participle form, tense morphology cannot intercede between the main verb root and the participle marker. This is difficult to show through

spelled-out morphology since non-past tense is null, but this issue - as well as some morpho-phonological questions - will be addressed in this section.

According to Lundquist (2011), "participle phrases have the same core distribution as adjectival phrases: they can appear in the complement of a copula, and they can appear as adnominal modifiers." The following examples display *-uuka* behaving (in (43a)) as the participle, and show that it requires the auxiliary support from the copula *aaNu* in order to prevent a syntactic failure (as in (43b)) due to the inability of the verb to concatenate with tense morphology when in its participle form:

(43) Participle Constructions

a. *avan* *pustakam* *ezhuthuukayaaNu*
avan pustakam ezhuth-uuka-y-aaNu-∅
3SG.M.NOM book write-PTCP-E-AUX-NPST
'He is writing a book.'

b. * *avan* *pustakam* *ezhuthuuka*
avan pustakam ezhuth-uuka
3SG.M.NOM book write-PTCP
Intended: 'He is writing a book.'

It is my hypothesis that, in the case of *-uuka* as a participle marker, the ungrammaticality is triggered by the lack of the null non-past tense morpheme that would otherwise be realized on the main verb stem if it were not in its participle form. Because the participle is closed-off to tense concatenation, structures like (43b) fail.

Asher and Kumari (1997: 321), via Gundert (1868: 92), claim that *-uuka* is an infinitive marker that is used for citation forms. The authors show that verbs marked with *-uuka* are "accessible to coordinating suffixes [as in (44a)...] and is used in the coordination of sentences" as in (44b) (Asher and Kumari 1997: 321).

(44) Coordination

a. *kaLikkuukayuum* *paThikkuukayuum* *veeNam*
kaLikk-uuka-y-uum paThikk-uuka-y-uum veeNam
play-UUKA-E-CONJ study-UUKA-E-CONJ should
'One should both play and study.' (Asher and Kumari 1997: 136)

b. *vaayanaSaalayil* *urakke* *vaikkuukayuum* *samsaarikkuukayuum*
vaayanaSaalay-il urakke vaikk-uuka-y-uum samsaarikk-uuka-y-uum
library-LOC loudly read-UUKA-E-CONJ talk-UUKA-E-CONJ
ceeyaruutu
ceey-aruutu
do-IMP.NEG
'Don't read aloud and don't talk in the library.' (Asher and Kumari 1997: 136)

Example (44a) shows the VERB-*uuka-uum* construction being used to coordinate two verbs, while (44b) shows the same type of construction being used to coordinate two verb phrases.

However, labelling *-uuka* as the infinitive instead of as a participle does not account for the range of situations shown in this section where it occurs in finite constructions. In fact, when infinitive phrases are constructed, the other infinitive *-uuvaan/-aan*[7] is used instead of *-uuka*:

(45) *-uum* vs. *-uunnuu*

a. *nyaan* *suresh-ooTu* *puustakam* *vaikkaan* *aavaSyappeTTuu*
nyaan Suresh-ooTu puustakam vaikk-aan aavaSyappeTT-uu
1SG.NOM Suresh-SOC book read-INF ask-PST
'I asked Suresh to read the book.'

b. * *nyaan* *suresh-ooTu* *puustakam* *vaikkuuka* *aavaSyappeTTuu*
nyaan Suresh-ooTu puustakam vaikk-uuka aavaSyappeTT-uu
1SG.NOM Suresh-SOC book read-PTCP ask-PST
Intended: 'I asked Suresh to read the book.'

Ultimately, when *-uuka* occurs, no inflectional information can attach to a verbal root, so an auxiliary or another verb is used to support it in a clause since tense is obligatory.

2.4.3 Durative *-kondu* & Continuous *-irikkuuka*

Malayalam has two markers that comment on the duration and continuity of an event. The durative marker, *-kondu*, signals that there is some event for which the telos has not been reached (Swenson 2016: 133). The continuous marker, *-irikkuuka*, signals that there is some event that is ongoing and is consequently uninterrupted, but it makes no comment on the

[7]For more information on this infinitive marker, see Asher and Kumari (1997: 322).

telos of the verb. It is important to note that both these markers also exist in the language as fully productive verbs; *kondu* can mean something like 'bear/carry' and sometimes appears as 'while', and *irikkaan* means 'to sit', but when it is used as the continuous, it exists in its participle form.

(46) Imperfective vs. Continuous Readings

a. CONTEXT: You walk into your sister's room where the window is shut but the room is very cold (which is impossible without the window being open). You ask her:

ni	*janalu*	*turanaayiiruunno*
ni	janalu	turan-aa-y-ii-r-uunnuu-o
2SG.NOM	window	open-AUX-E-PST-E-IPFV-Q

'Did you open the window?.'

b. CONTEXT: The answer to the above question:

nyaan	*turanaayiiruunnuu*
nyaan	turan-aa-y-ii-r-uunnuu
1SG.NOM	open-AUX-E-PST-E-IPFV

'I opened (it).'

c. CONTEXT: Also a possible answer to the above question:

nyaan	*janalu*	*turaniiTTirikkuukayaayiiruunnuu*
nyaan	janalu	turan-ii-TT-irikk-uuka-y-aa-y-ii-r-uunnuu
1SG.NOM	window	open-PST-PRF-CONT-PTCP-E-AUX-E-PST-E-IPFV

'I left the window open.'

Example (46b) could also involve a scenario where the person opens the window and then shuts it again, while still maintaining the truth value of the window being opened. However, (46c) cannot cover that version of events. In (46c), the window remained open for the entirety of the reference time, but could still be open. It is not until we introduce *-kondu* that the listener gets any information about the telos of the event:

(47)

nyaan	*janalu*	*turaniiTTukondirikkuukayaayiiruunnuu*
nyaan	janalu	turan-ii-TTu-kond-irikk-uuka-y-aa-y-ii-r-uunnuu
1SG.NOM	window	open-PST-PRF-DUR-CONT-PTCP-E-AUX-E-PST-E-IPFV

'I left the window open.' (and it is still open now)
NB: If the window was closed at UT, this utterance would be unacceptable.

While the meaning differences between verbs with just *-kondu* and just *-irikkuuka* are subtle, they are still distinguishable. In the examples below, the inclusion of *irikkuyka* in (48b) provides no information about the telos of the event, but in contrast, example (48a) which only has *-kondu* prevents a right-boundary from forming before utterance time, meaning that at utterance time, John must still be in the act of cutting mangoes.

(48) Right Event Boundary Prevention

a. *jan muunnu kilo mango arinyuukondiiruunnuu*
jan muunnu kilo mango ariny-uu-kond-ii-r-uunnuu
John three kilo mango cut-PST-DUR-PST-E-IPFV
'John had been cutting three kilos of mangoes (and is still cutting them).'

b. *jan muunnu kilo mango arinyuukondirikkuukayaayiiruunnuu*
jan muunnu kilo mango ariny-uu-kond-irikk-uuka-y-aa-y-ii-r-uunnuu
John three kilo mango cut-PST-DUR-CONT-PTCP-E-AUX-E-PST-E-IPFV
'John had been cutting three kilos of mangoes.'

Swenson (2019) suggests that *irikkuka* is a light verb, which would explain why there is multiple tense marking on data like (48a). For a more thorough treatment of *kondu* and *irikkuuka*, see Swenson (2017, 2019).

2.5 Modal Morphology

This section will briefly display and discuss the modal morphology in Malayalam. Ultimately, the claim supported in this dissertation is that *-uum* is a modal morpheme which involves universal quantification, and it is not a future tense morpheme (as discussed in (§2.5)). Other modals that exist in the language will be briefly explored as well; namely *-aam* and *-Nam*.

2.5.1 Modal Morphology

Most of the Malayalam literature claims that *-uum* is either a future marker (Asher and Kumari 1997) or a modal marker (Jayaseelan 2004a; Babu 2006; Swenson 2017). This dissertation agrees with the conclusions about *-uum* made in Babu (2006) which will be explored in this section.

Babu (2006: 1) claims that *-uum* is a "modalized generic operator that quantifies over-the set of accessible possible worlds [which gives] the sentence an intensional (characterizing) property." The author displays the behavior of *-uum* in the following example (he glosses it as FUT in parts of his analysis), juxtaposing it with *-uunnuu*[8]:

(49) *-uum* vs. *-uunnuu*

a. *suuryan kizhakku uudikkuum*
suuryan kizhakku uudikk-uum
sun east rise-FUT
'The sun rises in the east.' (Babu 2006: 2)

b. *suuryan kizhakku uudikkuunnuu*
suuryan kizhakku uudikk-uunnuu
sun east rise-PRS
'The sun rises in the east.' (Babu 2006: 2)

Babu (2006: 2) claims that (49a) "makes a prediction about the sun's behavior," while (49b) "is [...] a generalization of a series of repeated episodes of [the] sun's rising," and he reiterates that *-uum* signals that there is an "intensional operator that quantifies over the set of accessible possible worlds" which then assigns a characterizing property on the predicate. Characterizing predicates (as in (50b)) differ from episodic predicates (as in (50a)) in that they "describe an 'essential' [or nomic] property of some entity" (Babu 2006: 4).

(50) Episodic vs. Generic Predicates

a. The potato was first cultivated in South America. [Episodic]

b. The potato is highly digestible. [Generic/Characterizing]
(Babu 2006: 3)

In contrast, generic properties denote a "kind" reference on DPs, while generic sentences take on some characterizing property which can be either habitual or - in the case of lexical statives like *know French* - generic sentences "lack a situation argument altogether" (Babu 2006: 3).

[8]Similar to Swenson (2017), Babu (2006) ultimately rejects *-uunnuu* as the present tense morpheme and instead claims that *-uunnuu* is an imperfective that "licenses a situation argument, which is the characteristic property of an episodic predicate." For more on *-uunnuu* and the differing proposal from Swenson (2019) that it is an iterative pluractional progressive, see (§2.4.1).

In the case of characterizing sentences, their support for counterfactual statements provides a test for their nomicity. If (51) was not characterizing, the following argument would be unacceptable:

(51) My friends vote for Socialists. Hence, if you had been my friend, you would have voted for the Socialists. (Babu 2006: 4)

If, for some reason, the act of *voting for Socialists* was an accidential property, the argument would not be valid. Babu (2006: 5) claims that characterizing predicates should be viewed as intensional, "in that they make a generalization of the state of affairs in all the accessible possible worlds." It is this intensionality and the connection to accessible possible worlds which contributes to the ability of *-uum* to provide modal information in the predicate.

In fact, for characterizing sentences, *-uum* is essential. In (52a), Babu (2006) shows that while *-uunnuu* can provide a generalization over episodic predicates (like in (45)), only *-uum* can provide a generic reading for the lexical stative predicate *koLLaan* 'to hold':

(52) Lexical Stative Predicates

a. * *ii paatrattil naalu liitar veLLam koLLuunnuu*
ii paatratt-il naalu liitar veLLam koLL-uunnuu
DEM vessel-LOC four liter water hold-UUNNUU
Intended: 'This vessel holds four liters of water.' (Babu 2006: 7)

b. *ii paatrattil naalu liitar veLLam koLLuum*
ii paatratt-il naalu liitar veLLam koLL-uum
DEM vessel-LOC four liter water hold-UUM
'This vessel holds four liters of water.' (Babu 2006: 7)

So, as shown above, only *-uum* is allowed to provide a generic reading for lexical stative sentences like (52b). Example (52a) is not necessarily ungrammatical, but it is not characterizing. The vessel in (52b) doesn't actually have to contain any water at UT. It is simply a characteristic of that vessel that it has the capacity for four liters of water. In the same vein, (Babu 2006: 8) shows that only *-uum* is allowed for dispositional properties as well.

(53) Dispositionality with *-uum*

a. **pancasaara veLLattil aliyuunnuu*
pancasaara veLLatt-il aliy-uunnuu
sugar water-LOC dissolve-UUNNUU
Intended: 'Sugar dissolves in water.' (Babu 2006: 8)

b. *pancasaara veLLattil aliyuum*
pancasaara veLLatt-il aliy-uum
sugar water-LOC dissolve-UUM
'Sugar dissolves in water.' (Babu 2006: 8)

Again, (53a) is not necessarily ungrammatical, even though Babu marks it as such. But, it is not able to communicate the same meaning as (53b). Example (53b) is grammatical because dispositional properties are concerned with intensionality, not extensionality. Dispositional sentences are essentially a type of characterizing predicate, which requires *-uum*.

In light of its intensional force, Babu (2006: 12), (along with John (1987); Babu (1997)), claims that *-uum* is the modal marker, instead of the future tense marker as portrayed in previous literature (as in Asher and Kumari (1997)). The main claim from Babu is that the *-uum* that occurs on the verbal stem and the *-uum* that occurs on DPs in coordination constructions is one and the same universal quantifier. Babu (2006) provides a comprehensive overview of all of the environments where *-uum* occurs. These are provided below for referential convenience:

(54) Occurrences of *-uum*

a. Additive Particle
jobinuum vannuu
jobin-uum vann-uu
Jobin-UUM come-PST
'Jobin also came.' (Babu 2006: 12)

b. Conjunctive Particle
jishayuum jobinuum vannuu
jisha-y-uum jobin-uum vannuu
Jisha-E-uum Jobin-UUM come-PST
'Jisha and Jobin came.' (Babu 2006: 12)

c. Universal Quantifier
ellaa kuTTikaLuum
ellaa kuTTi-kaL-uum
all boy-PL-UUM
'all the boys' (Babu 2006: 12)

d. Indefinite
aarenkiluum vannoo
aar-enkil-uum vann-oo
who-COND-UUM come-Q
'Did anyone come?' (Babu 2006: 12)

e. Negative Polarity Item
aaruum vannilla
aar-uum vann-illa
who-UUM come-NEG
'No one came.' (Babu 2006: 13)

f. Free Choice
aaruum varuum
aar-uum var-uum
who-UUM come-UUM
'Anyone will come.' (Babu 2006: 13)

g. 'Whoever'
aaru paranynyaaluum avan keeLkkilla
aaru paranyny-aal-uum avan keeLkk-illa
who say-COND-UUM he hear-NEG
'He will not listen, no matter who says.' (Babu 2006: 13)

Babu (2006) compares these instances and asserts that, when attached to a verbal stem, *-uum* provides an intensional quantificational reading to the sentence, and when attached to a DP, *-uum* provides the same quantificational reading where - instead of quantifying over sets of accessible possible worlds - it quantifies over entities (Babu 2006: 14).

So, for situations where *-uum* seems to assign future temporality, it is really just providing access to all accessible possible worlds that exist where the verbal domain is true, and - in a way - coordinates them. This is shown in (55a) where Babu (2006: 14) claims that the meaning conveyed by *-uum* implies that "all accessible possible worlds that are located in tomorrow are worlds in which there is rain." This is juxtaposed with (55b), where modal *-aam* does not show the same quantificational force that *-uum* does.

(55) *-uum* vs. *-aam*

a. *naaLe* *mazha* *peeyuum*
naaLe mazha pee-y-uum
tomorrow rain pour-E-UUM
'It will rain tomorrow.' (Babu 2006: 14)

b. *naaLe* *mazha* *peeyaam*
naaLe mazha pee-y-aam
tomorrow rain pour-E-AAM
'It may rain tomorrow.' (Babu 2006: 14)

To add to the above collection provided by Babu (2006), Fernández and Antonini (2017) point out that *-uum* is available in habitual or repetitive situations as shown in the below example:

(56) a. CONTEXT: The speaker regularly has friends coming over for lunch on Sundays.

eppooLuum *nyaangngaL* *cooru* *uNTaakuum*
eppooL-uum nyaangngaL cooru uNT-aak-uum
when-UUM 1PL.EXCL rice make-AUX-UUM
'We always make rice.'
NB: Syntactically, *eppooLuum* can appear before each constituent.
(Fernández and Antonini 2017: 472)

b. *avan* *avaLeekkaaL* *urakke* *paaTuum*
avan avaL-ee-kkaaL urakke paaT-uum
3SG.M.NOM 3SG.F-E-COMP loud sing-UUM
'He sings louder than her.' (Fernández and Antonini 2017: 484)

Both (56a) and (56b) are quantificational situations (A-quantification and comparative quantification respectively) that add to Babu's already large collection of examples where *-uum* contributes some quantificational force.

Babu (2006: 15) concludes that the apparent quantificational force and the lack of a bounded time-span provided by *-uum* solidifies its classification as an universal quantifier (or at least the morphological signal of some quantificational operator) as opposed to a future tense marker and separate conjunctive particle. Deo (2009: 11) confirms that this type of modal treatment for generic operators extends to the interpretation of characterizing sentences. The author argues that "characterizing sentences are interpreted as necessity

statements restricted to the set of worlds within the modal base that are the most normal on some ordering source" (Deo 2009: 11).

In Malayalam, *-aam* is the ability/permissive modal - roughly equivalent to English 'can.' Below shows that only *-aam* is acceptable in answers for the following ability/permissive context:

(57) CONTEXT: Is John physically capable of cutting the mango?

a. *jan mango ariyaam*
jan mango ari-y-aam
John mango cut-E-MOD
'John can cut the mango.'

b.#*jan mango ariyuum*
jan mango ari-y-uum
John mango cut-E-MOD
'John can cut the mango.'
NB: Acceptable as 'John will cut the mango.'

Example (57b) shows that modal *-uum* is not able to provide ability/permissive readings. While *-aam* is able to express ability/permissive modality on its own, Malayalam can also express ability/permissive modality with lexical modals as well:

(58) Lexical 'can'

a. *jan mango ariyaankazhiyuum*
jan mango ariy-aan-kazhiy-uum
John mango cut-INF-can-MOD
'John can cut the mango.'

b. *jan mango ariyaanpattuum*
jan mango ariy-aan-patt-uum
John mango cut-INF-can-MOD
'John can cut the mango.'

Along with *-uum* and -aam, another common modal is *-Nam*. The modal morpheme, *-Nam*, shown below in (59), is roughly equivalent to English 'shall/should.' This is notably a deontic modal.

(59) CONTEXT: What should John do with the mango? As in, what is his duty?

jan *mango* *ariyaNam*
jan mango ariya-Nam
John mango cut-MOD
'John should cut the mango.'

All of these modal markers are incompatible with negation morphology, as discussed below in §2.6.

2.6 Negation Morphology

This section will discuss negation in Malayalam. Negation of sentences and of constituents can be accomplished in a few different ways depending on the negation's scope and the syntactic structure of the phrase. The two most notable negation markers are *illa* and *alla*, which correspond to *uNTu* and *aaNu* respectively. But, there is also the negative particle *aatt-* which can co-occur with either negation marker or appear on lexemes by itself.

Malayalam does not have negative concord, and multi-negatives produce affirmative readings. The combination of *illa-aatta* or *alla-aatta* is the adjectival form of the negative marker and remains negative. Examples of *aatt-* acting on its own, and examples of it interacting with *illa* and *alla* are shown below:

(60) Environments of *aatt-*

a. *mikkyavaruum* *uLLuu* *cooru* *kaanaattepooyii*
mikkyavaruum uLLuu cooru kaan-aatte-poo-y-ii
most there rice see-NEG.ADJ-go-E-PST
'Most of the rice is missing.'
NB: The serial verb construction SEE + GO is idiomatic.

b. *toozhilaaLi* *allaatta* *vasuu*
toozhilaaLi alla-aatta vasuu
laborer NEG-NEG.ADJ Vasuu
'Vasuu who is not a laborer...' (Asher and Kumari 1997: 70)

c. *viiTillaatta* *penkuTTi*
viiT-illa-aatta penkuTTi
home-NEG-NEG.ADJ girl
'The girl who was not home...'

In (60a), the data show *aatt-* performing as a negative particle, but in (60b) and (60c), it is adjectivalizing the negative marker *alla* and *illa* respectively. For more information on *aatt-* and the array of negation strategies in Malayalam, see Asher and Kumari (1997: 150-154). Our main focus will be on *illa* and *alla* as follows.

Negative sentences with *illa* correspond to affirmative phrases where *uNTu* would be acceptable. Like *uNTu*, *illa* requires auxiliary support from *aaNu* in order to host overt inflection. It can affix to nouns, verbs, or other particles to scope over different constituents. It cannot host TAM features in spite of its position in the verbal slot. I will discuss below the morphological possibilities of *illa* in brief by examining examples of its behavior.

The negation marker *illa* is able to negate sentences that would be affirmed with *uNTu*, as in (61) below:

(61) Existential Negation with *illa*

a. *vayalil* *pambuukaL* *uNTu*
vayal-il pambuu-kaL uNTu
field-LOC snake-PL EXIST
'There are snakes in the field.'

b. *vayalil* *pambuukaL* *illa*
vayal-il pambuu-kaL illa
field-LOC snakes-PL NEG
'There are not snakes in the field.'

Negation requires auxiliary support from *aaNu* in order to host TAM inflection, as shown below:

(62) Negative Markers Require the Copula

a. *raakSasanmaruNTaayiiruunnuu*
raakSasan-mar-uNTu-aa-y-ii-r-uunnuu
monster-PL-EXIST-COP-E-PST-E-IPFV
'There were monsters.'
Lit: 'Monsters existed.'

b. *raakSasanmarillaayiiruunnuu*
raakSasan-mar-illa-aa-y-ii-r-uunnuu
monster-PL-NEG-COP-E-PST-E-IPFV
'There were no monsters.'
Lit: 'Monsters did not exist.'

Without the inclusion of the *-aayiiruunnuu* morphemes, both examples in (62) would not be interpretable in past temporality. They would only be able to be interpreted as non-past, showing that - in this type of construction - *illa* requires auxiliary support, just like *uNTu*.

Sentential negation is also accomplished with *illa*, as in (63) below:

(63) Present Temporality

a. *avaL* *ende* *viiTil* *varuunnuu*
avaL ende viiT-il var-∅-uunnuu
3SG.F.NOM 1SG.GEN home-LOC come-NPST-IPFV
'She is coming to my house.'

b. *avaL* *ende* *viiTil* *varuunnilla*
avaL ende viiTil var-∅-uunnuu-illa
3SG.F.NOM 1SG.GEN home-LOC come-NPST-IPFV-NEG
'She is not coming to my house.'

Note that a key morphological difference between the TAM affixation in (63) and (62) is that full verbs like *varaan* 'to come' can concatenate with TAM morphology on their own without the help of an auxiliary. It is also important to remember that a verb like *varaan* 'to come' changes its stem to *vann-* in past temporal interpretations:

(64) Past Temporality

a. *avaL* *ende* *viiTil* *vannuu*
avaL ende viiT-il vann-uu
3SG.F.NOM 1SG.GEN home-LOC come.PST-PST
'She came to my house.'

b. *avaL* *ende* *viiTil* *vannilla*
avaL ende viiT-il vann-illa
3SG.F.NOM 1SG.GEN home-LOC come.PST-NEG
'She did not come to my house.'

Example (64b) shows the past-tense stem of *varaan* 'to come' with the past tense marker elided or at least covert (as in some structure like (68)).

Where affirmative sentences would use *aaNu*, the negated form for those constructions is *alla*, as in (65) below:

(65) Negation with *alla*

a. *luyis doctor aaNu*
luyis doctor aaNu-∅
Lewis doctor COP-NPST
'Lewis is a doctor.'

b. *luyis doctor alla*
luyis doctor alla
Lewis doctor NEG
'Lewis is not a doctor.'

Like *illa*, *alla* cannot host TAM features on its own. Notably, it is not a morphological variant of *aaNu*, but a wholly separate particle with different structural restrictions.

(66) Inflection with *alla*

a. *suresh sahoodaran aayiiruunnuu*
suresh sahoodaran aa-y-ii-r-uunnuu
Suresh brother COP-E-PST-E-IPFV
'Suresh was my brother.'

b. *suresh sahoodaran allaayiiruunnuu*
suresh sahoodaran alla-aa-y-ii-r-uunnuu
Suresh brother NEG-COP-E-PST-E-IPFV
'Suresh wasn't my brother.'

c. **suresh sahoodaran alliiruunnu/alluuruunnuu*
suresh sahoodaran alla-ii/uu-r-uunnuu
Suresh brother NEG-PST-E-IPFV
Intended: 'Suresh wasn't my brother.'

Example (66b) shows the auxiliary hosting TAM information for the phrase, but in (66c), the ungrammaticality is due to the fact that *alla* cannot host TAM information on its own. It is not a verb although it is positioned in the verbal slot.

Like *aaNu*, *alla* can also occur in cleft constructions that are negated, as in (67b):

(67) Clefts with *alla*

a. *avan innale vannuu*
avan innale vann-uu
3SG.M.NOM yesterday come-PST
'He came yesterday.'

b. *avaaNu* *innale* *vannatu*
avan-aaNu innale vann-atu
3SG.M.NOM-COP yesterday come.PST-NMLZ
'It was he who came yesterday.'

c. *avanalla* *innale* *vannatu*
avan-alla innale vann-atu
3SG.M.NOM-NEG yesterday come.PST-NMLZ
'It was not he who came yesterday.' (Asher and Kumari 1997: 154)

Example (67a) shows the non-clefted word order, (67b) shows normal clefting, and (67c) shows a negated cleft construction where *alla* affixes to the constituent being negated - which is now situated in the predicate because of the cleft.

There is an obvious question that remains to be addressed in this section: like *uNTu*, does *illa* trigger copula drop of the auxiliary when in non-past temporality (where the underlying form is something like (62) or (68))?

(68) Covert *aaNu*

avaL *ende* *viiTil* *varuukayilla*
avaL ende viiT-il var-uuka-y-illa-aaNu-∅
3SG.F.NOM 1SG.GEN home-LOC come-PTCP-E-NEG-AUX-NPST
'She is not coming to my house.'

This treatment of a covert auxiliary will be discussed in more depth in the following chapters, particularly in §6.4. Negation will not be a major topic of discussion in this dissertation, but it should be noted that for my mono-copular hypothesis to succeed, any assertions made about *uNTu* should be able to translate to *illa*, though much more work is needed on the subject.

2.7 Conclusions

This chapter provides descriptions of Malayalam morphology that would be relevant to the research in this dissertation. In the above discussion, I show that tense, aspect, and modal inflection is productive and compositional on the verbal stem. I also argue, in spite of the conclusions reached by Baker (1985) in the Mirror Principle, that tense affixation on

Malayalam verbs is adjacent to the root and not stem-final. I agree with Swenson (2017, 2019) that Malayalam uses a two-tense system, and I provide a preliminary morphological ordering proposal for the language which argues that compositional morphological tense concatenation is obligatory for an utterance to be acceptable.

Chapter 3

Specificational & Predicational Constructions

As claimed by Mikkelsen (2005, 2006); Heycock (2012); Müller (2012), there are two types of copular clauses: specificational and predicational. Specificational clauses (shown in (69a)) necessitate that the subject is the topic of the clause, and in predicational clauses (shown in (69b)), the subject is a referential argument. Instead of being two sides of the same coin, it is best to view predicational clauses as the elsewhere condition and specificational clauses as the special case. These two types are juxtaposed below:

(69) Specificational vs. Predicational Copular Clauses

a. The recipient [...] is Orhan Pamuk. [Specificational]

b. The recipient [...] is from Turkey. [Predicational]

(Mikkelsen 2006: 1)

The difference between (69a) and (69b) is motivated not by special syntax, but by what Mikkelsen refers to as "special alignment of semantic properties with syntactic position driven by information structure" (Mikkelsen 2006: 1). Ultimately, topicalized subjects trigger specificational copular clause structure, and referential subjects trigger predicational copular clause structure. One test that is displayed in Mikkelsen (2006: 3) deals with pronominal selection in tag questions, shown below:

(70) Specificational

a. The lead actress in that movie is Ingrid Bergman, isn't **it**?

b. *it* = non-referential, predicative subject (Mikkelsen 2006: 3)

(71) Predicational

a. The lead actress in that movie is Swedish, isn't **she**/*it?

b. *she* = referential subject (Mikkelsen 2006: 3)

Mikkelsen (2006) concludes that it is not the syntactic structure that motivates the difference between the two types of copular clauses, because in her analysis, the underlying structure is the same for both types. Instead, it is the semantic input from the information structure that motivates (or fails to motivate) topicalization of the subject DP.

In the following sections, I will expound on specificational constructions in §3.1, including going into more depth on prior research on specificational copulas, displaying how specificational constructions occur in Malayalam in §3.1.1, and looking at specificational copular constructions in other languages in §3.1.2. I also discuss predicational constructions in §3.2, covering previous literature on predicational copulas, and examining how Malayalam handles predicational constructions in §3.2.1. I also cover how Malayalam handles its copula drop mechanics in §3.3, how it uses the copula for cleft constructions in §3.4, and I also explain how the copula can be used as an auxiliary for main verbs to host TAM/Agree information in §3.5. Finally, a summary conclusion is available in §3.6.

3.1 Specificational Constructions

Specificational constructions contain a topicalized subject which is the initial DP. Essentially, that subject is non-referential, and it is the topic of the sentence (Mikkelsen 2006: 2). Mikkelsen shows the subject DP is topicalized by collecting evidence from question-answer pairs in English. In a specificational clause, "the subject is topic [and] the complement is focus," so these types of clauses have a fixed focus structure (Mikkelsen 2006):

(72) Fixed Focus Structure

a. Q: Who is the mayor?
A: The mayor is John. (Mikkelsen 2006: 5)

b. Q: Who/What is John?
A: #The mayor is John. (Mikkelsen 2006: 5)

c. Q: Is the mayor Sam?
A: #No, the FIRE CHIEF is Sam.
A: No, the mayor is JOHN. (Mikkelsen 2006: 5)

Using the answer in (72a) as a template for a standard specificational clause, we can examine the unacceptabilities that occur in (b) and (c) above. The subject is *the mayor* and the complement is *John*, so all of the focus phenomenon should affect the DP containing *John*. The unacceptability of the answer in (72b) is due to the wrong DP having focus in the clause. Focus should remain with the subject, *John* instead of the other DP, *the mayor*. The unacceptability in (72c) is due to misplaced contrastive focus on the wrong DP; instead of *the mayor*, it should be the DP containing *Sam/John* that gets contrastive focus in this case.

Mikkelsen (2006) also argues that specificational constructions are a special case of syntactic inversion where the topicalized DP lands in the subject position. This type of inversion pattern is exhibited below:

(73) Mikkelsen (2006) Evidence of Specificational Structure via Inversion

> *The biggest reason people want to become Vice-President, though, is that it has become the royal road to the Presidency, even if one's boss remains in perfect health. After Adams and Thomas Jefferson, during the republic's first two centuries* ***the only person to ever win a Presidential election while serving as Vice-President*** *was* ***Martin Van Buren****, in 1836.*

In (73), the subject DP *Martin Van Buren* is inverted with its DP complement, *the only person...* and it is due to the complement's aforementioned information that makes it more "familiar" in the discourse. Because the topic of the discourse was the *Vice-Presidency* and not *Martin Van Buren*, the complement becomes the more familiar piece of information and thus participates in this inversion pattern.

Below, Mikkelsen (2005) displays the syntactic and semantic structure for specificational constructions. Below, the $\text{DP}_{\langle e,t\rangle}$ has left its trace in Pred′ with the topic feature denoted as TOP, which agrees with T. The $\text{DP}_{\langle e\rangle}$ fails to check all of the features on T, so $\text{DP}_{\langle e,t\rangle}$ is the only option for successful agreement. The numbers assigned below correspond with the related semantic derivation:

(74) Mikkelsen (2005) Specificational Clause:

> *The actress is Ingrid Bergman.*

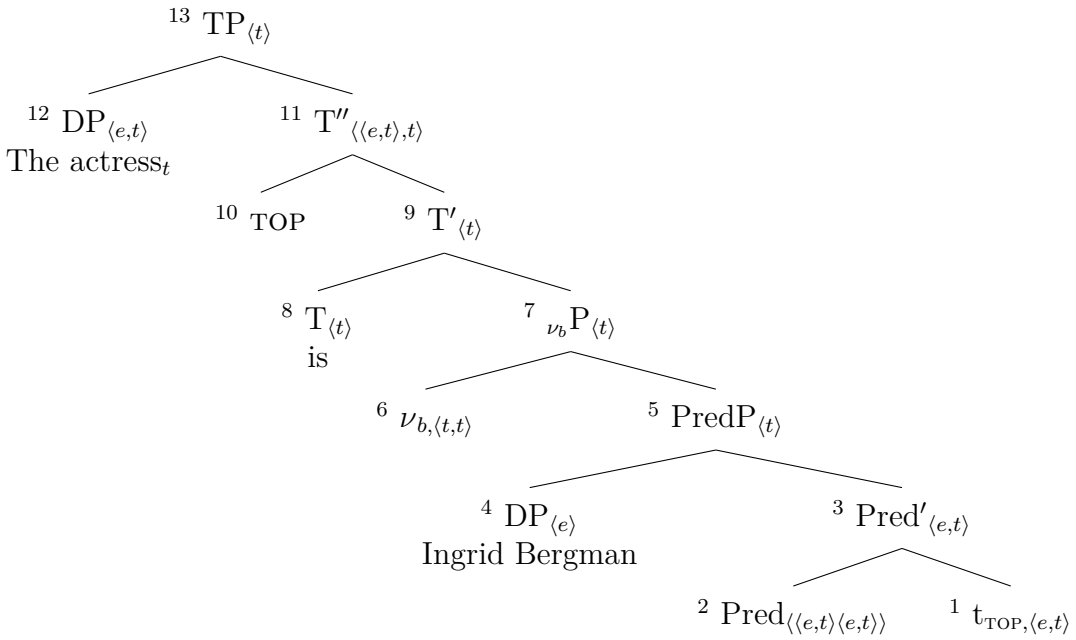

Figure 3.1: Mikkelsen (2005) Specificational Clause Structure of Example (74)

In the above structure, Mikkelsen (2005: 171) claims that "T bears the uninterpretable nominative case feature, the standard EPP feature, and an uninterpretable topic feature. Crucially, DP_{pred} [in specificational clauses] bears an interpretable topic feature, and DP_{ref} [in predicational clauses] does not." Mikkelsen (2005: 188) provides the associated semantic representation of the tree nodes above in the following breakdown, where b is an individual constant; x, y, z, and v are individual variables; P and Q are property variables; R and S are proposition variables; and $\rightarrow$ represents beta-reduction. The ν_b head is semantically vacuous, and it is a "true light verb."

Table 3.1: Mikkelsen (2005) Semantic Derivation for Specificational Clause Tree in Figure 3.1

[1] t_{top}	:	Q
[2] Pred	:	$\lambda P[\lambda x[P(x)]]$
[3] Pred′	:	$\lambda P[\lambda x[P(x)]](Q) \Rightarrow \lambda x[Q(x)]$
[4] DP_{ref}	:	b
[5] PredP	:	$\lambda x[Q(x)](b) \Rightarrow Q(b)$
[6] ν_b	:	$\lambda R[R]$
[7] ν_bP	:	$\lambda R[R](Q(b)) \Rightarrow Q(b)$
[8] T	:	$\lambda S[S]$
[9] T′	:	$\lambda S[S](Q(b)) \Rightarrow Q(b)$
[11] T″	:	$\lambda Q[Q(b)]$
[12] DP_{pred}	:	$\lambda x[actress'(x) \wedge \forall y[actress'(y) \rightarrow y = x]]$
[13] TP	:	$\lambda Q[Q(b)](\lambda x[actress'(x) \wedge \forall y[actress'(y) \rightarrow y = x]])$
		$\Rightarrow \lambda x[actress'(x) \wedge \forall y[actress'(y) \rightarrow y = x]](b)$
		$\Rightarrow actress'(b) \wedge \forall y[actress'(y) \rightarrow y = b]$

The semantic derivation above shows that *the actress* and *Ingrid Bergman* are in an identity relationship where the two referents are the same entity. It is actually Pred that s-selects for one predicative and one referential expression - not the copula. The copula simply denotes an identity function on propositions, making it what Mikkelsen (2005: 189) refers to as "the lightest [light verb] of them all" - both semantically and syntactically.

Heycock (2012: 237) takes Mikkelsen's analysis a step further and claims that specificational constructions are semantically equatives, but that they are "an 'asymmetric' equation, in that the noun phrase that occurs in initial position is interpreted as a 'more intensional'[1] object than the post-copular noun phrase." Heycock (2012: 237) and Mikkelsen (2002, 2005) agree that these types of constructions "involve [syntactic] 'inversion' of the two [arguments of an equative construction]." This type of inversion of specificational copular constructions is supported by a number of different forms of data; namely (i) agreement, (ii) focus, and (iii) scrambling patterns in a variety of languages. We have seen evidence of agreement patterns

[1]Making it essentially less referential than 'the actress.'

in (70) and focus patterns in (72), but Heycock (2012: 218) also claims that the syntactic inversion that is shown by data like (73) "is strongly reminiscent of the properties of scrambling," as is found in languages like German.

Heycock (2012: 218) explains that (via Lenerz (1977)) German has a "default" argument ordering, "one characteristic of which is that it is compatible with any focus assignment." Focal stress will, importantly, emphasize the default position which is in front of the verb. The effects of German scrambling patterns on allowable argument ordering are shown below:

(75) Scrambling in German - Set I

a. Question 1

Wem hat Peter das Futter gegeben?
who.DAT has Peter the.ACC food given
'Who has Peter given the food?' (Heycock 2012: 218)

b. Answer 1

Peter hat der Katze das Futter gegeben
Peter has the.DAT cat the.ACC food given
'Peter has given the cat the food.' (Heycock 2012: 219)

c. Answer 2

Peter hat das Futter der Katze gegeben
Peter has the.ACC food the.DAT cat given
'Peter has given the food to the cat.' (Heycock 2012: 219)

(76) Scrambling in German - Set II

a. Question 2

Was hat Peter der Katze gegeben?
what.ACC has Peter the.DAT cat given
'What has Peter given the cat?' (Heycock 2012: 218)

b. Answer 1

Peter hat der Katze das Futter gegeben
Peter has the.DAT cat the.ACC food given
'Peter has given the cat the food.' (Heycock 2012: 219)

c. Answer 2

#*Peter hat das Futter der Katze gegeben*
Peter has the.ACC food the.DAT cat given
'Peter has given the food to the cat.' (Heycock 2012: 219)

According to Heycock (2012), the (c) answer in both examples is only acceptable to answer the question in (75), because "the direct object [is] scrambled to the left" and you cannot scramble focused elements away from their preverbal position. Thus, if specificational constructions have the same underlying syntactic structure as normal predications, and the underlying order (at least here in German) requires the subject to precede the predicate, then the subject would fail to move out of the small clause PredP, and it would not retain the correct topicalization marking. It would take on the intonational properties of the focused element, and then would not be acceptable with the given focal stress. This is equally unacceptable in English if we pretend that intonational focus must fall in the same way:

(77) Focus Intonation
a. Q: What has Peter given to the cat?
b. A: Peter has given the cat THE FOOD.
c. A: Peter has given FOOD to the cat.
d.# A: Peter has given food to THE CAT.

In (77d), the focal stress cannot be on *the cat*, because it is not the DP complement - *the food* is.

Ultimately, both Mikkelsen (2005, 2006) and Heycock (2012) argue that it is the topicalization of the subject that causes specificational clauses to acquire their specificational type. The information structure of the phrase drives the topic/focus distinction to be set on particular DPs, whereas in predicational type copular constructions, no such distinction exists to restrict topic/focus assignment.

3.1.1 Specificational Constructions in Malayalam

In Malayalam, *aaNu* occurs in specificational copular clauses, but *uNTu* cannot. The following constructions with *aaNu* even show evidence of topicalized inversion that was mentioned in Mikkelsen (2006) and Heycock (2012) in the above section as a feature of specificational clauses, as displayed in (79):

(78) Specificational Constructions

a. *kristi juuliet aaNu*
kristi juuliet aaNu
Kristy Juliet COP
'Kristy is Juliet (in the play).'

b. **kristi juuliet uNTu*
Kristy juuliet uNTu
Kristy Juliet EXIST
Intended: 'Kristy is Juliet (in the play).'

c. *saimon raajaa aaNu*
saimon raajaa aaNu
Simon king COP
'Simon is the king.'

d. **saimon raajaa uNTu*
saimon raajaa uNTu
Simon king EXIST
Intended: 'Simon is the king.'

(79) Topicalized Inversion

raajaa saimon aaNu
raajaa saimon aaNu
king Simon COP
'The king is Simon.'

The above examples all prevent the use of *uNTu* in non-past temporal environments if equivalent meaning is to be retained.

So, if *aaNu* is the copula, what restrictions does it have that make it different from *uNTu*? Asher and Kumari (1997) claim that "the two main 'being' verbs in Malayalam are

aakuuka[2] and *uNTu*, with *irikkuuka* (also = 'sit') as a possible candidate for inclusion in the set" (Asher and Kumari 1997: 96). The authors also note that - in contrast with other Dravidian languages - "its presence in the sentence can be regarded as the norm, to the extent that it has been stated to be obligatory (see Prabhākara Vāriyar 1979: 39)," though the authors do note that *aaNu* is sometimes "deleted when used colloquially" (Asher and Kumari 1997: 97)[3], as in (80) below:

(80) Copula Drop with *aaNu*

a. *avan (oruu) tiiccar (aaNu)*
he a teacher be-PRS
'He is a teacher.' (Asher and Kumari 1997: 97)

b. *kuuTTi miTukkan (aaNu)*
child clever.person-M be-PRS
'The child is clever.' (Asher and Kumari 1997: 97)

However, the authors point out that overt inflectional morphology prevents the optionality of the copula, as in (81):

(81) *ceruuppattil avan maTiyan aayiiruunnuu/*(aayiiruunnuu)*
young.age-LOC he lazy.person-M be-PRS
'When young, he was lazy.' (Asher and Kumari 1997: 97)

The authors argue that there are two entries for the copula *aaNu* which are interpreted as 'be' or 'become.' This is shown in their table below (Asher and Kumari 1997: 96):

Table 3.2: Asher and Kumari (1997) Temporal Environments of *aaNu*

Present	Past	Future
aakuunnuu 'be'/'become'	*aayii* 'become'	*aakuum* 'be'/'become'
aaNu 'be'	*aayiiruunnuu* 'be'	

The distinctions between temporalities provided above is not compatible with my own analysis. Asher and Kumari (1997) claim that *-uunnuu* is the present tense morpheme, but my own findings align with the conclusion from (Swenson 2017) that it is an imperfective

[2]This is frequently realized as its non-past tense stem form, *aaNu*, on the surface pronunciation.
[3]See Swenson (2019) for a counterargument.

morpheme, and that the non-past tense morpheme is null. I argue that it is this aspectual distinction provided by the imperfective marker that allows for the contrast between a change-of-state reading and an eventive reading, which is particularly apparent when *aaNu* concatenates with past tense by itself, as in (83b) below. In (83a), the imperfective morpheme *-uunnuu* occurs in the utterance without the change-of-state reading, and (83b) demonstrates how - on a copula without aspectual morphology - the change-of-state reading can occur[4]:

(83) Dynamic vs. Stative

a. *avan* *kaLLan* *aayiiruunnuu*
3SG.M.NOM thief be-PST
'He was a thief.' (Asher and Kumari 1997: 99)

b. *avan* *kaLLan* *aayii*
3SG.M.NOM thief become-PST
'He became a thief.' (Asher and Kumari 1997: 99)

It is my hypothesis that the copula in the (83a) example and the copula in the (83b) example above are - essentially - the same item. There are not two separate entries for each version of *aaNu* as 'be' and 'become.' The change-of-state reading is the unmarked reading when in past temporal constructions due to the inherent perfective reading that the past tense morpheme *-ii/-uu* provides. Of course, with the inclusion of *-uunnuu*, the default perfective can be overridden when the reading is affected by the overt imperfective. For (83a), the

[4]My analysis and related glossing of (83) is shown in (82):

(82) Dynamic vs. Stative

a. *avan* *kaLLan* *aayiiruunnuu*
avan kaLLan aa-y-ii-r-uunnuu
3SG.M.NOM thief COP-E-PST-E-IPFV

'He was a thief.'

b. *avan* *kaLLan* *aayii*
avan kaLLan aa-y-ii
3SG.M.NOM thief COP-E-PST

'He became a thief.'

subject's status as a thief after the ET is open - either he was once a thief and is no longer (at UT), or alternatively, he was a thief at a certain point in the past and still is now (at UT). In (83b), there is no question about his change from some status as non-thief to thief. The transformation is not in progress; it is an achievement.

Like Asher and Kumari (1997), Swenson (2019) claims that Malayalam has two copulas - *aaNu* and *uNTu* - with *aaNu* being labeled as the equative copula[5]. Swenson (2019: 224) explains that *aaNu* "equates two referring individuals, [and is] used in predicative constructions where it is used for both states and events [and] clefts." Ultimately, this dissertation will show that *uNTu* is not a copula, but many of the constructions where *aaNu* appears are discussed in this chapter, and we will explore more of the juxtaposition between *aaNu* and *uNTu* in Chapter 5.

3.1.2 Specificational Constructions in Other Languages

Heycock (2012) uses examples from Moro (1997) in Italian in order to display an agreement phenomenon which shows that when the postcopular DP is the subject, that is the DP that agrees with the verb. This is displayed in (84):

(84) Italian

a. *il colpevole sono io*
the culprit be.PRS.1SG 1SG.NOM
'The cuplrit is me.' (Heycock 2012: 211)

b. **il colpevole è me*
the culprit be.PRS.3SG 1SG.ACC
Intended: 'The culprit is me.' (Heycock 2012: 211)

The ungrammaticality in (84b) is due to the fact that the subject is supposed to be *me*, but *me* is in the accusative form (not the nominative as it should be), and although the third person agreement is correctly marked with the use of *è* as if the nominative-marked DP *il colpevole* was to agree, *il colpevole* is not the subject due to the DP inversion phenomenon and so will not agree with the copular features. That leaves (84a) as the only possibility.

[5]See also Mohanan and Mohanan (1999); Babu and Madhavan (2003); Nair (2012); Swenson (2017).

Heycock (2012) similarly shows the same phenomenon acting on Catalan:

(85) Catalan

a. *el seu fort són les matemàtiques*
the his strong.point be.PRS.3PL the mathematics
'His strong point is mathematics.' (Heycock 2012: 211)

b. **el seu fort és les matemàtiques*
the his strong.point be.PRS.3SG the mathematics
Intended: 'His strong point is mathematics.' (Heycock 2012: 211)

In (85b), the verb does not agree with the singular DP *el seu fort* but with *les matemàtiques*, so it needs to reflect the plural properties found on the post-copular subject DP - in spite of the fact that in Italian and in Catalan the default subject position is pre-verbal.

There are languages that do not as readily participate in this inversion phenomenon. Languages like English and French, as Heycock (2012) explains, strongly favor the initial DP to be assigned subject status. This is displayed in the following examples:

(86) English

a. The real problem is your parents. (Heycock 2012: 213)

b. *The real problem are your parents. (Heycock 2012: 213)

(87) French

a. *l'état, c'est moi*
the.state it.be.PRS.3SG me
'The state is me.' (Heycock 2012: 213)

b. **l'état, c'es je*
the.state it.be.PRS.1SG I
Intended: 'The state is me.' (Heycock 2012: 213)

Both English and French exhibit a strong preference for a pre-copular subject DP, and the types of inversion patterns shown in German, Italian, and Catalan are not acceptable under similar circumstances. Heycock (2012: 216) ultimately concludes that "in copular clauses that do not have a specificational reading, the verb does not agree with the post-copular [DP] even if it is nominative." So, since the examples from English and French do not participate in the inversion phenomenon, the subject stays where it originates and thus the clause can

retain a specificational reading. However, the only way to account for the agreement patterns displayed by German, Italian, and Catalan would be subject inversion. In fact, this becomes even more clear when we compare (86) with the German equivalent (88):

(88) German

das grösste Problem sind deine Eltern
the biggest problem be.PRS.3PL your parents
'The biggest problem is your parents.' (Heycock 2012: 221)

In the example above, the copula agrees with the third person plural DP *deine Eltern* 'your parents,' which is the subject DP and also inverted to be post-copular, importantly different from the default subject position expected in German.

As far as Dravidian languages are concerned, most mark person agreement on verbs. So, unlike Malayalam, we can overtly see how the copula agrees with the arguments in the specificational clause in a language like Tamil:

(89) Tamil

naangkaL ungkaL aNiyaaka irunt-oom
1PL.NOM 2SG.GEN team.DAT be-1PL
'We were your team.'

The example above in (89) shows that the copula agrees with the subject that is nominative-marked and in the default SOV position for the language. While Tamil shows more overt agreement feature marking than Malayalam, it is essential to remember that structurally all of these specificational clauses share semantic and syntactic patterns in spite of the productivity of agreement marking or subject inversion phenomenon.

3.2 Predicational Constructions

Unlike specificational clauses, predicational clauses are referential and they tell us something about the subject DP. Mikkelsen (2006) shows that, at least for human subjects, the pronoun in question-answer pairs will reflect the person, number, and gender of the subject that it is referring to, as in (90) below:

(90) Q: What nationality is the lead actress in that movie?
A: She/*it/*that is Swedish. (Mikkelsen 2006: 4)

The only appropriate pronoun for the referential DP *the lead actress* is nominative, singular, and feminine *she*. The DP *the lead actress* tells us information about the DP to which it is referring.

According to Geist (2008), copulas express either IDENTITY or PREDICATION. The author provides the following sentences to illustrate the types of copular sentences that occur in English (Geist 2008: 80)[6]:

Table 3.3: Asher and Kumari (1997) Three Types of Copular Sentence

Types	Examples	**XP1**	XP2
Predicational	**John** is a teacher.	e	$\langle e,\ t\rangle$
Equative	**Mark Twain** is Samuel Clemens.	e	e
Specificational	**The murderer** is John.	$\langle e,\ t\rangle$	e

Of course, as covered in §3.1, specificational copular clauses have certain restrictions on the types of XPs that are able to occur in that environment, as in the subject must be the topic of the clause. Geist (2008) explains that, contrastingly, in predicational copular sentences the copula selects for a predicate of type $\langle e,\ t\rangle$. This is in contrast to equative (or specificational) sentences where both arguments are type e and thus "do not match the argument structure of the predicational copula" (Geist 2008: 80). Equative sentences express an identity relation between both e arguments that is not present in predicational copular sentences. In the specificational sentence provided in Table 3.3, "*the murderer* restricts the variable for which [...] *John* specifies a value" (Geist 2008: 80). Namely, it is the DP *the murderer* which is satisfying the EPP feature on T due to its status as the topicalized DP, identical with

[6]In the example sentences, XP1 is the left-most linear DP (bold for comparison).

unaccusative clauses[7]. For this reason, the following grammaticality restrictions occur and are shown in English:

(91) a. *She is tired.*
b. * *Her is tired.*
c. * *Tired is she.*

However, predicational clauses have no such topicalization/focus restriction. According to Mikkelsen (2005: 189), "the type-structure of a predicational clause [shown in Figure 3.2 below] is identical [to the specificational one shown in Figure 3.1], except that it is the referential DP that raises to the subject position, leaving behind a type $\langle e \rangle$ trace inside PredP, and depositing an index in a position left-adjoined to T′." This is exhibited in the following figure:

(92) Mikkelsen (2005: 189) Predicational Clause
Ingrid Bergman is the actress.

[7]The Extended Projection Principle (EPP) states that a subject must be syntactically available, even if there are no theta roles assigned. Thus, verbs which do not assign external theta roles have subjects that are either expletive (as in English *it, there*), or subjects which have been moved into subject position from a lower position (like, as in English, the subject of an embedded clause that is in a predicate with verbs like *seem*. The subject in these types of clauses does not need any overt reference. Languages with pro-drop mechanics, like Malayalam, can assign an empty category to satisfy the EPP requirement.

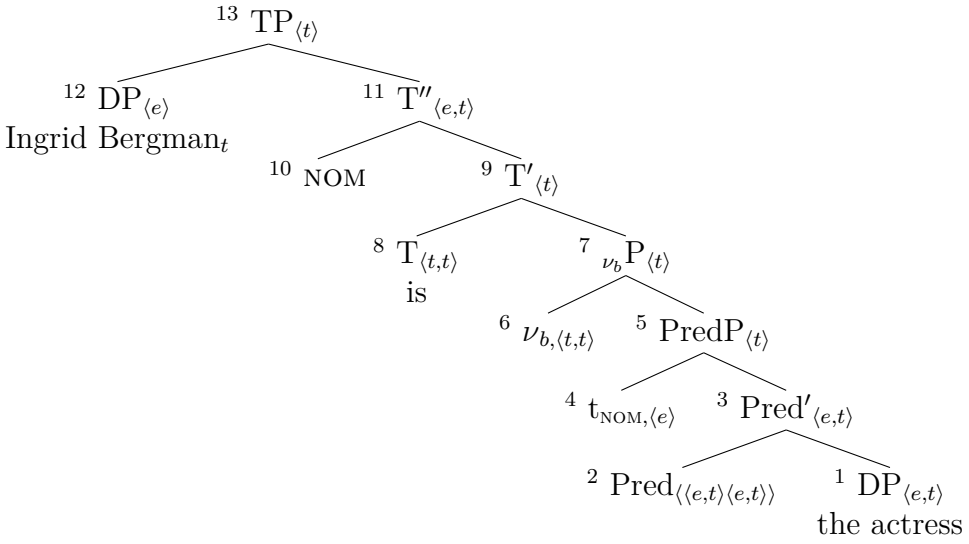

Figure 3.2: Mikkelsen (2005) Predicational Clause Structure of Example (92)

According to Mikkelsen (2005: 193), the copula is an "unaccusative light verb which assigns no theta role and no case. It is the lightness of the copula, in particular its inability to license a structural case, that distinguishes copular clauses from transitive clauses and which opens up the possibility for the lower predicative DP to move to the subject position." Furthermore, by unifying the underlying TP type-structure of both predicational and specificational copular clauses, Mikkelsen (2005) shows that the true difference between the two is thus: the DP that contains information relatively familiar, or essentially pre-contextualized, in the discourse appears in the subject position before novel information that has no referential meaning. The subject is not determined by content, but instead by which DP is already referenced in context. Notice that, unlike in Table 3.1 on page 52 which shows the semantic derivation for specificational clauses where the referential DP stays low, the table below shows the same type-structure for predicational clauses but, in this case the trace is left in SpecPredP from the subject undergoing normal raising to SpecTP.

[1] DP_{pred}	:	$\lambda x[actress'(x) \wedge \forall y[actress'(y) \rightarrow y = x]]$
[2] Pred	:	$\lambda P[\lambda z[P(z)]]$
[3] Pred′	:	$\lambda P[\lambda z[P(z)]](\lambda x[actress'(x) \wedge \forall y[actress'(y) \rightarrow y = x]])$
		$\Rightarrow \lambda z[\lambda x[actress'(x) \wedge \forall y[actress'(y) \rightarrow y = x]](z)]$
		$\Rightarrow \lambda z[actress'(z) \wedge \forall y[actress'(y) \rightarrow y = z]]$
[4] t_{NOM}	:	v
[5] PredP	:	$\Rightarrow \lambda z[actress'(z) \wedge \forall y[actress'(y) \rightarrow y = z]](v)$
		$\Rightarrow actress'(v) \wedge \forall y[actress'(y) \rightarrow y = v]$
[6] ν_b	:	$\lambda R[R]$
[7] ν_bP	:	$\lambda R[R](actress'(v) \wedge \forall y[actress'(y) \rightarrow y = v])$
		$\Rightarrow actress'(v) \wedge \forall y[actress'(y) \rightarrow y = v]$
[8] T	:	$\lambda S[S]$
[9] T′	:	$\lambda S[S](actress'(v) \wedge \forall y[actress'(y) \rightarrow y = v])$
		$\Rightarrow actress'(v) \wedge \forall y[actress'(y) \rightarrow y = v]$
[11] T″	:	$\lambda v[actress'(v) \wedge \forall y[actress'(y) \rightarrow y = v]]$
[12] DP_{ref}	:	b
[13] TP	:	$\lambda v[actress'(v) \wedge \forall y[actress'(y) \rightarrow y = v]](b)$
		$\Rightarrow actress'(b) \wedge \forall y[actress'(y) \rightarrow y = b]$

Table 3.4: Mikkelsen (2005) Semantic Derivation for Predicational Clause Tree in Figure 3.2

This derivation shows that, except for TP, the underlying structure of the predicate in both specificational and predicational clauses is essentially the same - which Mikkelsen (2005) aims to prove. Ultimately, there is a small clause complement where either the XP_{pred} will topicalize (Specificational) or the XP_{ref} will undergo normal subject movement from SpecPredP to SpecTP.

Specificational clauses require the XPs in the tree below to both be DPs, but predicational clauses do not have that restriction; only that one XP is predicative and one XP is referential:

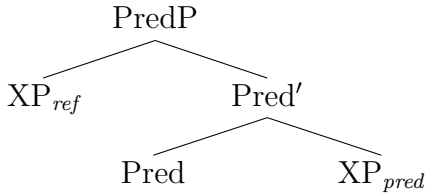

Figure 3.3: Mikkelsen (2006) Predicational Base Structure

If DP_{pred} is topicalized, the clause will be specificational. So, it is predicational constructions that are the unmarked, or elsewhere, version of this dichotomy. That fact makes recognizing specificational clauses rather easy, while predicational clauses have more variation. For example, we know that specificational clauses must have a topicalized subject, and so (93b) fails the criterion and thus is a predicational clause:

(93) Topicalized Subjects

a. Specificational
Q: Who is the architect?
A: The architect is Rem Koolhaas. (Mikkelsen 2011: 236)

b. Predicational
Q: Who is the architect?
A: Rem Koolhaas is the architect. (Mikkelsen 2011: 236)

According to Mikkelsen (2011: 238), "the constituent in the answer that corresponds to the *wh*-phrase in the question is the focus." So, if *Rem Koolhaas* is focused in (93), then it would fail as the subject in a specificational clause, but it succeeds as the subject in a predicational clause like (93b).

3.2.1 Predicational Constructions in Malayalam

Specificational clauses in Malayalam (in present temporal environments) are straightforwardly only compatible with *aaNu*. However, there are some predicational clauses that appear to allow overlapping distribution between *aaNu* and *uNTu*. These are property concept clauses and locative clauses, discussed in depth in Chapter 5. According to Swenson (2017), these clauses involve locative, medical, and psychological predicates. One of each type is provided below for preview:

(94) Locative

a. *carlz* *viiTil* *aaNu*
carlz viiT-il aaNu
Charles house-LOC AANU
'Charles is in the house.'

b. *carlz* *viiTil* *uNTu*
carlz viiT-il uNTu
Charles house-LOC uNTu
'Charles is in the house.'

(95) Medical

a. *enikku* *prameham* *aaNu*
enikku prameham aaNu
1SG.DAT diabetes AANU
'I am diabetic.' (Swenson 2017: 130)

b. *enikku* *prameham* *uNTu*
enikku prameham uNTu
1SG.DAT diabetes UNTU
'I am diabetic.' (Swenson 2017: 130)

(96) Psychological

a. *enikku* *pattikal* *pedi* *aaNu*
enikku patti-kal pedi aaNu
1SG.DAT dog-PL fear AANU
'I am afraid of dogs.' (Swenson 2017: 127)

b. *enikku* *pattikal* *pedi* *uNTu*
enikku patti-kal pedi uNTu
1SG.DAT dog-PL fear UNTU
'I am afraid of dogs.' (Swenson 2017: 127)

Swenson (2017: 121) analyzes the above types of copular clauses as having subtle meaning differences which is what motivates the apparent overlap. So, what other types of predicational clauses are available? As discussed above, essentially any referential copular clause that does not topicalize the predicate DP.

Occupational predicates can be expressed with copular structure in Malayalam, and they can be predicational type clauses, as in the example below:

(97) Occupation

a. *sharlot* *paacakakkaaran* *aaNu*
sharlot paacakakkaaran aaNu
Charlotte chef COP
'Charlotte is a chef.'

b. * *sharlot* *paacakakkaaran* *uNTu*
sharlot paacakakkaaran uNTu
Charlotte chef EXIST
Intended: 'Charlotte is a chef.'

As shown above, only *aaNu* is compatible in occupational predicates.

Attributive predicational clauses are also expressed with copular constructions, as in (98):

(98) Attribution[8]

a. *ende* *kaar* *veegatayuLLatu* *aaNu*
ende kaar veegatay-uLLatu aaNu
1SG.GEN car speed-ADJ COP
'My car is fast.'

b. * *ende* *kar* *veegata* *uNTu*
ende kar veegata uNTu
1SG.GEN car speed EXIST
Intended: 'My car is fast.'

As in (97), (98b) shows that *uNTu* is not allowed in attributive constructions. However, there is an available rescue strategy when case is introduced on the subject DP:

(99) Attribution with *uNTu*

ende *kar-inu* *veegata* *uNTu*
ende kar-inu veegata uNTu
1SG.GEN car-DAT speed EXIST
'My car is fast.'

Note the presence of the dative subject in (99). The dative also shows up for the subject DP in the medical and psychological predicates in (95) and (96). So, the literal reading for an example like (99) may be underlyingly something like 'There is speed for my car,' if we are to consider *uNTu* as a purely existential "copula." But, what if instead of using an adjectivalized nominal for attributive constructions, we use a true adjective like *niila* 'blue'? Will we still see the same case-marking rescue strategy? The answer is yes, as displayed in (100c):

[8]It is not transparent enough to mark *uLLatu* as a simple adjectivizer, but more information on that construction is available in Mohanan and Mohanan (1999) and on adjectives in Malayalam in general in Asher and Kumari (1997).

(100) Attribution with True Adjectives

a. *kaseera niila aaNu*
kaseera niila aaNu
chair blue COP
'The chair is blue.'

b. **kaseera niila uNTu*
kaseera niila uNTu
chair blue EXIST
Intended: 'The chair is blue.'

c. *kaseerayil niila uNTu*
kaseera-yil niila uNTu
chair-LOC blue EXIST
'The chair is blue.'
Literally: 'There is blue in/on the chair.'

So, why is the locative required in (100c) but not in the other examples? As will be discussed in the following chapters, the analyses from Swenson (2017, 2019) claim that there is a pragmatic requirement (which she refers to as IMMEDIACY) that allows *aaNu* and *uNTu* to overlap in their distribution. Where *aaNu* occurs, there is a general reading, but where *uNTu* occurs, there is some pragmatically immediate information that is relevant to the current discourse. In trying to account for similar phenomena, Mohanan and Mohanan (1999) claim that there is a covert syntactic mechanism causing cases of overlap between *aaNu* and *uNTu* on surface structures. These analyses, and the potential issues with them, will be covered in Chapter 5 to hopefully solve the problems that we are seeing with predicational constructions in Malayalam.

3.2.2 Conclusions on Predicational Constructions

In sum, predicational constructions are the unconditioned structure of copular clauses, and they do not exhibit the same restrictions on topic/focus requirements as specificational clauses do. Predicational subjects have referential meaning, and their complements can be any phrase type. In Malayalam, both *aaNu* and *uNTu* occur in predicational clauses.

For *uNTu*, there seems to be a requirement for dative case assignment on certain constituents, particularly in property concept clauses. This section has followed the framework from Mikkelsen (2005) that shows - aside from TP - the syntactic structure of predicational clauses is identical to that of specificational clauses.

3.3 Copula Drop Mechanics

Like other Dravidian languages, Malayalam participates in copula drop mechanics when no overt inflectional morphology is required on the copular stem. The term COPULA DROP MECHANICS is used here to refer to any copular element - in this case *aaNu* - that is required to carry TAM morphology but that may be covertly expressed when none of its inflectional elements need to be phonologically overt - in this case the null non-past tense morpheme. This is exhibited below in (101).

(101) Required Copula Drop in Kannada

a. *bhaaskar oLLeya meeSTru*
Bhaskar good teacher
'Bhaskar is a good teacher.' (Sridhar 1990: 82)

b. *nimma aLiya tumbaa curuku*
your son.in.law very smart
'Your son-in-law is very smart.' (Sridhar 1990: 83)

(102) Optional Copula Drop in Malayalam

a. *avan ezhuuthuukaran (aaNu)*
avan ezhuuth-uuka-r-an aaNu-∅
3SG.M.NOM write-PTCP-NMLZ-M COP-NPST
'He is a writer.'

b. *liiSa sahRdam *(aaNu)*
Leisha friendly COP
'Leisha is friendly.'

As shown above, the copular sentences in Kannada require the copula to be dropped when no overt surface inflection morphology is needed. According to Sridhar (1990: 82), an overt copula in (101) would "sound awkward" in either sentence. In Malayalam; however, (102b)

needs a copula for acceptability. But, for either language, if any inflectional information is required, the copula is obligatory:

(103) Overt Copula Requirement in Kannada

a. *lataa sangiita impaagi ittu*
Lata music sweet-ADV be-PST-3SG
'Lata's music was sweet.' (Sridhar 1990: 83)

b. **lataa sangiita impaagi*
Lata music sweet-ADV
Intended: 'Lata's music was sweet.' (Sridhar 1990: 83)

(104) Overt Copula Requirement in Malayalam

a. *avan ezhuuthuukaranaayiiruunnuu*
avan ezhuuth-uuka-r-an-aa-y-ii-r-uunnuu
3SG.M.NOM write-PTCP-NMLZ-M-COP-E-PST-E-IPFV
'He was a writer.'

b. **avan ezhuuthuukaran (aayiiruunnuu)*
avan ezhuuth-uuka-r-an aa-y-ii-r-uunnuu
3SG.M.NOM write-PTCP-NMLZ-M COP-E-PST-E-IPFV
Intended: 'He was a writer.'

In (103b), the absence of the copula *ittu* produces an ungrammaticality, because inflectional morphology is required overtly in the surface structure of the sentence. The same goes for (104b) with *aayiiruunnuu* in Malyayalam.

If a verb requires *aaNu* to host overt TAM features as an auxiliary, the auxiliary is overt. In the examples below with the participle form (marked with *-uuka*)[9], *aaNu* is required since the stem needs tense morphology:

(105) Auxiliary Support from *aaNu*

a. *nyaan oruu kathu ezhuuthuukayaaNu*
nyaan oruu kathu ezhuuth-uuka-y-aaNu-∅
1SG.NOM ART letter write-PTCP-E-AUX-NPST
'I am writing a letter.'

[9]For more information about *-uuka* as the participle, see §2.4.2.

b. * *nyaan* *oruu* *kathu* *ezhuuthuuka*
nyaan oruu kathu ezhuuth-uuka
1SG.NOM ART letter write-PTCP
Intended: 'I am writing a letter.'

As I have shown previously, TAM information cannot directly concatenate on *uNTu* without the help of auxiliary *aaNu*. So, why does it appear on its own in non-past affirmative constructions? I propose that clauses that show *uNTu* on its own in the phrase are actually cases of copula drop and that *aaNu* is present covertly to provide non-past tense morphology. This is shown below in example (106):

(106) *uNTu* with Auxiliary Support - Non-Past

a. *viiTil* *raNTu* *pambukaL* *uNTu*
viiT-il raNTu pambu-kaL uNTu aaNu-∅
house-LOC two snake-PL EXIST COP-NPST
'There are two snakes in the house.'

b. * *viiTil* *raNTu* *pambukaL* *uNTu*
viiTil raNTu pambu-kaL uNTu-∅
house-LOC two snake-PL EXIST-NPST
Intended: 'There are two snakes in the house.'

That *aaNu* must be present underlyingly is supported by the fact that *uNTu* cannot host overt TAM on its own, as shown in (107):

(107) *uNTu* with Auxiliary Support - Past

a. *viiTil* *raNTu* *pambukaL* *uNTaayiiruunnuu*
viiT-il raNTu pambu-kaL uNTu-aa-y-ii-r-uunnuu
house-LOC two snake-PL EXIST-COP-E-PST-E-IPFV
'There were two snakes in the house.'

b. * *viiTil* *raNTu* *pambukaL* *uNTuuruunnuu/uNTiiruunnuu*
viiT-il raNTu pambu-kaL uNT-uu-r-uunnuu
house-LOC two snake-PL EXIST-PST-E-IPFV
Intended: 'There were two snakes in the house.'

The morpheme *uNTu* occurs so readily and frequently on its own without *aaNu* in non-past affirmative constructions that to claim *aaNu* is there covertly is a hypothesis that desperately requires unmitigated proof. One way to show the necessity of a covert *aaNu* is to show that

it is required in other non-past affirmative environments, like in cases of future temporal reference. This is shown in (108) below:

(108) Auxiliary Requirements in Future Temporal Environments

a. *ende* *viiTil* *bhakSaNam* *uNTaakuum*
ende viiT-il bhakSaNam uNTu-aak-∅-uum
1SG.GEN house-LOC food EXIST-COP-NPST-MOD
'There will be food at my house.'

b. * *ende* *viiTil* *bhakSaNam* *uNTuum*
ende viiT-il bhakSaNam uNTu-∅-uum
1SG.GEN house-LOC food EXIST-NPST-MOD
Intended: 'There will be food at my house.'

Without *aaNu* hosting TAM information, *uNTu* fails to host verbal inflection on its own. This is most commonly observed with the *uNTaayiiruunnuu* construction (as in (107) and found throughout this dissertation and other Malayalam literature). Some authors gloss it simply as BE.PAST, but my argument is that the past construction is fully compositional. For more information on the compositionality of *uNTaayiiruunnuu*, see §3.5 below. For a full discussion on my verbal morphological ordering proposal, see §6.4.

3.4 Cleft Constructions

According to Asher and Kumari (1997: 181), clefting in Malayalam is accomplished by nominalizing the main verb of a clause which then becomes the subject of a clause where *aaNu* is the verb. The copula *aaNu* can be appended to any "major constituent" to create a focus cleft construction. Some examples of cleft constructions (in bold) in Malayalam are provided below[10]:

(109) Cleft Constructions

a. *Raman* *innale* *Krishnanu* *raNTu* *pustakam* *koTuttuu*
Raman innale Krishnan-u raNTu pustakam koTutt-uu
Raman yesterday Krishnan-DAT two book give-PST
'Raman gave Krishnan two books yesterday.' Asher and Kumari (1997: 181)

[10]The glossing in the following examples has been modified from Asher and Kumari (1997) to reflect my own analysis about TAM concatenation on verbal stems.

b. *Raman**aaNu*** *innale* *Krishnanu* *raNTu* *pustakam* *koTuttatu*
Raman-aaNu-∅ innale Krishnan-u raNTu pustakam koTutt-atu
Raman-COP-NPST yesterday Krishnan-DAT two book give.PST-NMLZ
'It was Raman who gave Krishnan two books yesterday.'

c. *innale* ***aaNu*** *Raman* *Krishnanu* *raNTu* *pustakam* *koTuttatu*
innale aaNu Raman Krishnan-u raNTu pustakam koTutt-atu
yesterday COP Raman Krishnan-DAT two book give.PST-NMLZ
'It was yesterday that Raman gave Krishnan two books.'

d. *Raman* *innale* *Krishnann**aaNu*** *raNTu* *pustakam* *koTuttatu*
Raman innale Krishnan-n-aaNu-∅ raNTu pustakam koTutt-atu
Raman yesterday Krishnan-DAT-COP-NPST two book give.PST-NMLZ
'It was Krishnan that Raman gave two books to yesterday.'

e. *Raman* *innale* *Krishnanu* *raNTu* *pustakam* ***aaNu*** *koTuttatu*
Raman innale Krishnan-u raNTu pustakam aaNu-∅ koTutt-atu
Raman yesterday Krishnan-DAT two book COP-NPST give.PST-NMLZ
'It was two books that Raman gave Krishnan yesterday.'

Asher and Kumari (1997) posit that the past tense stem of the nominalized verb is what provides a temporal reading for the matrix clause. However, it is possible to get past temporal readings to appear overtly marked on the copular cleft marker, as in (110):

(110) Tense Marking on Cleft Constructions

raNTu *pambukaL**aayiiruunnuu*** *innale* *muriccatu*
raNTu pambu-kaL-aa-y-ii-r-uunnuu innale muricc-atu
two snake-PL-COP-E-PST-CONT-IPFV yesterday die.PST-NMLZ
'It was two snakes that died yesterday.'
NB: This is not equivalent to 'Two snakes died yesterday.'

While this is an interesting example of past tense and aspect concatenation, it does not necessarily change any of the features of the cleft constructions proposed by Asher and Kumari (1997). However, according to Mohanan and Mohanan (1999), Malayalam has multiple types of cleft constructions, including (i) full clefts with *uNTu* and *aaNu*, (ii) reduced clefts with only *aaNu*, and (iii) doubly reduced clefts with no verb. The authors claim that the reason *uNTu* and *aaNu* appear in overlapping distribution in some clauses is due to the fact that in these instances, *aaNu* is acting as a cleft and not as a copula verb.

Mohanan and Mohanan (1999: 5) use the following examples to show that the seemingly overlapping distribution of *aaNu* and *uNTu* is due to underlying cleft structure and subtle meaning differences. The glosses below have been modified to reflect my conventions, but the translations are those found in the source material:

(111) *aaNu* as Cleft

a. *kaappi* *fridjil* *uNTu*
kaappi fridj-il uNTu
coffee fridge-LOC EXIST
'There is coffee, in the fridge.' (Mohanan and Mohanan 1999: 5)

b. *kaappi* *fridjil* *aaNu*
kaappi fridj-il aaNu
coffee fridge-LOC COP
'The coffee is in the fridge.'
NB: It is not somewhere else. (Mohanan and Mohanan 1999: 5)

The authors comment that "(111b) asserts [the coffee's] location" is specified "to the exclusion of other locations" (Mohanan and Mohanan 1999: 6). Thus, "(111b) implies that there is coffee only in the fridge. If there is coffee on the table, (111b) is unacceptable. (111a) is neutral to this distinction" (Mohanan and Mohanan 1999: 10). Thus, the authors claim that *aaNu* assigns some UNIQUE quality to the clause that *uNTu* does not. Importantly, *fridj-il* 'fridge-LOC' is the unique item in (111b) that excludes all other locations except for itself. It is this uniqueness factor that Mohanan and Mohanan (1999: 11) claim is the motivation for the cleft construction, as opposed to the usual, expected motivation of contrastive focus. Because cleft constructions in Malayalam require some nominalized main verb, Mohanan and Mohanan (1999) argue that underlyingly in (111b) there is some nominalized predicate, as shown overtly in (112)[11], which is grammatical and acceptable:

(112) *kaappi* *fridjil* *aaNu* *(uLLatu)*
kaappi fridj-il aaNu-∅ uLL-atu
coffee fridge-LOC COP-NPST uLLuu-NMLZ
'It is in the fridge that the coffee is.'
(Mohanan and Mohanan 1999: 13)

[11]In their paper, the authors gloss *uLLuu* as BE. For a discussion on *uLLuu* in this dissertation, see §7.2.2.

Their analysis could solve the issue of *uNTu* and *aaNu* supposedly overlapping in non-past affirmative constructions (like (113)), but as soon as other temporal or aspectual morphology is required, there is a problem. On this point, Swenson (2017: 123) claims that in the following example, (113b) is available for a non-cleft reading.

(113) Locative *aaNu/uNTu* Alternation

a. *unni labil uNTu*
unni lab-il uNTu
Unni lab-LOC EXIST
'Unni is in the lab.' (Swenson 2017: 123)

b. *unni labil aaNu*
unni lab-il aaNu
Unni lab-LOC COP
'Unni is in the lab.'
NB: This is a non-cleft reading. (Swenson 2017: 123)

According to Swenson (2017: 123), there is no "uniqueness" that Mohanan and Mohanan (1999) claim we should expect to see on (113b). In fact, (113b) "conveys that Unni is in the lab because that is normally where he works; it is a statement about the general situation, not the current situation" (Swenson 2017: 123).

Ultimately, this dissertation disagrees with the claims made in Mohanan and Mohanan (1999) about covert *uLLatu* in cleft constructions, since the main argument here is that there is no overlapping distribution since *aaNu* and *uNTu* cannot occupy the same slot and are not motivated by the same syntacto-semantic inputs.

3.5 Auxiliary Constructions

The traditional view of auxiliaries in syntactic theory is that they are selected by other syntactic heads like Voice or Agree. Bjorkman (2011: 18) argues that auxiliary verbs are not selected and instead occur because they "reflect failures of the [syntactic] inflectional system," and that auxiliaries like the copula are not directly selected "but instead [are] inserted to support inflectional material that was unable to combine with the main verb." Bjorkman refers to this mechanism as the OVERFLOW PATTERN. The overflow pattern is

defined as situations where "auxiliaries appear only in certain combinations of inflectional categories" (Bjorkman 2011: 21). The author exemplifies this type of auxiliary patterning with the following example where, in Latin, the auxiliary is only required when both the perfect and passive inflection are required (as in (114c)):

(114) Latin

a. *amavi*
amavi
love.1SG.PRF
'I loved.'/'I have loved.' (Bjorkman 2011: 21)

b. *amor*
amor
love.1SG.PASS
'I am loved.' (Bjorkman 2011: 21)

c. *amatus* *sum*
amatus sum
love.PRF.PASS be.1SG.PRS
'I am loved.' (Bjorkman 2011: 21)

Because the 1SG and tense fail to attach to the main verb *amatus* 'love,' the auxiliary rescues the syntax by providing a landing site for the inflection. Bjorkman (2011: 36) makes the key assertion that the auxiliary "occurs not to supply the clause with an otherwise-lacking verb, but to realize inflection that is, for some reason, not expressed on the main verb."

For the purposes of this dissertation, it is important to distinguish if *uNTaayiiruunnuu* constructions are: (i) instances of a verbal *uNTu* that requires a copular auxiliary to "rescue" it in the derivation, or (ii) if *uNTu* is not verbal then clauses with *uNTaayiiruunnuu* constructions are copular and the main verb here is *aaNu*, not *uNTu*. If we hypothesize the first of these two options, this rescuing ability, which *uNTu* seems to lack, is our main concern. Why is *aaNu* able to rescue sentences like (115), while *uNTu* is not - in spite of its so-called status as a copula?

(115) Participle Support: *aaNu* vs. *uNTu*

a. *nyaan* *pookuukayaaNu*
nyaan pook-uuka-y-aaNu-∅
1SG.NOM go-PTCP-E-AUX-NPST
'I am going.'

b. **nyaan* *pookuukayuNTu*
nyaan pook-uuka-y-uNTu
1SG.NOM go-PTCP-E-EXIST
Intended: 'I am going.'

We could argue that (115b) is a case of semantic or pragmatic clash instead of a syntactic one - if we wanted to maintain that *uNTu* is copular - but, why are main verbs in Malayalam able to host their own TAM morphology (as in (116a)) while a potentially verbal *uNTu* needs to be rescued by the copular auxiliary (as in (116b)) in all instances of its inflectional concatenation?

(116) *uNTu* + AUX

a. *John mango arinyuu*
John mango ariny-uu
John mango cut-PST
'John cut a mango.'

b. *John mango *uNTuu/uNTii*
John mango *uNT-uu
John mango EXIST-PST
'John had a mango.'

I argue, in this dissertation, that *uNTu* is ultimately not a copular verb. But, in returning to Bjorkman, I agree that *aaNu* is able to participate in some auxiliary rescue mechanics with the participle as shown in (115). Bjorkman (2011: 38) ultimately concludes that auxiliary constructions that align with the overflow pattern must align with the following properties:

(117) Bjorkman (2011) Overflow Auxiliary Pattern

a. Inflectional information must be associated with a separate position from the main verb.

b. The mechanism that relates inflectional information to the main verb must be able to fail.

c. There must be a 'repair' mechanism that inserts an auxiliary verb to realize inflection that has failed to combine with the [main] verb.

The main verb must remain *in situ* while the auxiliary is generated to agree with the inflectional features that fail to combine with the main verb. Instead of the auxiliary moving up to acquire these features, Bjorkman instead proposes that it is a downward Agree feature that catalyzes its generation (Bjorkman 2011: 39). Inflectional information is still able to be introduced on their relevant functional heads (e.g. Asp, T, etc), but they are realized on the main verb. Bjorkman (2011: 42) provides the following definition for this type of Agree:

(118) AGREE is a relationship between two features such that an unvalued feature [F:_] receives the value of a feature [F:val] of the same type iff:
   a. A head α containing [F:_] is c-commanded by a head β containing [F:val].
   b. There is no head γ containing a matching feautre [F:(val)], such that γ c-commands α and β c-commands γ. (Bjorkman 2011: 42)

It is important to note that Bjorkman refers to this definition as REVERSE AGREE, since it is in conflict with the original definition of Agree found in Chomsky (1998), who claims that Agreement requires some case-licensing from some c-commanding head. This new version of Reverse Agree is illustrated in a tree provided by Bjorkman below, wherein "verbs are merged with an unvalued inflectional feature [*u*INFL: _], and any head with a valued inflectional feature [*i*INFL: *y*] also carries an unvalued inflectional feature" (Bjorkman 2011: 44):

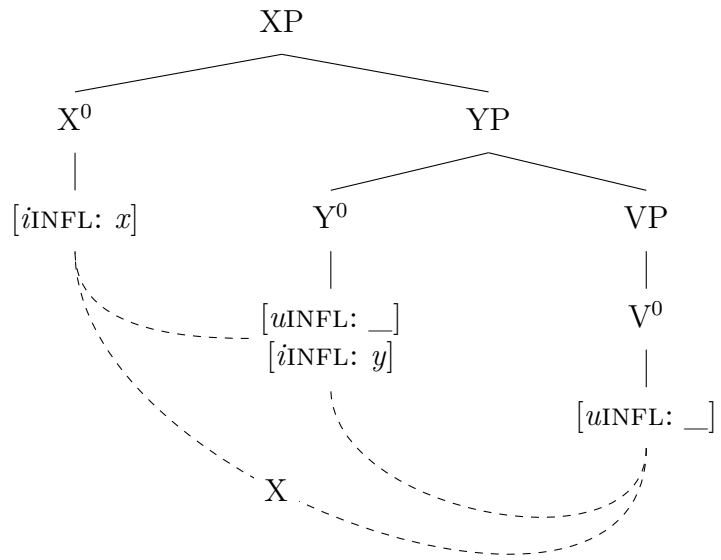

Figure 3.4: Bjorkman (2011) Operation of Reverse Agree

Since V^0 does not agree with X^0, this type of structure would represent the type of syntactic failure that Bjorkman posits would thus require the generation and insertion of an auxiliary verb to repair feature-stranding. If Y^0 lacked valued inflectional features, it would not intervene, because then it would be a possible landing site for Agreement. As a juxtaposition, Bjorkman (2011: 42) provides a non-auxiliary example in (Figure 3.5) below, and an example that shows the auxiliary using these valued inflectional features to lilypad between aspect and tense:

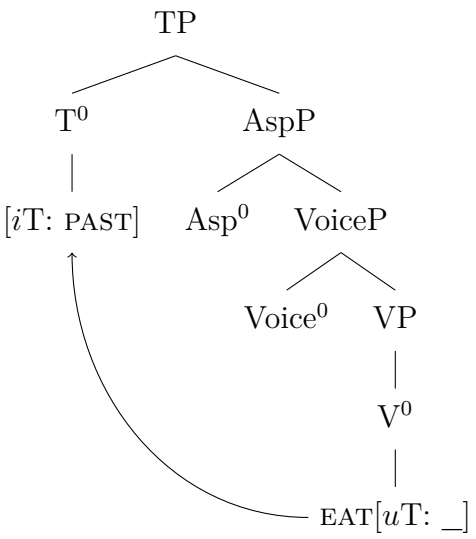

Figure 3.5: Normal V-to-T

'I ate.'

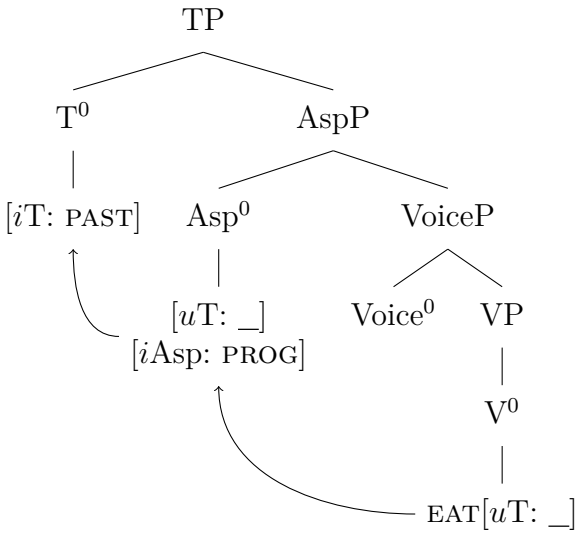

Figure 3.6: Auxiliary Rescue

'I was eating.'

But, what if an auxiliary does not follow the overflow pattern of auxiliary insertion? Bjorkman (2011: 21) claims that the other option is the ADDITIVE PATTERN of auxiliary selection. Bjorkman refers to the additive pattern as a situation where "categories that occur with an auxiliary always occur with an auxiliary" ((Bjorkman 2011: 21)). If there are multiple categories which require auxiliary selection, then there will be evidence of multiple auxiliaries. The author provides an example of the additive pattern in English:

(119) Progressive Aspect

a. FINITE: The children **were** eating the cake.

b. NON-FINITE: The children want to **be** eating the cake.

c. PERFECT: The children have **been** eating the cake. (Bjorkman 2011: 23)

Note that (119c) shows the HAVE auxiliary and the BE auxiliary occurring to support both perfect and progressive aspect. Or, an even more extreme example of aspect stacking, the progressive passive perfect shown in (120):

(120) The cake had **been being** eaten. (Bjorkman 2011: 24)

These examples demonstrate that certain inflectional categories require an auxiliary to occur.

I argue that the copula *aaNu* does not adhere to the additive pattern of auxiliary selection. There are no inflectional categories that it supports that cannot also be exhibited on a main verb (a few examples are provided in (121)). However, I claim that *aaNu* follows the overflow pattern of auxiliary insertion. When the copula provides auxiliary support to verbs (like participle forms), it is not necessarily the case that the copula is required to be there for tense or aspectual morphological concatenation, as in cases like (121), where verbs can host their own TAM inflection. Instead, the presence of *aaNu* "rescues" the syntax by providing a landing site for inflectional categories that are blocked on the main verb, as in participle cases like (122).

(121) Verbs Host Inflection

a. *trevor puustakam vaikkuunnuu*
trevor puustakam vaikk-∅-uunnuu
Trevor puustakam read-NPST-IPFV
'Trevor is reading a book.'

b. *trevor puustakam vaiccuu*
trevor puustakam vaicc-uu
Trevor puustakam read-PST
'Trevor read a book.'

(122) Auxiliaries Rescue Inflection

a. *trevor puustakam vaikkuukayaayiiruunnuu*
trevor puustakam vaikk-uuka-y-aa-y-ii-r-uunnuu
Trevor puustakam read-PTCP-E-AUX-E-PST-E-IPFV
'Trevor was reading a book.'

b. **trevor puustakam vaikkuukayii/vaikkuukayuu*
trevor puustakam vaikk-uuka-ii/-uu
Trevor puustakam read-PTCP-PST
Intended: 'Trevor was reading a book.'

In example (122b), the main verb cannot host tense morphology on its own because it is in the participle form, but the auxiliary *aaNu* rescues the derivation - as in (122a). Example (121a) also shows that an auxiliary is not required for *-uunnuu*, and only concatenates with the auxiliary when the inflectional attachment is blocked by the participle *-uuka*.

3.6 Conclusions

This chapter argues for two types of copular clauses: specificational and predicational. Specificational copular clauses have a topicalized subject and a focused DP complement. Predicational copular clauses are all other types of copular constructions. This chapter follows Mikkelsen (2006) which states that, except for the TP, the underlying structure of both types of copular clauses is the same. Ultimately there is a small clause complement where some predicational head will topicalize to the subject position for specificational interpretation or some referential head will undergo normal subject movement without any dedicated topic/focus restrictions. In Malayalam, we see that for specificational clauses, only *aaNu* is allowed. However, clauses that have a possessive reading require *uNTu* to be overt. Additionally, this chapter observed that there is some alternation between *aaNu* and *uNTu* in locative and property concept copular constructions that will need to be explained. I show that only *aaNu* is used in normal clefting environments, and that it is the only morpheme which can act as an auxiliary for main verbs that need TAM hosting. For a formal analysis of the interaction that *aaNu* has as an auxiliary, we turn to Bjorkman (2011) who claims that auxiliaries are not selected, but are motivated to rescue syntactic environments that would otherwise be unacceptable without the presence of the auxiliary. I also show that *aaNu* readily participates in typical Dravidian copular drop mechanics. In this chapter, I have suggested that only *aaNu* is a copula in Malayalam, and that *uNTu* cannot host TAM information, cannot stand alone in phrases where it is required, and does not act as an auxiliary because it fails to generate for any rescue or copula drop mechanics.

Chapter 4

Existential & Possessive Constructions

The link between existential and possessive constructions has been studied in depth[1], but before looking into what links these two types of clauses together, there are some important terms to define. Namely, the elements that make up an EXISTENTIAL CONSTRUCTION include optional items and required items.

All existential clauses require a nominal PIVOT, which contains "the individual whose existence is under discussion" (McNally 2011: 1831). Other than the pivot, all other items are optional - to some degree - depending on the language exhibiting the existential clause. Optionally, languages can have an EXPLETIVE, or expletive subject, like English *there/it* or French *il*. Existential constructions may contain a verb, and if they do, it "is often homophonous with a verb meaning 'to be' or 'to have,' or with some other verb related to possession (such as *geben* 'give' in German) which is 'bleached' of its content" (McNally 2011: 1831). For the purposes of dealing with Malayalam, I will label this item as COPULA and point to *aaNu* as the available lexeme for this label. Languages may display a CODA item which is a phrase that is external to the pivot (McNally 2011: 1831), also sometimes referred to as the complement to the pivot argument[2], as is shown by *sur la table* 'on the table' in (123). Languages can include a DEICTIC expression in their existential constructions, but since the expression - when included - is typically 'bleached' of its meaning (namely that it has lost any original contentful semantics or has undergone some valency shift from a

[1]Literature referenced here on this topic includes: Lyons (1967); Clark (1978); Freeze (1992); Francez (2006, 2007); McNally (2011); Creissels (2014); McNally (2016); Francez and Koontz-Garboden (2017).

[2]As is explained later in this chapter, I analyze the coda as a contextual modifier of the pivot which provides a spatio-temporal domain for its existence (in line with the analysis from Francez (2007)).

productive morpheme to a limited one), some linguists (see (Bentley et al. 2015)) refer to it as the existential PROFORM, which is the term used in this dissertation. Unfortunately, some research uses the term proform to refer to English *there*, although for Bentley et al. (2015), it is a separate item: the expletive. However, I will clarify terms from other works of literature as they arise.

An example of a language with all of these elements available in its existential expressions is French:

(123) Complete Existential Construction with Optional Elements

a.

il	*y*	*a*	*des livres*	*sur la table*
it	there	has	some books	on the table
EXPLETIVE	PROFORM	COPULA	PIVOT	CODA

'There are some books on the table.' Modified from (Bentley et al. 2015: 1)

Some linguists have analyzed existential constructions as structural variations of copular constructions where the pivot, *des livres*, is the argument of the coda predicate, *sur la table* (Stowell 1978; Safir 1985; Pollard and Sag 1994). Others analyze existential constructions as inherently locative structures (Freeze 1992), and some argue that the pivot is the predicate while the coda modifies the pivot externally (Williams 2006; Francez 2006, 2007). I will do my best to provide a brief comparison of some of the most relevant theoretical frameworks, but this dissertation adopts the lattermost analysis proposed by Francez (2006, 2007, 2009); Francez and Koontz-Garboden (2015, 2016, 2017).

This chapter will explore existential and possessive constructions in Malayalam and other languages. Following this introduction, there is a discussion of prior theoretical claims about existential constructions in general in §4.1, an exploration of the literature and data concerning existential constructions in Malayalam in §4.1.1, a brief look at how other languages handle existential constructions in §4.1.2; including Modern Hebrew (§4.1.2.1), Russian (§4.1.2.2), Palauan (§4.1.2.3), and ending with a short summary of existentials in §**??**. Then, following a mirrored structure, I will discuss possessive constructions and how they are similar to or differ from existentials in §4.2, I discuss possessive constructions in Malayalam

in §4.2.1, and possessive constructions in other languages in §4.2.2; again including Modern Hebrew (§4.2.2.1), and Palauan (§4.2.2.2). Lastly, I end with a brief chapter conclusion in §4.3.

4.1 Existential Constructions

As mentioned briefly above, this section will discuss relevant literature on existentials and explore possible theoretical frameworks that may fit the Malayalam existential paradigm, displayed in (124). The goal is to isolate a framework that supports my hypothesis that *aaNu* is present underlyingly as the copula, in constructions with *uNTu*, isolating *uNTu* as a non-copular pivot auxiliary[3] morpheme. The below example shows that *uNTu* is present as some existential operator in (124a), and notably, *aaNu* is unable to provide existential meaning on its own in (124b):

(124) Malayalam Existential Constructions

a. *adukkalathil pambu uNTu*
adukkala-thil pambu uNTu
kitchen-LOC snake UNTU
'There is a snake in the kitchen.' (Swenson 2017: 119)

b.# *adukkalathil pambu aaNu*
adukkala-thil pambu aaNu
kitchen-LOC snake AANU
Intended: 'There is a snake in the kitchen.' (Swenson 2017: 119)

Example (124b) is notably not ungrammatical, but the intended sentence lacks the necessary existential meaning that *uNTu* seems to signal. So, how do we explain the phenomena in (125) where *uNTu* and *aaNu* seem interchangable?

[3]The term pivot auxiliary is used here not in the way helping verbs are auxiliaries, but in the sense that *uNTu* signals that there is some semantic or syntactic structure that would otherwise be unavailable to the predicate without its inclusion.

(125) Locative *aaNu* & *uNTu*

a. *unni labil uNTu*
unni lab-il uNTu
Unni lab-LOC uNTU
'Unni is in the lab.' (Swenson 2017: 123)

b. *unni labil aaNu*
unni lab-il aaNu
Unni lab-LOC aaNU
'Unni is in the lab.' (Swenson 2017: 123)

As I discuss in the next chapter, Swenson argues that there is some pragmatic variation at play in the (125a) example above. Note that where *uNTu* provides existential meaning in (124a), that same existential meaning is not obligatory or is not available in (125a). However, locatives, possessives, and existentials are frequently linked in the literature, so perhaps *uNTu* is a marker that is related to those types of readings.

Widely cited for reference on existential constructions, Freeze (1992) seeks to provide a unifying theory of a locative paradigm that consists of the PREDICATIVE LOCATIVE, the EXISTENTIAL, and the POSSESSIVE predication - all of which are identical in form, according to Freeze - derived from an underlying structure where the locative element (the PP) is the head of the entire predicate (Freeze 1992: 553). Freeze provides preliminary evidence of this structural unification by displaying three Russian examples of the past tense copula verb была *byla* 'was' which carries inflectional morphology in locative, existential, and possessive constructions:

(126) Locative Paradigm Variants via Freeze (1992)

a. Predicate Locative
книга была на столе
kniga byla na stole
book.NOM.F COP.PST on table
'The book was on the table.' (Freeze 1992: 553)

b. Existential
на столе была книга
na stole byla kniga
on table COP.PST book.NOM.F
'There was a book on the table.' (Freeze 1992: 554)

c. Possessive
у меня была сестра
u menja byla sestra
at 1SG.GEN COP.PST sister.NOM
'I have a sister.' (Freeze 1992: 554)

In the previous examples, the locative (126a), existential (126b), and possessive (126c) structures are all handled by the past tense form of the copula была *byla* 'was.' Freeze (1992: 554) argues that possessive expressions and existential forms are inherently locative. His analysis relies on a single underlying structure in which the thematic arguments are LOCATION and THEME, and that languages will either use (i) a LOCATIVE SUBJECT EXISTENTIAL (as in the Russian example (126b) above) word order variation, or (ii) an overt PROFORM EXISTENTIAL (like the proform *there* in English) morpheme[4].

To account for the locative subject existential word order pattern, Freeze (1992: 556) displays examples from different language families to provide evidence that these locative subject existentials trigger constituent order alternation. In the below pairings, the (a) examples display the base locative word order of the language while the (b) examples show the locative existential ordering:

(127) Chamorro

a. Locative
gaige gi gima' si juan
be in house UNM Juan
'Juan is in the house.' (Freeze 1992: 556)

b. Existential
guãha lahi gi gima'
be man in house
'There is a man in the house.' (Freeze 1992: 556)

[4]Note that Freeze (1992) definition of proform differs from that of Bentley et al. (2015) where they would refer to English *there* as an expletive. This is a marginal issue, but one in need of clarification.

(128) Hindi

a. Locative
mãĩ hindustaan-mẽẽ thaa
1SG India-in COP.1S.M.PST
'I was in India.' (Freeze 1992: 555)

b. Existential
kamree-mẽẽ aadmii hai
room-in man COP.3SG.M.PRS
'There is a man in the room.' (Freeze 1992: 555)

(129) Finnish

a. Locative
mies on huonee-ssa
man.NOM is room-INES
'The man is in the room.' (Freeze 1992: 556)

b. Existential
huonee-ssa on mies
room-INES is man.NOM
'There is a man in the room.' (Freeze 1992: 556)

Note that in the (b) examples of every pairing above, the typical locative constituent order is changed. Freeze (1992) notes that the order in which the constituents alternate is dependent on a language's base word order and not determined by any underlying language-specific syntactic variation.

Instead of locative subject word order alternations for their existential sentences, Freeze (1992: 562) shows that a few languages have "a proform co-occurring with a locative constituent elsewhere in the sentence" in order to achieve an existential meaning. He refers to these types of existential morphemes as the PROFORM EXISTENTIAL, but he ultimately concludes that these construction types are still inherently locatives. Freeze (1992) provides evidence from different language families to show the typological distinctions of this type of proform existential construction:

(130) Catalan

a. Locative
el libre es damunt la taula
the book is on.top the table
'The book is on top of the table.' (Freeze 1992: 563)

b. Existential
no hi ha peix al menu d'avui
not PROF is fish on.the menu of.today
'Isn't there fish on today's menu?' (Freeze 1992: 563)

In the above pair, example (130b) shows that the proform *hi* provides existential content. Although not a minimal pairing, these two sentences still show that the base word order that is expected for Catalan is maintained in (b), which is different from how the locative subject existentials behave.

(131) Palestinian Arabic

a. Locative
ʔulaad kanu ʕa(la) l maktab
boys COP.PST.PL on the desk
'The boys were on the desk.' (Freeze 1992: 563)

b. Existential
kaan fii ʔulaad ʕa(la) l maktab
COP.PST.PL PROF boys on the desk
'There were boys on the desk.' (Freeze 1992: 563)

These two examples in (131) are a minimal pair. Palestinian Arabic uses the proform *fii* to provide an existential meaning. Freeze (1992) makes no comment on the verbal scrambling in (131b), so although there is a clear proform, some constituent movement is occurring even for non-locative subject existential type languages.

(132) Palauan

a. Locative
ng-ngar a sers-ek a bilis
3SG.COP NP garden-my NP dog
'The dog is in my garden.' (Freeze 1992: 563)

b. Existential
ng-ngar-ngii *a* *bilis* *er* *a* *sers-ek*
3SG-COP-PROF.3SG NP dog PROF NP garden-my
'There is a dog in my garden.' (Freeze 1992: 563)

Note that in all of the (b) examples in Catalan, Palestinian Arabic and in Palauan, the proform only ever occurs with an existential meaning. The Palauan example in (132b) is particularly interesting since the proform *-ngii* concatenates on the copular stem and has a secondary morphological item, *er*, later in the phrase which surrounds the existentially focused constituent, *a bilis* 'a dog.' A similar morphological pattern occurs in Malayalam where *uNTu* can directly affix with the copula *aaNu*, as shown in (133) below:

(133) Malayalam

a. *ende* *teeaaTTatil* *naaya* *aayiiruunnuu*
ende teeaaTTa-til naaya aa-y-ii-r-uunnuu
1SG.GEN garden-LOC dog COP-E-PST-E-IPFV
'The dog was in my garden.'

b. *ende* *teeaaTTatil* *oruu* *naaya* *uNTaayiiruunnuu*
ende teeaaTTa-til oruu naaya uNTu-aa-y-ii-r-uunnuu
1SG.GEN garden-LOC ART dog EXIST-COP-E-PST-E-IPFV
'There was a dog in my garden.'

Just like *ngii* in (132b), *uNTu* concatenates with the copular auxiliary *aaNu*, which hosts TAM morphology for the predicate. Freeze (1992: 564) clarifies that although these kinds of proforms are inherently locative, they are importantly not deictic. Now that we have seen how Freeze supports a match between existentials and locatives, we will look at how he accounts for the similarities between existentials and possessives.

Freeze (1992) claims that existential predicate structures are the same as *have*, or possessive, predicates. Freeze states that "the *have*-predication constitutes the third member of the locative paradigm - specifically, that it derives from the same D-structure as the predicate locative and the existential" (Freeze 1992: 576), meaning that the possessive predicate and the locative predicate share the same constituency requirements. The author uses the following examples to illustrate these structural similarities:

(134) Yucatec

a. Locative Existential
yaan huntul ciimin tiʔ yukataan
COP one horse PROF Yucatan
'There is a horse in the Yucatan.' (Freeze 1992: 577)

b. Possessive
yaan huntul ciimin tiʔ in-paapa
COP one horse PROF my-father
'My father has a/one horse.' (Freeze 1992: 577)

According to Freeze, the proform in (134a) and (134b) are the same element. The only structural difference for him is that the constituency requirements are different between the two utterances.

(135) Russian

a. Locative-Existential
na stole byla kniga
on table.LOC COP book.NOM
'There was a book on the table.' (Freeze 1992: 577)

b. Possessive
u menja byla sestra
at 1SG.GEN COP sister.NOM
'I had a sister.' (Freeze 1992: 577)

In (135), the same type of constituency differences can be observed as they were in Yucatec; locatives require a DP + PP argument relationship, while possessives require a DP + DP relationship. In Russian, there is no proform, so relating it to Yucatec does not provide a clear juxtaposition.

(136) Finnish

a. Locative-Existential
poyda-lla on kynd
table-ADE COP pencil
'There is a pencil on the table.' (Freeze 1992: 577)

b. Possessive
liisa-lla on mies
Lisa-ADE COP man
'Lisa has a husband.' (Freeze 1992: 577)

Like Russian, Finnish handles possessive and existential constructions in a similar way. The only visible difference here is the type of constituents that are in the sentences. In fact, the adessive case marking on the subjects remains on both (136a) and (136b).

Freeze's syntactic proposal that supposedly accounts for the structure of the above examples, which is discussed in more detail in Swenson (2019: 299), is displayed below in Figure 4.1, Figure 4.2, and Figure 4.3.

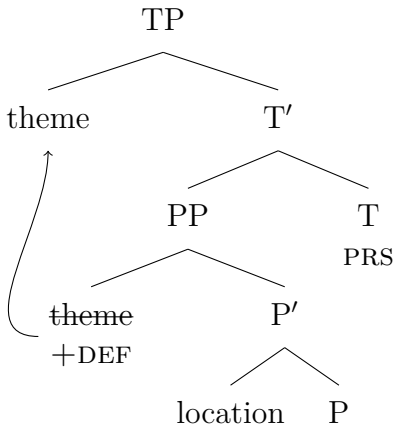

Figure 4.1: Freeze (1992) SOV Locative Structure

Figure 4.1 shows that the theme argument of a locative structure has a [+DEFINITE] attribute and moves to the subject position in SpecTP as subjects are expected to do. The location argument does not undergo any movement.

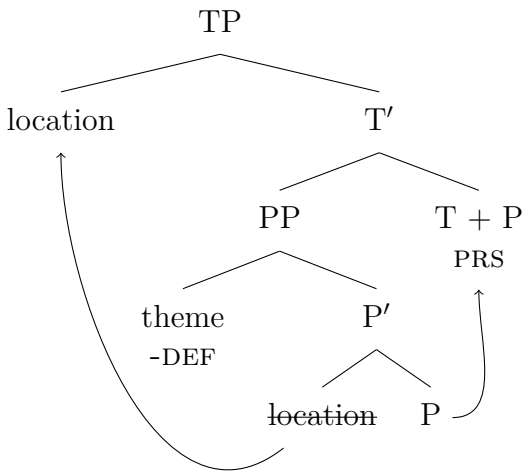

Figure 4.2: Freeze (1992) SOV Existential Structure

The above tree structure shows that instead of the theme moving up to SpecTP, it is the location. In existential structures, Freeze (1992) argues that the location of the existentially focused theme undergoes movement to the subject position. The Russian and Finnish examples in (135) and (136) display this ordering.

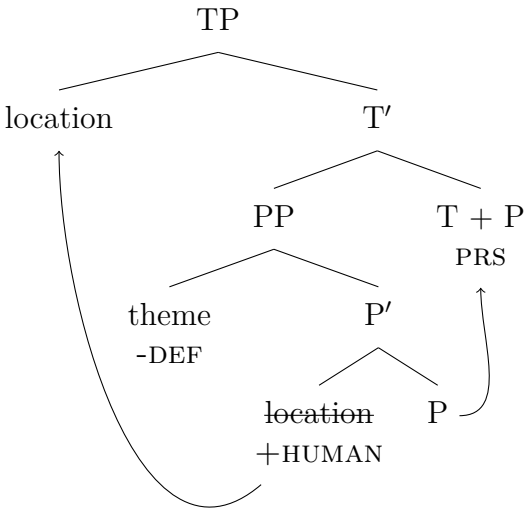

Figure 4.3: Freeze (1992) SOV Possessive Structure

Much like Figure 4.2, this possessive tree structure shows that it is still the location argument that raises to the subject position, but here, Freeze (1992) claims that there is some [+HUMAN] feature which accounts for the different readings between existential (136a) and possessive (136b).

Myler (2016) provides an account against the conclusions reached in Freeze (1992), and diverges from Freeze's unification of predicate locatives and existentials, claiming that (i) "Freeze's assimilation of transitive HAVE to his Locative Paradigm fails" (Myler 2016: 315), (ii) definiteness effects in possessive sentences do not necessarily match syntactically with existential sentences, and (iii) HAVE predicates are transitive but essentially not unaccusative as labeled in Freeze (1992) (Myler 2016: 336). According to Myler (2016: 314), the failure of the syntactic mirroring of existential and locative structures provided in Freeze (1992) is due to the fact that although Freeze claims agreement between the theme and the copula is expected, cross-linguistically there is variation that shows this is not always the case. In (137), (Myler 2016: 314) displays a counter example using Cochabamba Quechua:

(137) Existential Agreement in Cochabamba Quechua

a. *kaypi llamas tiyanku*
kay-pi llama-s tiya-n-ku
this-in llama-PL be.EXIST-3.SBJ-PL
'There are llamas here.' (Myler 2016: 314)

b. **kaypi llamas tiyan*
kay-pi llama-s tiya-n
this-in llama-PL be.EXIST-3.SBJ
Intended: 'There are llamas here.' (Myler 2016: 314)

(138) Locative Agreement in Cochabamba Quechua

a. **llamas kaypi tiyanku*
llama-s kay-pi tiya-n-ku
llama-PL this-in be.EXIST-3.SBJ-PL
Intended: 'Llamas are here.' (Myler 2016: 314)

b. *llamas kaypi tiyan*
llama-s kay-pi tiya-n
llama-PL this-in be.EXIST-3.SBJ
'Llamas are here.' (Myler 2016: 314)

Like Myler, Francez (2006) also argues that existentials are essentially not unaccusatives, which does not hold for Freeze's account. The author explains that "while English unaccusatives can realize their single argument as a subject (without an expletive [as in example (139e)]), existential *be* often cannot realize its theme as a subject" (as in (139b) or (139c)) (Francez 2006: 8). This issue is displayed in the example below:

(139) Theme-as-Subject Issues (Francez 2006: 8)

a. There *are* three ways out of here.

b. *Three ways *are* out of here.

c. *Three ways out of here *are*.

d. There *arrived* four riders.

e. Four riders *arrived*.

Francez (2006: 8) claims that (139a) "does not have a counterpart in which *be* is the main verb and the pivot is its subject," which is the reason (139b) and (139c) are ungrammatical.

According to Francez (2006: 10), pivots of existential constructions are "predicates of a contextually determined domain of quantification." In locative copular constructions, the locative is the predicate and the theme is the argument; however, in the case of existentials, the pivot is the predicate and the "contexually given domain of quantification" is the argument. This means that there is a semantic difference between a pivot without a contextually derermined domain (as in (140a)) and one that has a contextually determined domain (as in (140b)):

(140) Existential Sentence with and without Contextual Coda

a. There is a dog.

b. There is a dog in the yard.

For (140b), the contextually determined domain of quantification scopes over the domain of DOG and finds a sub-domain of DOG that is IN THE YARD. Because this sub-domain is still a set of all *dog* entities, it can still be true for (140b) that there is more than one dog in the yard. So, for existential clauses, we have a semantic type shift of the pivot *a dog* where in non-existential constructions, it is an $\langle e, t\rangle$ type, but in existential clauses, it must be an

$\langle\langle e, t\rangle, t\rangle$ type. The pivot, *a dog*, is a predicate and needs to take an explicit argument which is a full sentence. Francez (2006: 72) describes this semantic phenomenon as CONTEXTUAL CLOSURE:

(141) CONTEXTUAL CLOSURE
Contextual closure is β-reduction where the value of P is contextually determined. The contextual domain d_u is the set of entities related to u by R, where u is some entity. The value of d_u can be, for example, the domain of entities E of the model [...] Since all entities are members of E, the set of things that stand in relation to any entity u will be the domain of E (assuming all entities can stand in trivial relation to themselves) (Francez 2006: 72).

This means that, even when there is no overt contextual domain, as in (140a), the entity *dog* is still in a domain with itself. Syntactically, this fits nicely with the conclusions from Mikkelsen (2005) about copulas using the lower PredP where DP_{pred} is its own small clause construction.

In the following section, data from Malayalam will be used with these existential/possessive theoretical frameworks from Freeze (1992); Francez (2006); Myler (2016) in order to determine how *uNTu* and the pivots in Malayalam existential constructions interact in existential and possessive contexts with the ultimate goal set as finding a way to unify the use of *uNTu* in both cases.

4.1.1 Existential Constructions in Malayalam

In Malayalam, existential constructions are built using *uNTu*. Asher and Kumari (1997: 104) claim that *uNTu* is a copula that is used to denote existence, shown in their example below:

(142) *kaTTil* *paampukaL* *uNTu*
forest-LOC snake-PL be-PRS
'There are snakes in the forest' (Asher and Kumari 1997: 104)

As argued in Asher and Kumari (1997) and most other Malayalam literature in the two-copula-camp, there is a syntactic overlap in distribution between *aaNu* and *uNTu* where both morphemes seem to occupy the verbal position. Asher and Kumari (1997: 104) claim that the structural similarity in (143) may occur because of the semantic "overlap of the notions

of location and existence." There is no discussion of the change in word order in (143b), but if the locative subject existential analysis from Freeze (1992) about word order alternations holds true, it could explain this phenomenon. With the basic predicational copula in (143a), the subject *veedana* 'pain' is in the initial position, and *kaalil* 'leg-LOC' is in the complement position. But, in (143b), the word order is reversed. However, it should be noted that (like in (144)) swapping *veedana* and *kaalil* in both cases is acceptable.

(143) Locative Overlap with *aaNu* and *uNTu*

a. *veedana kaalil aaNu*
pain leg-LOC be-PRS
'The pain is in the leg.' (Asher and Kumari 1997: 104)

b. *kaalil veedana uNTu*
leg-LOC pain be-PRS
'There is pain in the leg.' (Asher and Kumari 1997: 104)

This supposed overlapping distribution and structural similarity between the two types of phrases is shown in non-locative sentences as well (as in (144)). Note the lack of word order alternation between the subject and the complement (as seen in (143)) in the examples below as would have been expected in the locative subject existential account from Freeze (1992):

(144) Possessive Overlap with *aaNu* and *uNTu*

a. *avannu pani aaNu*
he-DAT fever be-PRS
'He is suffering from fever.' (Asher and Kumari 1997: 104)

b. *avannu pani uNTu*
he-DAT fever be-PRS
'He has fever.' (Asher and Kumari 1997: 104)

In this pair, it seems like *aaNu* and *uNTu* occupy the same verbal slot in what would otherwise be equivalent sentences. So, the main question that arises from this juxtaposition of locative and possessive constructions is: what is the motivation for the presence of *uNTu* - location, possession, existential - or something else? According to Asher and Kumari (1997); Mohanan and Mohanan (1999), it is the existential nature of *uNTu* sentences that causes the overlap.

Mohanan and Mohanan (1999) also separately explore possession as the motivation for the use of *uNTu*.

Mohanan and Mohanan (1999) provide a brief description of the issues in dealing with the differences between clauses with *aaNu* and clauses with *uNTu*. They assert that Malayalam speakers have a "clear, intuitively perceived meaning difference between the [aforementioned] verbs" (Mohanan and Mohanan 1999: 1). These meaning differences are two fold: (i) *uNTu* has some possessive meaning where *aaNu* does not, and (ii) *uNTu* makes some connection to existential interpretation while *aaNu* does not. The authors also mention that "in a large number of contexts, these verbs appear to be interchangeable [which has] thwarted the efforts of a clear characterization of the meanings of the two verbs" (Mohanan and Mohanan 1999: 1).

So far, I do not disagree on any particular point the authors make about the puzzle. However, I will show that interchangeability, or overlap, is not the true issue at hand, since - as far as this research is concerned - *aaNu* needs to be present covertly in sentences where there is a bare *uNTu* to host tense morphology. For my analysis, it is important to note that these two lexical items are not occupying the same slot.

Mohanan and Mohanan (1999) argue that when *aaNu* is interchangeable with *uNTu*, *aaNu*'s function is that of a cleft marker, and that "the existential meaning [is] expressed independently by the case markers on the nouns" (Mohanan and Mohanan 1999: 1). The authors aim to prove this argument by highlighting cases of distribution where *aaNu* and *uNTu* seem to overlap (i.e. situations of (i) possession, (ii) specificity effects, (iii) scrambling, and (iv) presuppositions).

Mohanan and Mohanan (1999) use specificity to show that unacceptable sentences with *aaNu* are caused by its interaction with non-specific DPs. In the following examples, the presence of *aaNu* in (**??**a-c) is contrasted with that of *uNTu* in (145a-c):

(145) Specificity Effects with *uNTu*

a. *tooTTattil puucca uNTu*
garden-L cat-N BE-PR
'There is a cat in the garden.' (Mohanan and Mohanan 1999: 4)

b. *tooTTattil aaroo uNTu*
garden-L someone-N BE-PR
'There is someone in the garden.' (Mohanan and Mohanan 1999: 4)

c. *ewiTeyoo puucca uNTu*
somewhere cat-N BE-PR
'There is a cat somewhere.' (Mohanan and Mohanan 1999: 4)

In all of the above examples, the pivot is an indefinite or non-specific DP. By contrast, the examples below use definite DP pivots. Malayalam does not obligatorily mark definiteness on nominals, but the translations provided by Mohanan and Mohanan (1999), even though they are without overtly-given contexts, give the reader a window into the implied definite/indefinite contexts of the examples.

(146) Specificity Effects with *aaNu*

a. *tooTTattil puucca aaNu*
garden-L cat-N BE-PR
'It is a cat in the garden.' (Mohanan and Mohanan 1999: 5)

b. * *tooTTattil aaroo aaNu*
garden-L someone-N BE-PR
Intended as equivalent of (145b) (Mohanan and Mohanan 1999: 6)

c. * *ewiTeyoo puucca aaNu*
somewhere catN BE-PR
Intended as equivalent of (145c) (Mohanan and Mohanan 1999: 6)

As shown in (145b), the non-specific *aaroo* 'someone' is allowed as the pivot in *uNTu* constructions, but with *aaNu*, the same sentence is unacceptable. Without *uNTu*, there can be no existential meaning. Even English speakers cannot say, for example, *It is someone in the garden* without a special context, and instead speakers must use a *there*-clause. Similarly, *It is somewhere that a cat is* seems equally unacceptable without contextual specificity. So, the judgements in (146b) and (146c) are, at least contextually, unsurprising.

My speakers could not provide the cleft translation in (146a) - no matter what context I attempted to use with it. They simply translated it as unclefted. Any time I tried to specify 'a cat' to 'this cat', the word order changed and *puucca* 'cat' was preferred in the initial position, as if it was simply a specificational clause and not a cleft construction, as in (147).

(147) a. *tooTTattil puucca aaNu*
tooTTa-ttil puucca aaNu-∅
garden-LOC cat COP-NPST
'A cat is in the garden.'

b. *ii puucca tooTTattil aaNu*
ii puucca tooTTa-ttil aaNu-∅
DEM cat garden-LOC COP-NPST
'This cat is in the garden.'

Although some of my speakers say there is a "free" word order in Malayalam, the language definitely tends toward SOV. Mohanan and Mohanan (1999: 5) use the following examples to show that "word order differences in copula constructions are accompanied by differences in meaning." Mohanan and Mohanan claim that (148a) is a "simple statement about the location of the coffee" while (148b) excludes any alternative locations. For my speakers, (148a) was preferred when it was the answer to the question 'Where is the coffee?' (as in, I am actively looking for it) but not unacceptable when given without context - just dispreferred in those instances. Mohanan and Mohanan submit that (149a) is a "simple statement about the existence of coffee in the fridge," and (149b) is identifying the fridge's contents.

(148) a. *kaappi friDjil uNTu*
coffee-N fridge-L BE-PR
'There is coffee, in the fridge.' (Mohanan and Mohanan 1999: 5)

b. *kaappi friDjil aaNu*
coffee-N fridge-L BE-PR
'The coffee is in the fridge (and not somewhere else).'
(Mohanan and Mohanan 1999: 5)

(149) a. *friDjil kaappi uNTu*
fridge-L coffee-N BE-PR
'There is coffee in the fridge.' (Mohanan and Mohanan 1999: 5)

b. *friDjil kaappi aaNu*
fridge-L coffee-N BE-PR
'Coffee is what is in the fridge (and not something else).'
(Mohanan and Mohanan 1999: 6)

For Mohanan and Mohanan (1999), there is a level of presupposition motivating the word order distinction in the examples above. The authors base their definition on that of Strawson (1952), where "a statement S presupposes a statement S' if and only if the truth of S' is a precondition for the truth or falsity of S" (via Mohanan and Mohanan 1999: 6). So, for (149b), the authors point out that there is an essential presupposition of items existing in the fridge, and the statement in (149b) is a report based on that truth. They argue that (149b) would be unacceptable in a context where it is known that the fridge is empty. Thus, based on these examples and others, Mohanan and Mohanan (1999: 18) conclude that the difference between *aaNu* and *uNTu* is a semantic one, and they provide the following lexical representations and definitions:

(150) a. *aaNu* : V[x BE y]
aaNu has a dual function. (i) It is a plain equative copula with the meaning of [x BE y], occurring in the environment (A) [NP-NOM COP NP-NOM] where x is an element/subset of y]; (ii) It is also a cleft marker occurring in environments (B) [NP-DAT COP NP-NOM] and (C) [NP-NOM COP NP-LOC], yielding a reduced cleft of existential clauses whose full version contains the existential verb *uNTu*. In other words, when the copula in (B) and (C) is *aaNu*, it is a cleft of the corresponding *uNTu* clause.

b. *uNTu* : V[x EXIST (LOC y)]
uNTu is an existential copula with the meaning of [x EXIST (LOC y)], where y is an abstract or concrete entity in the semantic fields of experience, location, and possession. It occurs in (B) and (C) listed above.

These definitions from Mohanan and Mohanan (1999) are not necessarily incompatible with my initial hypothesis in this dissertation, but again - the overlap cannot exist. There is an issue when, with past temporality, both *aaNu* and *uNTu* are needed for interpretation. It would seem that *uNTu* cannot stand alone in past temporal environments, in spite of the

assertion from Mohanan and Mohanan (1999) (and other literature) that it is a copula. By broad definition, the copula in any sentence exists to host inflectional and agreement morphology for a clause, and *uNTu* cannot fill that role.

For instance, in (151a), *uNTu* and *aaNu* (which is hosting TAM features in the clause) provide existential meaning and tense information respectively. For comparison, in (151b) if only the copula *aaNu* is used, the meaning changes to one of change-of-state - even if the covert presence of an underlying *uLLaTu* is assumed - and the same configuration becomes unacceptable. One speaker noted that (b) seemed like the coffee appeared there by magic, and they rejected the utterance, deeming it unacceptable. But, this construction is saved when aspectual morphology is included as in (151c).

(151) Aspectual Requirements on Past Temporal Clauses

a. *fridge-il* *kaappi* *uNTaayiiruunnuu*
fridge-il kaappi uNTu-aa-y-ii-r-uunnuu
fridge-LOC coffee EXIST-AUX-E-PST-E-IPFV
'There was coffee in the fridge.'
NB: There are no implications about whether the coffee is still in the fridge at utterance time.

b.# *fridge-il* *kaappi* *aayii*
fridge-il kaappi aa-y-ii
fridge-LOC coffee COP-E-PST
Intended: 'Coffee was in the fridge.'
Literally: #Coffee became in the fridge.

c. *fridge-il* *kaappi* *aayiiruunnuu*
fridge-il kaappi aa-y-ii-r-uunnuu
fridge-LOC coffee COP-E-PST-E-IPFV
'Coffee was in the fridge.'

The interpretations of (151a) and of (151c) are clearly different in that (151a) is existential and (151c) is a locative predicate.

This dissertation does not disagree with Mohanan and Mohanan (1999) about the ability of *aaNu* to act as a cleft marker, nor is it very limiting for *uLLaTu* to be present covertly in cleft environments. The main issue this dissertation has when reconciling with Mohanan and Mohanan's findings is that *uNTu* cannot stand on its own in past temporal environments,

and thus cannot fulfill its role as a copula which is meant to provide a syntactic landing site for inflectional TAM morphology.

The following argument from Mohanan and Mohanan (1999) is particularly important to my own analysis, because it discusses the internal morphology of copular stems while coming to a conclusion about a similar base ordering of the verbal morphology that I have proposed in §2.1. In a brief footnote, Mohanan and Mohanan (1999) describe *aaNu* and *uNTu* as being derivations from two roots: *aa* and *uL* respectively. The authors claim that "these verbs belong to a closed class of 'defective verbs', because they do not participate in the inflectional paradigms of verbs" (Mohanan and Mohanan 1999: 2). The authors describe the past tense form of copula *aayiiruunnuu* as such:

(152) *aayiiruunnuu*
aa *-i* *-ir* *-ikk* *-tuu*
COP -PST -IR -VS -PST
'...was/were' (Mohanan and Mohanan 1999: 2)

The authors do not describe the affixes *-ir-ikk*, labelling the construction as -IR-VS, but as discussed in Asher and Kumari (1997) in the subsection above, it may be the historical form of *ir-ikk-* 'sit'-VOICE that they claim has grammaticalized to a light verb. Mohanan and Mohanan (1999) suggest that *-uunnuu* itself is derived from the past tense *-tuu*. This dissertation is in agreement with Swenson (2017) which claims that *irikk-* is, synchronically, an aspect marker[5]. The main caveat to take away from (152) is that the copular stem *aa-* is followed immediately by the past tense morpheme and then the additional verbal morphology follows after that. If the lexical item *ir-ikk* is an additional verb stem, then the second past tense morpheme *-tuu* would make sense if it was in a verbal series. For more information about my conclusions on verbal morphological ordering in Malayalam, please see §6.4.

Swenson (2017, 2019) attempts to unify the use of *uNTu* in locative, possessive, and existential constructions by modifying the framework given by Freeze (1992), and she provides a pragmatic account which argues that *uNTu* is selected in contexts that include an

[5]See §2.4.3 for more on *-irikkuuka*.

IMMEDIACY REQUIREMENT[6], or "how relevant the situation being discussed is to the present moment" (Swenson 2017: 117). The author explains that *uNTu* appears in instances of immediate location, medical condition, psychological predication, and possessive constructions. First, we will look at the examples Swenson (2017: 119) provides for the distribution of each verb.

In (153), Swenson (2017) provides typical existential constructions in Malayalam:

(153) Existential

a. *adukkala-til pambu uNTu/*aaNu*
kitchen-LOC snake be.PRS
'There is a snake in the kitchen.' (Swenson 2017: 119)

b. *deivam uNTu/#aaNu*
God be.PRS
'God exists.' (Swenson 2017: 119)

As shown above, the existential paradigm matches that which we have already seen in the language; *uNTu* is needed for existential interpretation. In (154), Swenson shows that *uNTu* is also required for possessive interpretations:

(154) Possessive

a. *enikku chechi uNTu/*aaNu*
1SG.DAT older.sister be.PRS
'I have an older sister.' (Swenson 2017: 119)

b. *enikku car uNTu/*aaNu*
1SG.DAT car be.PRS
'I have a car.' (Swenson 2017: 119)

Above, we can see that *aaNu* is unable to provide any possessive readings for these sentences. However, *aaNu* and *uNTu* are both present in locative constructions, like (155) below:

(155) Locative

a. *nyaan delhi-yil uNTu/#aaNu*
1SG.NOM Delhi-LOC be.PRS
'I am in Delhi.' (Swenson 2017: 122)

[6]Information on the immediacy requirement is first provided by Patel-Grosz (2016), but the data is accessed and referenced via Swenson (2017) since I could not secure my own access to the original publication.

b. *delhi india-yil aaNu/#uNTu*
Delhi India-LOC be.PRS
'Delhi is in India.' (Swenson 2017: 122)

In (155a), Swenson (2017: 121) shows that in locative contexts, both *uNTu* and *aaNu* are acceptable. However, in locative contexts where the location of an entity is immovable or unchanging, *aaNu* is preferred in order to show the normal location of that entity, as in (155b). Since Delhi does not travel away from India - it is stationary, immovable, etc - *uNTu* is dispreferred as it would convey some sort of impermanence reading.

Swenson (2017: 125) further examines the differences in the locative contexts between *aaNu* and *uNTu* by showing that, depending on what question is asked, the answer will yield either one morpheme or the other:

(156) Interrogative Result Variability

a. Question: Where is the bathroom?

bathroom avide aaNu
bathroom there be.PRS
'The bathroom is there.' (Swenson 2017: 125)

b. Question: Do you have a bathroom?

bathroom avide uNTu
bathroom there be.PRS
'(We) have a bathroom there.' (Swenson 2017: 125)

The question of whether or not *aaNu* and *uNTu* are in some sort of syntactic overlap remains. For Swenson (2017, 2019), *aaNu* and *uNTu* are syntactically equivalent but essentially pragmatically conditioned. Instead of trying to explain the occurrence of *uNTu* over *aaNu* in existential environments, I hypothesize that *aaNu* is always there underlyingly and that *uNTu* only appears when it needs to provide semantic - namely existential - information for the clause - perhaps like a proform. It is largely semantically bleached, and now *uNTu* is only deployed for sentences that need to have some existential focus.

My hypothesis for the distribution of *uNTu* is that it is a part of the pivot of an existential construction:

(157) Proposed Malayalam Existential Components

meesha-ppuRattu	*cila pustakangngaL*	*uNTu*	*(aaNu)*
table-on	some book-PL	EXIST	COP
CODA	PIVOT	PIVOT AUXILIARY	COPULA

'There are some books on the table.'

As shown above, I propose that *uNTu* is included in the pivot phrase, and I will refer to it from here as an EXISTENTIAL PIVOT AUXILIARY[7]. Notably, it is not an auxiliary in the same way that *aaNu* can be, but the term AUXILIARY is used here in a category-neutral sense; the pivot auxiliary's only job is to signal that there is some underlying change to the syntacto-semantic information structure or interface which motivates the presence of *uNTu* in existential environments. I provide a breakdown of my hypothesized requirements of *uNTu* below:

(158) Requirements of *uNTu*

a. *aaNu* is present overtly or covertly in all *uNTu* constructions.

b. All *uNTu* constructions are existential clauses.

c. When there is an overt coda, it will either be assigned dative case by a PP head for possessive clauses, or it will be a locative PP construction for clauses with existential meaning.

The conclusion that, in copular constructions, the nominal in the coda is assigned dative case by the head of the PP containing it (adopted from Swenson 2019) is essential to my hypothesis. In the case of dative-marked codas, I am claiming that the dative is a locative post-position which is specific to the category of possessive interpretation. While Swenson claims both *aaNu* and *uNTu* are copulas, I argue only *aaNu* is a copula. Swenson also claims that there is some immediacy requirement that accounts for *aaNu*/*uNTu* alternations, I claim that it is an existential focus force signaled by *uNTu* that is applied to the pivot of its clause. My hypothesis needs to be tested in multiple different copular environments, and by using

[7]While I argue that it is no longer productively a verb, it is possible that *uNTu* has some diachronic link to the predicate. Is it entering into a small clause relationship with the pivot DP? Is it the other part of the *uLLatu* cleft that is proposed by Mohanan and Mohanan (1999)? At this point, this is outside of the scope of this dissertation, but is open for future study. For my main point, the lexical category of *uNTu* is inconsequential - so long as it still needs *aaNu* overtly or covertly to produce a grammatical sentence.

the specificational and predicational restrictions outlined in the previous chapter, we can take another look at the basics of my proposal. The sentences below all have a topicalized subject. As a reminder, all equative sentences of type $\langle e, e \rangle$ are specificational:

(159) Clause Types with *aaNu* and *uNTu*

a. *tita doctor aaNu*
tita doctor aaNu-∅
Tita doctor COP-NPST
'Tita is a doctor.'

b. **titakku doctor aaNu*
tita-kku doctor aaNu-∅
Tita-DAT doctor COP-NPST
Intended: 'Tita is a doctor.'

c. **tita doctor uNTu (aaNu)*
tita doctor uNTu aaNu-∅
Tita doctor EXIST COP-NPST
Intended: 'Tita has a doctor.'

d. *titakku doctor uNTu (aaNu)*
tita-kku doctor uNTu aaNu-∅
Tita-DAT doctor EXIST COP-NPST
'Tita has a doctor.'

In (159a), *Tita* is a topicalized DP subject and *doctor* is the focused DP complement. The clause is specificational. As shown in (159b), it cannot have a dative subject. Example (159c) shows that, when *uNTu* is included in the clause, the meaning cannot be equative, but in (159d), that construction can have a possessive meaning and there can be a dative subject. But, my hypothesis clearly states that all *uNTu* clauses are existential, so we must find a way to unify the existential and possessive under a single analysis. We know that the word order for clauses with a dative subject, like in (159d), is restricted because of the ungrammaticality of (160) below. Also, as shown in Mikkelsen (2005), copular clauses have a TOP feature on SpecTP which allows for topic movement to its position:

(160) Dative Subject Requires Topicalization

* *doctor titakku uNTu*
doctor tita-kku uNTu
doctor Tita-DAT EXIST
Intended: 'Tita has a doctor.'

For predicational clauses, the reading that results from the inclusion of *uNTu* is existential, as in (161b):

(161) Predicational Clauses with *uNTu*

a. *ii raNTu viiTukaLuum skuuLinu samiipam aaNu*
ii raNTu viiTukaLuum skuuLinu samiipam aaNu-∅
DEM two house-PL-QUANT school-DAT near COP-NPST
'These two houses are near the school.'

b. *skuuLinu samiipam ii raNTu viiTukaL uNTu (aaNu)*
skuuL-inu samiipam ii raNTu viiTu-kaL uNTu aaNu-∅
school-DAT near DEM two house-PL EXIST COP-NPST
'There are these two houses near the school.'

Only the existential meaning is possible in (161b), and there cannot be an existential meaning in (161a). However, there is still the problem, also discussed in Swenson (2017, 2019), about locative and property concept constructions where *aaNu* and *uNTu* seem to occupy the same sentences and exhibit the same meanings - although having different pragmatic interpretations, according to Swenson. Repeated from (155) above, some examples of these types of clauses are below:

(162) Locatives

a. *veedana kaalil aaNu*
pain leg-LOC be-PRS
'The pain is in the leg.' (Asher and Kumari 1997: 104)

b. *kaalil veedana uNTu*
leg-LOC pain be-PRS
'There is pain in the leg.' (Asher and Kumari 1997: 104)

(163) Property Concepts

a. *unni-kku sneeham aaNu*
Unni-DAT love be.PRS
'Unni loves someone.' (Swenson 2017: 128)

b. *unni-kku sneeham uNTu*
Unni-DAT love be.PRS
'Unni loves someone.' (Swenson 2017: 128)

A full discussion of these types of clauses is available in Chapter 5 as this section is mainly concerned with existential clauses, but the locative and property concept clauses exhibited above create questions as to the contribution of *uNTu* which are not transparently existential in nature.

4.1.2 Existential Constructions in Other Languages

In the following subsections, I will use examples and analyses provided by other authors, to explore what - if any - comparisons can be made with the existential construction that is seen in Malayalam with *aaNu* and *uNTu* to other languages with similar features. Modern Hebrew *yeS* constructions are the most similar, with the existential *yeS* being unable to normally inflect and also being present on existential and possessive constructions alike. Russian existential copular constructions use **есть** *yest'* 'be.' Russian requires special case marking, similar to how *uNTu* seems to require dative case, in order to handle existential and possessive constructions. Finally, the *ngar-ngii* construction in Palauan existentials is akin to *uNTu* as both languages concatenate their existential markers onto a waiting copula verb.

4.1.2.1 Modern Hebrew

In Modern Hebrew[8] existential constructions are marked with an existential morpheme *yeS*. So what are the properties of *yeS*, and does it follow a similar pattern to Malayalam *uNTu*?

[8]See Friedman (2003); Beliavsky (2006); Francez (2006); Melnik (2018); Rubinstein (2019) for more information on Hebrew existential constructions.

According to Rubinstein (2019), Modern Hebrew uses *yeS* to communicate existential, possessive, and deontic modality:

(164) Hebrew *yeS*

a. *yeS* *bakbuk* *yayin*
yeS bakbuk yayin
EXIST bottle wine
'There is a bottle of wine.' (Rubinstein 2019: 4)

b. *yeS* *li* *bakbuk* *yayin*
yeS l-i bakbuk yayin
EXIST to-me bottle wine
'I have a bottle of wine.' (Rubinstein 2019: 4)

c. *yeS* *liSmor* *oto* *beqerur*
yeS liSmor ot-o be-qerur
EXIST to.keep ACC-it in-refrigeration
'It must be kept refrigerated.' (Rubinstein 2019: 4)

Rubinstein (2019: 4) notes that the dative marking *li* 'to me' in (164b) is required for grammaticality.

Friedman (2003: 14) argues that, like the *uNTu/illa* alternation in Malayalam, Hebrew *yeS* alternates with a morphologically separate negative existential particle - *eyn*. This is shown in the examples below:

(165) Hebrew Positive and Negative Existentials

a. *yeS* *kelev* *bagan*
yeS kelev ba-gan
EXIST dog in.the-yard
'There is a dog in the yard.' (Friedman 2003: 13)

b. *eyn* *kelev* *bagan*
eyn kelev ba-gan
NEG dog in.the-yard
'There is not a dog in the yard.' (Friedman 2003: 13)

According to Friedman (2003: 13), neither *yeS* nor *eyn* "can be inflected to show past or future tense." The author displays these restrictions in the following examples:

(166) Hebrew Existentials and Temporality

a. *haya* *kelev* *bagan*
haya kelev ba-gan
be-PST.3SG.M dog in.DEF-yard
'There was a dog in the yard.' (Friedman 2003: 14)

b. **yeS* *baavar* *kelev* *bagan*
yeS ba-avar kelev ba-gan
EXIST in.DEF-PST dog in.DEF-yard
Intended: 'There was a dog in the yard.'

The existential marker *yeS* also alternates with accusative-marked pivots. According to Francez (2006: 13), pronominal arguments require accusative marking in Hebrew (as displayed in (167a)), even though "prescriptively, accusative marking in existentials [...] used to be considered ungrammatical."

(167) Hebrew Pronominal Accusative Marking

a. *haya* *et* *ze* *Sam*
haya et ze Sam
be.PST.3SG ACC that there
'They had that there./It existed there.' (Francez 2006: 13)

b. **haya* *ze* *Sam*
haya ze Sam
be.PST.3SG that there
Intended: 'They had that there./It existed there.' (Francez 2006: 13)

(168) Hebrew Existential Constructions

a. *yeS* *oto* *basinematek*
yeS oto ba-sinematek
YES ACC.3SG.M in.DEF-cinemateque
'It's showing at the Cinemateque.'
Lit: 'There is him in the Cinemateque.' (Francez 2006: 13)

b. **yeS* *hu* *basinematek*
yeS hu ba-sinematek
YES NOM.3SG.M in.DEF-cinemateque
Intended: 'It's showing at the Cinemateque.'
Lit: 'There is him in the Cinemateque.' (Francez 2006: 13)

The examples above show that, in these types of constructions, the accusative case marking on object pronominals in *yeS* constructions is obligatory, just like the dative is obligatory for

uNTu possessive constructions. In fact, if there is an animate object pronoun in Malayalam, the accusative is obligatory:

(169) Malayalam Pronominal Accusative Marking

a. *enikku* *avaLe* *uNTu*
enikku avaL-e uNTu aaNu-∅
1SG.DAT 3SG.F-ACC EXIST COP-NPST
'I have her.'

b. * *enikku* *avaL* *uNTu*
enikku avaL uNTu aaNu-∅
1SG.DAT 3SG.F EXIST COP-NPST
Intended: 'I have her.'

Interestingly, the accusative also appears in locative object marking where, possibly, the accusative affects the full PP phrase:

(170) Accusative-Marked PP Phrase

a. *sindi* *playil* *aaNu*
sindi play-il aaNu-∅
Cindi play-LOC COP-NPST
'Cindi is in the play.'

b. * *sindi* *playile* *aaNu*
sindi play-il-e aaNu-∅
Cindi play-LOC-ACC COP-NPST
Intended: 'Cindi is in the play.'

c. *sindi* *playile* *uNTu*
sindi play-il-e uNTu aaNu-∅
Cindi play-LOC-ACC EXIST COP-NPST
'Cindi is in the play.'

d. * *sindi* *playil* *uNTu*
sindi play-il uNTu aaNu-∅
Cindi play-LOC EXIST COP-NPST
Intended: 'Cindi is in the play.'

Out of a great many data that I collected, this example is the only one which displays this odd case requirement. It should be treated as an outlier, but because of the strange inclusion of the accusative, I wanted to juxtapose it alongside these Hebrew examples.

But, Malayalam and Hebrew are not completely similar in behavior. In (171a), Friedman (2003: 23) explains that "the NP is indefinite but has a specific/unique referent" and in (171b), "the NP is definite grammatically but has a generic referent."

(171) Non-Accusative NPs in Hebrew Existential Constructions

a. *yeS* *sefer* *basifriya*
yeS sefer ba-sifriya
EXIST book in.DEF-library
'There is a book in the library.' (Friedman 2003: 23)

b. *yeS* *et* *hasefer* *haze* *basifriya*
yeS et ha-sefer ha-ze ba-sifriya
EXIST ACC DEF-book DEF-this in.DEF-library
'There is (a copy of) this book in the library.' (Friedman 2003: 23)

Friedman (2003: 24) claims that "the indefinite NP in an existential sentence must have a specific/unique referent, whereas the definite NP of the sentence cannot be interpreted as having a specific/unique referent," and since (171b) "contains a definite NP, this [...] cannot be specific/unique."

In Malayalam, though, there is not the same restriction as *uNTu* can co-occur with definite or indefinite DPs:

(172) Malayalam Definite/Indefinite Existential Pivots

a. *oruu* *naaya* *viiTil* *uNTu*
oruu naaya viiTil uNTu aaNu-∅
ART dog house-LOC EXIST COP-NPST
'There is a dog in the house.'

b. *ii* *naaya* *viiTil* *uNTu*
ii naaya viiT-il uNTu aaNu-∅
DEM dog house-LOC EXIST COP-NPST
'This dog is in the house.'

Example (172) shows that Malayalam can express existential meaning with definite or specific NP pivots. Thus, while Malayalam *uNTu* and Modern Hebrew *yeS* share a lot of the same patterns, there is some distinct variation between the two.

4.1.2.2 Russian

The case of the Russian copula *yest'* есть[9] (which is *byt'* быть in the infinitive) is well-studied in linguistics (Chvany 1975; Jung 2008; Paducheva 2008; Arylova 2010). Since Russian is *have*-less (in that it does not use a specific verb for possession[10].), it instead uses its copula - along with case marking and word order - to express possession and existential interpretations. Note that in present temporal equative constructions (such as (173a)), which do not involve possession semantics, there is no copula required.

(173) Russian Copular Constructions

a. *Валентина космонавт*
Valentina kosmonavt
Valentina cosmonaut
'Valentina is a cosmonaut.'

b. *мой отец был добрым*
moy otets byl dobrym
1SG.GEN father COP.PST kind
'My father was kind.'

c. *у Машы есть брат*
u Mashy yest' brat
GEN Masha COP brother
'Masha has a brother.' (Paducheva 2008: 150)

d. *здесь есть волки*
zdes' yest' volki
here COP wolves.NOM
'There are wolves here.' (Paducheva 2008: 148)

Although not a direct match, there are some similarities in the Russian paradigm that I would like to explore in juxtaposition with Malayalam. First, the copula drop mechanism (which is much more active in Russian, shown in (173a)) is present in both languages. Both languages also lack a possession verb, and are thus considered *have*-less. But, when possession does occur, there is overt case marking on the possessor, or agent, in the clause (as in (173c)).

[9]Transliterations of Russian examples are accomplished with the GOST 7.79 2000 standard system. The Cyrillic is provided for convenience in cross-linguistic comparisons.
[10]The term *have*-less is borrowed from Jung (2008).

There are some major differences when it comes to what is allowable in locative constructions; Malayalam displays data that is seemingly in overlapping distribution[11], and the language allows its copula *aaNu* to be overt in non-present temporal environments both in existential and locative sentences (as shown in (175)), while Russian prevents an overt copula in locative constructions (as in (174b) below):

(174) Russian

a. *телефон есть на кухне*
telefon yest' na kukhne
telephone COP LOC kitchen
'There is a telephone in the kitchen.' (Paducheva 2008: 148)

b. *твой мобильник (*есть) на кухне*
tvoy mobil'nik yest' na kukhne
2SG.GEN cellphone COP LOC kitchen
'Your cellphone is in the kitchen.' (Paducheva 2008: 148)

(175) Malayalam

a. *aTukkaLayil oru telephone uNTu*
aTukkaLay-il oru telephone uNTu aaNu-∅
kitchen-LOC DET telephone EXIST COP-NPST
'There is a telephone in the kitchen.'

b. *aTukkaLayil oru telephone uNTaayiiruunnuu*
aTukkaLay-il oru telephone uNTu-aa-y-ii-r-uunnuu
kitchen-LOC DET telephone EXIST-COP-E-PST-E-IPFV
'There was a telephone in the kitchen.'

c. *ninte cellphone aTukkaLayil aaNu*
nin-te cellphone aTukkaLay-il aaNu-∅
2SG-GEN cellphone kitchen-LOC COP-NPST
'Your cellphone is in the kitchen.'

According to Paducheva (2008: 150), "possession has no localization in space" and Russian uses a possessor to control the expression. Thus, the author concludes that - at least for Russian - "possessive sentences constitute a subclass of existential sentences." This analysis benefits my hypothesis for *uNTu* in a sense, because *uNTu* also occupies both an existential

[11]See example (214) in section §4.1.1

and possessive semantic space. Freeze (1992) notes that ambiguity can be avoided between locative and possessive constructions in Russian through the use of word order (as in (176)):

(176) Word Order Alternation in Russian Existentials

a. *книга была на столе*
kniga byla na stole
book COP.PST LOC table
'A book was on the table.' (Freeze 1992: 559)

b. *на столе была книга*
na stole byla kniga
LOC table COP.PST book
'There was a book on the table.' (Freeze 1992: 559)

Some of the same word order alternations can be seen in Malayalam (see example (178)). Harking back to example (149) from Mohanan and Mohanan (1999), copied below for convenience, we see that both Russian and Malayalam can show an EXHAUSTIVE LIST interpretation where all of the referent elements are included but no others can be. Compare (177) and (178) below:

(177) Russian

a. Existential meaning where there could be other furnishings in the room that were not mentioned:
в номере есть письменный стол и кровать
v nomere yest' pis'mennyy stol i krovat'
LOC room COP writing desk CONJ bed
'There are a table and a bed in the room.' (Paducheva 2008: 152)

b. Locative (exhaustive list) meaning where, crucially, these are the only furnishings:
в номере письменный стол и кровать
v nomere pis'mennyy stol i krovat'
LOC room writing desk CONJ bed
'There are a table and a bed in the room.' (Paducheva 2008: 152)

(178) Malayalam

a. Existential meaning where other items may be in the fridge along with the coffee:
friDjil kaappi uNTu
friDj-il kaappi uNTu
fridge-LOC coffee EXIST
'There is coffee in the fridge.' (Mohanan and Mohanan 1999: 5)

b. Locative (exhaustive list) meaning where the fridge only has coffee in it:
friDjil *kaappi* *aaNu*
friDj-il kaappi aaNu-∅
fridge-LOC coffee COP-NPST
'Coffee is in the fridge.' (Mohanan and Mohanan 1999: 5)

Again, where **есть** *yest'* is present, so too is *uNTu*, showing that when there is some +EXISTENTIAL meaning, those existential operators are required and overt.

Obviously, the two languages behave differently in more ways than they are similar, but the fact remains that overt existential markers are triggered by both possessive and existential environments. Additionally, in both environments, Russian and Malayalam show some evidence of non-canonical case marking. This provides some evidence for a link between those two semantic contexts, supporting the claim that the possessive construction is a type of existential.

4.1.2.3 Palauan

Palauan, listed in Creissels (2014: 28) as an expletive-locative language, or one that uses an existential form that retains and conveys some deictic meaning, is classed in the same typological family as English. When it comes to existential morphological patterns, Creissels (2014: 28) claims that, in languages like Palauan, the existential marker shares "formal properties" with canonical subjects in an agreement strategy. The author ultimately concludes that, in reference to expletive-locative existential markers, "what was originally a deictic locative has grammaticalized as a marker encoding the change in perspectivization of the FIGURE-GROUND relationship[12] that characterizes existential predication."

In spite of Creissels (2014) claim that Palauan is not of the same existential predicator type as Malayalam, there are some similarities that merit comparison. For one, Palauan is also a *have*-less language and Palauan existential constructions can express possession relations. The copula *ngar* is syntactically entwined with the existential construction, just in the way

[12]This is a relationship between some FIGURE or entity which is located at some spatiotemporal place or GROUND.

aaNu is connected with *uNTu* when it provides inflectional information. Nuger (2016) claims that the existential string consists of *ng ngar er ngii* '3SG COP LOC 3SG' where the first morpheme, *ng*, is an agreement clitic which can change forms depending on its referent; the second morpheme, *ngar*, is the copula which can inflect for tense and mandatorily selects a locative phrase; the third morpheme, *er*, is a locative preposition (glossed as LOC for comparison with proposal from Freeze (1992)); and the final morpheme *ngii* is the existential expletive. In non-locative, non-possessive, and non-existential constructions, the Palauan copula is null or unpronounced, as in (179):

(179) Palauan

aika el oluches a mechetngaid
aika el oluches a me-chetngaid
these L thin DET PL-pencil
'These pencils are thin.'

Consider the following set[13]:

(180) Palauan Existential Constructions

a. *te ngar er ngii a remo 50 el melemalt el chad el*
te ngar er ngii a re-mo 50 el melemalt el chad el
3PL.HUM COP.NPST LOC 3SG DET PL-AUX.FUT 50 L innocent L people L
ngar er se el beluu
ngar er se el beluu
COP.NPST LOC DEM L city
'There are fifty innocent people in the city.' (Nuger 2016: 59)

b. *a irechar e ng mla er ngii a ta el chelid el*
a irechar e ng mla er ngii a ta el chelid el
DET earlier.times then 3SG COP.PST LOC 3SG DET one L god L
ngklel a Meluadeangel
ngkl-el a Meluadeangel
name-3SG.GEN DET Meluadeangel
'Once upon a time, there was a god named Meluadeangel.' (Nuger 2016: 59)

c. *ngar ngii a subreddit ra tekinged?*
ngar ngii a subreddit ra tekinged?
COP.NPST 3SG DET subreddit for tekinged
'Is there a subreddit for tekinged.com?' u/cleanest (2018) via Reddit

[13]Nuger (2016) glosses *ngii* as 'there' but it is more specifically the third singular emphatic pronoun.

In (180a), the *ngar er ngii* cluster is not separated by any constituent, but notice that there is a second *ngar er* construction on the far right edge of the DP pivot that is being existentially focused. This shows that the constituent *a remo 50 el melemalt el chad* is the target or pivot of the existential construction. The same targetting is not available on (180b), but note that the existential sentence in (180b) is not bound by a locative contextual domain like the pivot is in (180a). So, this pair is just like the *There is a dog/ There is a dog in the yard* pairing from the conclusions made by Myler (2016) discussed earlier in this chapter. Example (180c) shows that the *ngar* and *ngii* lexical items are obligatory in existential constructions, but at least in this interrogative, the *er/mla* morpheme is absent.

If, like English *there*, Palauan *ngii* is an existential expletive that does not receive any features from the subject nor pivot DP in the sentence, then the agreement found before the copula (as in *te* in (180a) or *ng* in (180b)) is referent to either the subject or pivot DP instead. Malayalam, contrastingly, does not morphologically mark person or number agreement features on its verbal stems, but it is important to make the distinction that *ngii* does not refer to any DP available to it in the sentence; it is purely an expletive marker for existential constructions. The opposing structure to existential constructions containing *ngii* is provided in the form of locative constructions below where *ngii* is notably absent, much like how in predicational locative constructions in Malayalam, *uNTu* is absent:

(181) Palauan Locative Constructions

a. *a sensei a ngar er a obis*
a sensei a ngar er a obis
DET teacher DET COP.NPST LOC DET office
'The teacher is in the office.' (Malsol 1999)

b. *a delak a mla er a uum*
a delak a mla er a uum
DET mother DET COP.PST LOC DET kitchen
'My mother was in the kitchen.' (Malsol 1999)

However, it is not just *ngii* that triggers the existential meaning; it is the entire COP + LOC + *ngii* construction. I argue the same for Malayalam. It is not just *uNTu* that provides

an existential meaning. For *uNTu* to succeed, it also needs the copula *aaNu* as well as some locative preposition (as in (182a)), or the dative construction (as in (181b) and (182b)) - which, in other languages, can be achieved by a locative preposition. This is shown in English with phrases like *I sent the letter to him* or *She threw the ball at me.* Where other languages like Malayalam use case to mark these recipients *him* and *me* with dative morphology, in modern English we only see the prepositions *to/at* (or historical evidence of the dative on pronouns).

(182) a. *nyaan* *viiTil* *uNTaayiiruunnuu*
nyaan viiT-il uNTu-aa-y-ii-r-uunnuu
1SG.NOM house-LOC EXIST-COP-E-PST-E-IPFV
'I was at home.'

b. *enikku* *viiTu* *uNTaayiiruunnuu*
enikku viiTu uNTu-aa-y-ii-r-uunnuu
1SG.DAT house EXIST-COP-E-PST-E-IPFV
'I had a house (but now I don't).'
Literally: 'There was a house for me.'

Note that in the locative construction in (182a), the subject *nyaan* is in the nominative, but in (182b), there is a 'dative subject' where, in reality, subjecthood has instead landed with *viiTu* and now *enikku* is the recipient/patient of this construction. So, although Palauan and Malayalam are only similar when pushed to this level of simplification, there is some comparison to be made between these two existential systems. Palauan marks for person and number agreement where Malayalam lacks those Agree features on the surface.

4.2 Possessive Constructions

My aim is to somehow unify the possessive in Malayalam with the existential. Languages manage possession strategies in many different ways, but Perniss and Zeshan (2008) provide a general definition of possession as "a possessive relationship holds between an item or entity that is possessed (i.e. the possessum) and the person or entity which possesses the item (i.e. the possessor). Semantically, when a speaker uses a possessive construction, she refers to an

entity by designating it as standing in a relationship of ownership, that is, by indicating its status as a possessum through identification of its possessor." Perniss and Zeshan (2008) claim that there are two structural types of possession: predicative and attributive. Predicative possession (183a and 183b) involves interaction between the logical subject and predicate of the possessive construction, while attributive possession (183c) is restrained to the internal DP structure.

(183) Perniss and Zeshan (2008) Possession Structures in English[14]

a. I have a dog. [Predicative]

b. The dog belongs to me. [Predicative]

c. My dog... [Attributive]

Importantly, Perniss and Zeshan (2008) points out that "attributive possessive constructions generally convey a presupposed possessive relationship. That is, in the case of predicative possession, the proposition as a whole consists of an assertion of the possessive relationship itself, as new information. In contrast, an attributive possession construction is phrasally embedded, as old information, within a proposition declaring something about the possessed item." In Malayalam, internal and external possession have very different syntactic outcomes:

(184) Internal vs. External Possession in Malayalam

a. *enikku* *naaya* *uNTu*
enikku naaya uNTu aaNU-∅
1SG.DAT dog EXIST COP-NPST
'I have a dog.'

b. *ende* *naaya* *kazhuppuum* *veLuppuum* *aaNu*
ende naaya kazhupp-uum veLupp-uum aaNu-∅
1SG.GEN dog black-CONJ white-CONJ COP-NPST
'My dog is black and white.'

As shown above, external possession is handled by [+uNTu] constructions, while internal possession is phrasally controlled.

[14] *The dog is mine* is also a possible member of this group.

Typically, linguists categorize the different typological categories of possession strategies into "schemas" or "types" (like the eight schemas from Heine (1997) or the four types of possession from Stassen (2009)) that include categories like *have*-possession or *topic*-possession where the morphosyntactic structure of the language is grouped into typological type sets that use similar strategies. Malayalam is a *have*-less language in that it does not have a verb that overtly expresses possession, and instead it uses copular strategies to achieve the same goal by using case marking and word ordering to convey possessor-possessee relationships. If Malayalam were to be assigned into one of these typological groupings, it would be most similar to the existential category described by Creissels (2014: 43), where Malayalam is a

> 'dedicated existential predicator', [by which] I mean an existential predicator in a construction that cannot be analyzed as an instance of one of the types of existential predication presented in the previous sections, and that cannot be analyzed as having the same kind of relationship with another type of predicative construction either. Note that this definition does not exclude the possibility that a dedicated existential predicator may have other uses resulting from divergent grammaticalizations from the same source, such as for example that of auxiliary verb. (Creissels 2014: 43)

Other languages included in this existential class are Hebrew and Russian. The following section will answer this question by walking through data that depict how possessive mechanics work in Malayalam.

4.2.1 Possessive Constructions in Malayalam

The following examples[15] provided by Mohanan and Mohanan (1999) show that, in cases of possession in Malayalam, "the two verbs *uNTu* and *aaNu* appear to be entirely interchangeable, and syntactically and semantically equivalent" (Mohanan and Mohanan 1999: 2). This claim is not in line with my own findings, and I will attempt to address their arguments by providing my own analysis at the end of the subsection. Some of the examples the authors provide for possession are below:

[15] In Mohanan and Mohanan (1999), the corresponding negative forms are included here as well, but I have removed them for the sake of brevity.

(185) a. *aanakku pani uNTu*
elephant-D fever-N BE-PR
'The elephant has a fever.' (Mohanan and Mohanan 1999: 2)

b. *aanakku pani aaNu*
elephant-D fever-N BE-PR
'The elephant has a fever.' (Mohanan and Mohanan 1999: 3)

(186) a. *Anikku kuTTi uNTu*
Ani-D child-N BE-PR
'Ani has a child.' (Mohanan and Mohanan 1999: 3)

b. * *Anikku kuTTi aaNu*
Ani-D child-N BE-PR
Intended: 'Ani has a child.' (Mohanan and Mohanan 1999: 3)

In the first example, (185a) shows semantic assignment of possessive meaning provided by *uNTu*. However, in (185b), my speakers rejected the dative case on the subject in favor of the genitive (*aana-uTe* 'elephant-GEN'), so the relationship between possession and case in (185b) seems to be a complex issue. In addition to the case change, my speakers translated (185b) as 'The elephant is feverish/sick' meaning that the nominative case on *pani* 'fever' may also be problematic. In example (186), my speakers agree with Mohanan and Mohanan's judgements, and they provided me with the literal meaning of (186b) which is the traditionally equative construction where *Ani* is *a child* versus possesses one, but the dative case would be unacceptable.

In the following example, clefting with *aaNu* is visible in (187d). When asked to provide judgments, my speakers provided multiple ways to it; giving the subject the genitive case (*Ani-uTe* 'Ani-GEN'), double-listing the clefted element (*Ani-uTe kaar aaNu veLutta kaar*), and other modifications. However, one of my speakers did not reject it outright and simply claimed that it is a dialectal divergence. So, the controversy here may warrant some revisitation. The examples below further display the issue:

(187) Clefting in Possessive Constructions

a. *Anikku kaaR uNTu*
Ani-D car-N BE-PR
'Ani has a car.' (Mohanan and Mohanan 1999: 4)

b. *Anikku veLutta kaaR uNTu*
Ani-D white car-N BE-PR
'Ani has a white car.' (Mohanan and Mohanan 1999: 4)

c. # *Anikku veLutta kaaR aaNu*
Ani-D white car-N BE-PR
Intended: 'Ani has a white car.' (Mohanan and Mohanan 1999: 4)

d. *Anikku veLutta kaaR aaNu*
Ani-D white car-N BE-PR
'Ani has a white car.'/'The car that Ani has is white.'
(Mohanan and Mohanan 1999: 4)

My speakers rejected (187d) and corrected me by using *uNTu* instead. But, Mohanan and Mohanan (1999) explain that the grammaticality of (187d) is supported by their hypothesis that this is a case of a reduced cleft, where the asymmetry of grammaticality is linked to the function of *aaNu* as a cleft marker and some additional information that is missing. Mohanan and Mohanan (1999) claim that the missing information is the verb *uLLaTu*, which is a "phonological realization of *uNTu* + *atu*" glossed in their article as: BE + it (Mohanan and Mohanan 1999: 12). They attempt to resurface this missing verb using a previously-seen example, where (188a) and (188b) are equivalent, and the only difference is that *uLLaTu* is not overtly expressed in (188a):

(188) Mohanan and Mohanan (1999) Support for *uLLaTu*

a. *aanakku pani aaNu*
elephant-D fever-N BE-PR
'The elephant has a fever.' (Mohanan and Mohanan 1999: 6)

b. *aanakku pani aaNu uLLaTu*
elephant-D fever-N BE-PR BE-it
'What the elephant has is a fever.' (Mohanan and Mohanan 1999: 6)

If (188a) is simply missing an overt spellout of *uLLaTu*, then is there a possibility that it is motivating the cleft and not giving *aaNu* license for possession? It is also important to note

that having a fever or being sick are property concept constructions, which Swenson (2017, 2019) claims are treated differently in Malayalam, so the following chapter separates them and treats them with other predicates of that type.

In Malayalam, the main issue is that adjectives in the language are usually created with denominalized nouns. So, avoiding locative and property concept sentence structures, the data I provide below show equative and possessive sentences with and without *uNTu*:

(189) Specificational Sentences with *uNTu*[16]

a. *tita doctor aaNu*
tita doctor aaNu-∅
Tita doctor COP-NPST
'Tita is a doctor.'

b. **titakku doctor aaNu*
tita-kku doctor aaNu-∅
Tita-DAT doctor COP-NPST
Intended: 'Tita is a doctor.'

c. #*tita doctor uNTu*
tita doctor uNTu aaNu-∅
Tita doctor EXIST COP-NPST
Intended: 'Tita is a doctor.'

d. *titakku doctor uNTu*
tita-kku doctor uNTu aaNu-∅
Tita-DAT doctor EXIST COP-NPST
'Tita has a doctor.'

The inclusion of *uNTu* signals that there is a change to the information structure of the sentence. There is a different semantic meaning in the possessive sentences, as opposed to the specificational structure of sentences that only have *aaNu*. The dative subject shows us that there is some case assignment which is a direct result of the different underlying syntax. So, clearly, there is something about the inclusion of *uNTu* in these types of sentences that reflects the structure beneath.

[16]Copied from (159).

4.2.2 Possessive Constructions in Other Languages

This section will explore how other languages handle possessive constructions. I have selected languages that have typological features similar to how Malayalam handles existential constructions armed only with the connections that other literature has made between existential and possessive constructions cross-linguistically.

4.2.2.1 Modern Hebrew

According to Friedman (2003: 9), Modern Hebrew does not have an overt copula verb in present temporal reference, as shown in (190a), but requires it in cases of past temporal reference like (190b):

(190) Modern Hebrew

a. *hu moreh*
hu moreh
he teacher
'He is a teacher.' (Friedman 2003: 9)

b. *hu haya moreh*
hu haya moreh
he be-PST.3SG.M teacher
'He was a teacher.' (Friedman 2003: 9)

But, unlike (190a) the copula cannot be omitted in possessive sentences that use the copula like (191a):

(191) Possession in Hebrew

a. **lo chatul katan*
lo chatul katan
him.DAT cat small
Intended: 'He has a small cat.' (Friedman 2003: 10)

b. *haya lo chatul katan*
haya lo chatul katan
be-PST.3SG.M him-DAT cat small
'He had a small cat.' (Friedman 2003: 10)

In present tense sentences, the ungrammaticality of a possessive construction as shown in (191a) can be saved by the use of the existential morpheme *yeS*, as in (192):

(192) Possession with *yeS* in Hebrew

yeS	*lo*	*bayit*	*bair*
yeS	lo	bayit	ba-ir
EXIST	him.DAT	house	in.the-city

'He has a house in the city.'

This is similar to the use of *uNTu* in possessive constructions in Malayalam which also require the existential morpheme to be overt:

(193) Malayalam Possession Requires Overt *uNTu*

a.

nyaan	*naaya*	*uNTu*	
nyaan	naaya	uNTu	aaNu-∅
1SG.NOM	dog	EXIST	COP-NPST

'I have a dog.'

b. *

nyaan	*naaya*
nyaan	naaya
1SG.NOM	dog

Intended: 'I have a dog.'

Friedman (2003) does not comment much further on the special distribution of *yeS* in possessive sentences, only reiterating that possessive sentences (labelled as +POSSESSOR) should not be construed with existential sentences (which the author labels as -POSSESSOR, because possessive structures require a DP possessor for grammaticality (Friedman 2003: 14). This fact is true of Malayalam as well, and even further, it seems that the dual work of both existential meaning and possession that *yeS* accomplishes in Hebrew is available to *uNTu* in Malayalam as well:

(194) Hebrew Existential vs. Possession

a. *yeS* *mafteach* *bakiso*
yeS mafteach ba-kis-o
EXIST key in.the-pocket-3SG.M.POSS
'There is a key in his pocket.' (Friedman 2003: 14)

b. *yeS* *lo* *mafteach*
yeS lo mafteach
EXIST him.DAT key
'He has a key.' (Friedman 2003: 14)

(195) Malayalam Existential vs. Possession

a. *avande* *pokkattil* *oruu* *taakkol* *uNTu*
avan-de pokkatt-il oruu taakkol uNTu aaNu-∅
3SG.M-GEN pocket-LOC ART key EXIST COP-NPST
'There is a key in his pocket.'

b. *avanu* *oruu* *taakkol* *uNTu*
avan-u oruu taakkol uNTu aaNu-∅
3SG.M-DAT ART key EXIST COP-NPST
'He has a key.'

Friedman (2003: 28) depicts this duality of *yeS* as in the binary structure below:

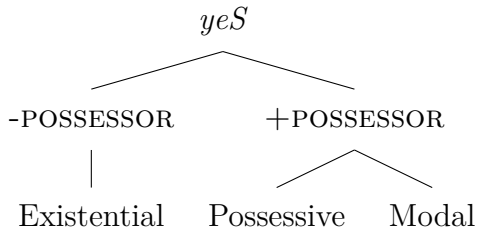

Figure 4.4: Friedman (2003) *yeS* +/-POSSESSOR Choices

While *uNTu* could match up with the *yeS* paradigm so far, Malayalam cannot inflect for person/number agreement as in (196b) below, so no comparison can affirm their similarity here:

(196) Inflection on Hebrew *yeS*

a. *yeS* *shlosha* *chatulim* *bagan*
yeS shlosha chatulim ba-gan
EXIST three cats in.the-yard
'There are three cats in the yard.' (Friedman 2003: 28)

b. *shlosha* *chatulim* *yeSnam* *bagan*
shlosha chatulim yeS-nam ba-gan
three cats EXIST-3PL.M in.the-garden
'Three cats are in the yard.' (Friedman 2003: 28)

c. * *shlosha* *chatulim* *yeS* *bagan*
shlosha chatulim yeS ba-gan
three cats EXIST in.the-yard
Intended: 'There are three cats in the yard.' (Friedman 2003: 28)

Not unlike the conclusion reached by Mohanan and Mohanan (1999) where there is underlyingly an *uLLatu* in non-cleft sentences in Malayalam, Friedman (2003) claims that regardless of whether or not one prefers to argue that there is a null copula in examples like (196b), there is still an element missing which, under normal circumstances, is present even in the absence of the copula (like in (196a)). That element is the expletive particle *yeS*. Thus the conclusion must be drawn that expletive *yeS* may be optionally null and that this follows from the pattern of partial pro-drop in Modern Hebrew.

However, I am hesitant to stop my search here and agree with Friedman (2003) (and in comparison with the argument made by Mohanan and Mohanan (1999) that *uLLatu* - or some version of *uNTu*) that like *yeS*, *uNTu* is present covertly due to cleft mechanics. These findings from Hebrew do not provide an answer as to why *aaNu* is required in past tense constructions that would otherwise require only *uNTu* (as in Hebrew like (191)) if it is in fact the copular +POSSESSOR or perhaps +EXISTENTIAL marker. It also does not tell us why *uNTu*, unlike *yeS*, cannot inflect. But, those differences may be language-dependent due to grammaticalization or other phenomena.

4.2.2.2 Palauan

Like *uNTu*, Palauan can also use existential constructions to provide possessive meaning. Note that, in (197b), *ngar* is doing the heavy lifting of inflectional morphology and the expletive *ngii* is unchanged - frozen in the 3SG form, much like the English expletive *it*:

(197) Palauan Possessive Constructions

a. *ng ngar er ngii a kekere el ududek el silber el*
ng ngar er ngii a kekere el udud-ek PRO el silber el
3SG COP.NPST LOC 3SG DET small E money-1SG.GEN me E silver E
sebechek el mo msang
sebech-ek el mo ms-ang PRO
ability-1SG.GEN E AUX.FUT give-3SG.ACC him
'I have a small silver coin that I can give him.'
Literally: 'There is my small silver coin that I can give him.' (Nuger 2016: 61)

b. *tia el beluu el dengar er ngii a diak*
tia el beluu el de-ngar er ngii PRO a diak
DEM E village E 1PL.NOM.INCL.IRR-COP.NPST LOC 3SG we.INCL DET NEG
leua beluu er a Oreor
le-ua beluu er a Oreor
3SG.NOM.IRR-like city LOC DET Koror
'This village of ours is not like the city of Koror.' (Nuger 2016: 61)

Compare (197) to Malayalam in (198), where *aaNu* carries morphological inflection for *uNTu* just as Palauan *ngar* does for *ngii*:

(198) EXIST + COPULA

a. *enikku doctor uNTu*
enikku doctor uNTu aaNu-∅
1SG.DAT doctor EXIST COP-NPST
'I have a doctor.'

b. *enikku doctor uNTaayiiruunnuu*
enikku doctor uNTu-aa-y-ii-r-uunnuu
1SG.DAT doctor EXIST-COP-E-PST-E-IPFV
'I had a doctor.'

Importantly, for Palauan as well as Malayalam, the entire construction is needed to provide meaning and proper morphological inflection in order for the sentence to succeed. Where *ngii* needs the inflectional hosting support from *ngar* in Palauan, so too does *uNTu* need the

inflection to be hosted on *aaNu* in order to be a part of a grammatically viable construction. Moreover, both *ngii* and *uNTu* are required in order to get existential meanings, so they are both signaling some underlying structural or semantic existential force that cannot be handled by the copula or other predicate morphemes.

4.3 Conclusions

Existential and possessive constructions in Malayalam are both built using *uNTu*. This chapter defines the elements of existential constructions, pointing out that the only obligatory element is the pivot which, with the framework provided by Francez (2009), is the predicate of the existential clause. According to Francez (2009), the pivot is a predicate which is modified by a contextually determined coda that assigns spatio-temporal information to it. I argue that the framework provided by Swenson (2019) for Malayalam, is essential in unifying existential and possessive clauses under a single syntactic analysis. The case assignment that comes from the PP that Swenson proposes is required for existential codas to achieve the appropriate structure. Although Swenson (2017, 2019) claims that there is an immediacy requirement that prompts *uNTu* to occur in certain environments, I instead argue that *uNTu* is simply signaling underlying syntactic focus for the existential phrase. Because existential sentences focus new information, the newness (perhaps the immediacy) comes from the existential pivot's focus. Thus, I label *uNTu* as an existential pivot auxiliary. It is required for existential sentences in Malayalam, and it is not a copula verb. It is not deictic nor can it be case-marked, so it is not adequate for status as a coda. Its purpose as an auxiliary is to signal that the information structure of the existential sentence is changed from the typical copular structure. I outlined the requirements for the presence of *uNTu* and I provided supporting data for each requirement. I also briefly compared *uNTu* and its behavior to that of other languages' existential and possessive sentences.

Chapter 5

Property Concept & Locative Constructions

In Chapter 3, the data that I discussed illuminated how the copula *aaNu* interacts with specificational and predicational constructions, as well as how it hosts tense, aspect, and modal morphology for other verbs. In Chapter 4, the focus was on the morpheme *uNTu*, which occurs in existential and possessive constructions. Both chapters alluded to claims from previous literature on Malayalam that *aaNu* and *uNTu* are in overlapping distribution in certain types of clauses: locative constructions, medical and psychological predicates. This chapter is primarily concerned with the issues of the supposed "overlapping distribution," and the ultimate goal is to determine the role *uNTu* has in copular constructions of all types.

The first major section in this chapter deals with the category of PROPERTY CONCEPT CONSTRUCTIONS. I argue that property concept constructions include selected classes of PROPERTY CONCEPT LEXEMES where the referent of some DP is the experiencer or affectee subject of a condition of its property concept DP/AP in a copular sentence. Property concept lexemes are notions of particular descriptions that are lexicalized as adjectives (see (Dixon 1982; Francez and Koontz-Garboden 2015)). Dixon (1982) provides examples of seven possible classes of property concepts:

(199) Dixon's Property Concept Classes[1]

a. DIMENSION: big, small, long, tall, short, wide, deep...

b. AGE: new, young, old...

c. VALUE: good, bad, lovely, atrocious, perfect, proper...

d. COLOR: black, white, red...

e. PHYSICAL: hard, soft, heavy, wet, rough, strong, hot, sour...

[1]Provided in (Francez and Koontz-Garboden 2015: 533).

f. SPEED: fast, quick, slow...

g. HUMAN PROPENSITY: jealous, happy, kind, clever, generous...

Francez and Koontz-Garboden (2015: 534) claim that there are two types of property concept constructions: CANONICAL and POSSESSIVE. Canonical property concept constructions take the form of copular constructions that predicate with adjectival complements (as in (200a)), and possessive property concept constructions "instead employ a strategy of predication based on possessive morphosyntax" (Francez and Koontz-Garboden 2015: 534) where two DPs are in said possessive relationship. This distinction is displayed below:

(200) Canonical vs. Possessive Property Concept Constructions

a. Katie is strong. [Canonical]

b. Katie has strength. [Possessive]

Note that, in (200a), the canonical construction displays *strong*, which is an adjectival predicate, as the syntactic complement of the sentence, while (200b) shows the DP complement *strength* in a possessive relationship with *Katie*. Semantically, Francez and Koontz-Garboden (2015: 535) claim that property concept lexemes like *strong* in (200a) are of the semantic class type of ADJECTIVALLY DENOTING, and lexemes like *strength* in (200b) are of the semantic class type of SUBSTANCE DENOTING. Francez and Koontz-Garboden (2015: 535) argue that possessive property concept predication involves relating individuals to "portions" of such substances that they attribute, and that "adjectivally denoting property concept lexemes, by contrast, denote whatever it is that adjectives denote" (535). There is evidence for typological variation in the way different languages handle each class of property concept lexemes, as shown in (201) below:

(201) Typological Variation in Property Concept Clauses

a. English

Clym is thirsty.

b. Spanish

Clym tiene sed
Clym has thirst
'Clym is thirsty.'

Where English can use the property concept *thirsty* as an adjective in (201a), in Spanish it is a noun, as shown in (201b).

Francez and Koontz-Garboden (2015: 536) ultimately propose a hypothesis called THE LEXICAL SEMANTIC VARIATION HYPOTHESIS, which states that

> "substance-denoting PC (property concept) lexemes require possessive semantics to achieve the truth conditions of PC constructions. Adjectivally denoting PC lexemes do not. Possessive morphosyntax contributes possessive semantics, and hence surfaces only with PC constructions built on substance-denoting PC lexemes."

For the property concept constructions that I am concerned with in Malayalam, I will focus on property concept classes of human propensity (*happy*, *clever*) as in (202), and dimension (*tall*, *deep*) as in (203). I will also add medical predicates in this discussion (as in (204)), which are not in Dixon's proposed class list, but would include lexemes like *sick* or *diabetic*[2]. In these cases, first analyzed in Swenson (2017), Malayalam displays some of the "overlapping"[3] distribution of *aaNu* and *uNTu*:

(202) Human Propensity Class

a. *avaL* *santooshavatiaaNu*
avaL santoosh-avati-aaNu-∅
3SG.F.NOM happy-3SG.F-COP-NPST
'She is happy.'

[2]Perhaps these could fit into the PHYSICAL or HUMAN PROPENSITY class.

[3]As a reminder, this dissertation hypothesizes that there is no overlap in distribution, because *aaNu* and *uNTu* do not occupy the same syntactic slot. Also, from a compositional semantics point of view, they should not render the same truth-conditions for propositions forming minimal pairs.

b. *avaLkku* *santoosham* *uNTu*
avaLkku santoosh-am uNTu aaNu-∅
3SG.F.DAT happy-NMLZ EXIST COP-NPST
'She is happy.'
Literally: 'She has happiness.'

(203) Dimension Class

a. *keTTiTam* *uyarnnataaNu*
keTTiTam uyarnnat-aaNu-∅
building high-COP-NPST
'The building is tall.'
Literally: 'The building is high.'

b. *keTTiTinu* *uyaram* *uNTu*
keTTiT-inu uyar-am uNTu aaNu-∅
building-DAT high-NMLZ EXIST COP-NPST
'The building is tall.'
Literally: 'The building has height.'

(204) Physical/Medical Class

a. *nyaan* *prameeharoogiyaaNu*
nyaan prameeha-roogi-y-aaNu-∅
1SG.NOM diabetes-sick-E-COP-NPST
'I am diabetic.'
Literally: 'I am sick with diabetes.'

b. *enikku* *prameeham* *uNTu*
enikku parameeh-am uNTu aaNu-∅
1SG.DAT diabetes-NMLZ EXIST COP-NPST
'I have diabetes.'
In data from Swenson (2017, 2019): 'I am diabetic.'

These three pairings show that both *aaNu* and *uNTu* sentences are able to express property concept assignments; however, there are clear differences regarding case morphology for the logical subject - or affectee - (as with *enikku* in (204b)), and the property concepts themselves alternate between adjectival forms like *santoosh-* 'happy' in (202a) and nominal forms like *prameeham* 'diabetes' in (204b). Using these types of property concept examples, I hope to provide an explanation for why some phrases allow for the presence of *uNTu*, where others only require *aaNu* for acceptability.

Another case where *aaNu* and *uNTu* are shown in seemingly overlapping distribution is with locative constructions, as in (205) below:

(205) Locative Constructions in Malayalam

a. *unni labil aaNu*
unni lab-il aaNu
Unni lab-LOC be.PRS
'Unni is in the lab.' (Swenson 2017: 123)

b. *unni labil uNTu*
unni lab-il uNTu
Unni lab-LOC be.PRS
'Unni is in the lab.' (Swenson 2017: 123)

Note that, according to Swenson (2017, 2019), there is a pragmatic difference in interpretation between (205a) and (205b). Swenson (2017: 123) states that where (a) is a general statement about the subject's location, (b) introduces some immediate information that is linked to the context in which the utterance is produced.

Swenson's claim about *uNTu* reacting to some immediacy requirement explains the phenomenon in its surface form. But, I will argue that instead of some pragmatic force, this sense of immediacy is a by-product of *uNTu*'s status as an existential pivot auxiliary. I claim that because *uNTu* is essentially a signal for existential meaning, and existential clauses can support focused information into the discourse, the reading received by the clause is not pragmatically immediate because it is adhering to some immediacy requirement; it is syntactic focus introducing new information that causes a non-characterizing reading to occur.

In order to show that *uNTu* is supported by a covert tense-hosting *aaNu* in examples like (205b), I will show that it is a matter of locative existentialism, where *lab-il* 'lab-LOC' is not an argument but a contextual domain which modifies the subject of the existential clause. The reason that the information in (205b) is pragmatically immediate is because semantically, an existential sentence asserts the existence or the presence of some previously unknown entity to the discourse (Cruschina et al. 2012; McNally 2011). However, the pragmatic function of existential sentences is not normally to assert the existence of some entity but "to introduce

the NP referent into the discourse world of the interlocutors by asserting its presence in a given location" (Lambrecht 1994: 179).

The organization of this chapter is as follows. I will discuss property concept constructions, with focus on the property concept lexemes and their effect on the realization of *uNTu* in §5.1, then I will apply an analysis to the property concept Malayalam data in §5.1.1, followed by a brief section conclusion in §**??**. Then, I will cover locative constructions in §5.2, and provide an analysis for the supposed overlapping distribution of *aaNu* and *uNTu* in §5.2.1. Then, there is a conclusion in §5.3.

5.1 Property Concept Constructions

As stated in the prior section concerning property concept constructions, Francez and Koontz-Garboden (2015: 534) claim that "possessive strategies are semantically motivated [...] by the denotation of the [property concept] lexemes that are found in them." Thus, the substance denoting class of property concept lexemes "denote the set of all 'portions' of the relevant substance," just as a mass noun like *meat* would denote the set of all entities that are *meat*. If something is *meat*, then its component parts are *meat*. So, in substance possession (like (205b)), Francez and Koontz-Garboden (2015) provide the following proposal:

(206) Substance Possession Lexical Semantics
The property **strength** is the constant naming of the substance *strength*, that is, the set of all portions of *strength*. Let P, Q be variables over substances, that is, subsets of A or the characteristic functions thereof, and let p, q be variables over portions π. If α is a substance-denoting expression denoting the substance **strength**, the denotation of α is written as the function characterizing all and only the portions of this substance:
$[\alpha] = \lambda p.\mathbf{strength}(p)$

If this expression in (206) "combines with an individual - yielding **strength**(a), [it] says that a is a portion of strength, not that a is strong" (Francez and Koontz-Garboden 2015: 546). So, substance-denoting property concept lexemes are successfully predicated via the

semantic rules of substance possession. Francez and Koontz-Garboden (2015: 546) define SUBSTANCE POSSESSION as:

(207) any individual a and substance P, a has P iff $\exists p[P(p)\&\pi(a,\ p)]$.

If possessive property concept constructions are morphologically different than canonical property concept constructions, then the property concept lexemes must require differing structures due to their different interpretations which, as Francez and Koontz-Garboden (2015) mention, is why examples like (208)[4] are unacceptable:

(208) Substance Possession Restrictions
a. #Katie is strength.
b. *Katie has strong.

Thus, the choice between predication and possession property concept constructions is motivated by the possessive semantics, but shows up overtly in the morphosyntactic structure of some languages.

5.1.1 Property Concept Constructions in Malayalam

Concerning property concept sentences in Malayalam, Francez and Koontz-Garboden (2016) claim that the morphosyntactic variation between possessive and predicative property concept constructions is due to semantic variation and not syntactic variation. Menon and Pancheva (2014) show that Malayalam has two classes of property concept lexemes. Class I contains roots that "become free words" when they concatenate with the *-a* suffix (e.g. *valiya* 'big', *nalla* 'good'). Menon and Pancheva (2014: 290) claim that *-a* is a relativizer and that "these relativized forms, in order to be used as predicates, must be turned into light-headed relatives" using bound person-marking suffixes as in (209):

[4]Note that (208a) is only acceptable in the sense of figurative metaphor - e.g. *God is strength.*

(209) Light-Headed Relatives in Malayalam

a. *nallavaL*
nalla-vaL
good-F.SG
'She who is good...' (Menon and Pancheva 2014: 292)

b. *nallavan*
nalla-van
good-M.SG
'He who is good...'
(Menon and Pancheva 2014: 292)

Structures like (209) can appear in sentences like (210):

(210) Equative Sentences with Light-Headed Relatives

avaL nallavaL aaNu
avaL nalla-vaL aaNu
she good-F.SG COP
'She is good.' (Menon and Pancheva 2014: 292)

But, these light-headed relatives do not have to occur with all lexemes in Class I, as shown in (211):

(211) Relativizer *-atu*

avaL puutiyatu aaNu
avaL puutiy-atu aaNu-∅
she new-REL COP-NPST
'She is new.'

Instead of using a light-headed relativized form of *puutiya* 'new,' (211) uses the relativizing suffix *-atu*[5].

In contrast to Class I, Class II property concept lexemes in Malayalam are roots that concatenate with the nominalizing suffix *-am* (e.g. *santoosham* 'happiness', *madhuram* 'sweetness'). The suffix *-am* can combine with these property concept lexemes, or it can combine with verbs, in order to nominalize them (as in *sneham* 'love' from *snehan* 'to love', or *chaatam*

[5]For more information on the relativizer suffix *-atu*, see Swenson (2019).

'jump' from *chaatan* 'to jump'). Importantly, Class II roots form sentences that have possessive morphosyntax, as in (212b)[6]:

(212) Class II Property Concept Possessive Sentences

a. *avaLkku* *mookuutti* *uNTu*
avaL-kku mookuutti uNTu
3SG.F-DAT nose.pin EXIST
'She has a nose pin.' (Menon and Pancheva 2014: 294)

b. *avaLkku* *pokkam* *uNTu*
avaL-kku pokk-am uNTu
3SG.F-DAT tall-NMLZ EXIST
'She is tall.'
Literally: 'She has tallness.' (Menon and Pancheva 2014: 294)

Different than the syntactic analysis provided by Menon and Pancheva (2014), Francez and Koontz-Garboden (2016: 29) claim that although it seems like possession only occurs with Class II roots (as in (212b)), the real difference between the two classes is not their possessive or non-possessive strategies, but their lexical semantic makeup. For Francez and Koontz-Garboden (2016: 31), Class I roots are "individual-characterizing verbs" and that these roots are restricted to "canonical predicating property concept sentences, while Class II roots only appear in (overtly) possessive property concept sentences." So, while Class I lexemes are individual-characterizing and must describe some DP, Class II lexemes are substance-characterizing and are the possessees of a mal/benefactor relationship. If only Class II roots are bound (and then nominalized by *-am*), and if *-am* does not provide any semantic meaning on its own except for the nominalization, then Class II roots + *-am* return the original semantic meaning of the root pre-concatenation (Francez and Koontz-Garboden 2016: 33). Thus, there is no need for a different syntactic structure for these property concept lexemes - they can act as normal DPs would in a DP + [POSSESS] + DP construction. But, if Class I roots are individual-characterizing as Francez and Koontz-Garboden (2016) predicts, then that class of lexemes cannot be property concept lexemes. Property concept roots are

[6]Examples taken from Menon and Pancheva (2014) are also used in Francez and Koontz-Garboden (2016).

inherently substance-characterizing. So, Class I roots can only be canonical-predicating as in normal DP + [BE] + AP constructions.

The discussion now must return to conclusions from Swenson (2017) about property concept lexemes that, according to her findings, utilize the aforementioned immediacy requirement, which Swenson defines as "how relevant the situation being discussed is to the present moment" - like a form of predicational deixis (Swenson 2017: 107). She explains that immediacy is encoded in the grammars of languages like English, East Austrian German, Norwegian, and Kutchi Gujarati - although not necessarily only on copula selection, but also in the way negative prohibition is expressed. By extending the findings from Patel-Grosz (2016) concerning immediacy on negation to *uNTu* in Malayalam, Swenson attempts to account for why *uNTu* is used in predicates with immediate context that refer to locative, psychological, and medical conditions.

Swenson (2017) explains that Patel-Grosz (2016) uses English examples to show how immediacy controls expressions about prohibition of a proximal situation - in contrast with general prohibition. In English, the immediacy requirement can be seen at work in instances of overt 'you' commands, as in (213b). Examples like (213b) cannot be used as general commands and must be related to a situational event of the speaker seeing another person engaged in a forbidden activity proximal to UT. In contrast, examples like (213a) would be general prohibitive statements for a wide audience independent of ongoing activities:

(213) Immediacy Requirement

a. Don't smoke in front of the children!

b. Don't you smoke in front of the children! (Swenson 2017: 133)

For an example of an immediate locative situation in Malayalam, Swenson (2017: 123) claims that (214a) is preferred over (214b), because it expresses the immediate situation of finding Unni, whereas (214b) expresses general information not directly related to the situation explored below:

(214) "Scenario: People in the department like to eat lunch together. Today, the lab technician, Unni, is not present at the lunch. However, his friend Nithin is there. Usually, Nithin only comes to lunch when Unni comes. A third person comes in and, seeing Nithin but not Unni, asks with surprise, 'Where is Unni?"' (Swenson 2017: 122)

a. *unni lab-il uNTu*
Unni lab-LOC be.PRS
'Unni is in the lab.' (Swenson 2017: 123)

b.# *unni lab-il aaNu*
Unni lab-LOC be.PRS
'Unni is in the lab.' (Swenson 2017: 123)

As previously addressed, the use of *aaNu* without *uNTu* in (214b) is not an appropriate response to the question given the context; it is just a general statement about Unni's whereabouts. When the contextual domain of the discourse seeks to restrict the locations which Unni can occupy, Malayalam employs an existential construction with a coda (in this case, *lab-il* 'lab-LOC') which restricts the spatio-temporal location of the existential pivot, Unni.

Swenson's argument that immediate location causes a semanto-pragmatic divide between the "two copulas" requires that *uNTu* is used in contexts where the aim is to locate things that can be moved (as in (215a)), but not items that are inherently static (as in(215b)) (Swenson 2017: 124):

(215) Locative Alternations

a. *unni kochi-yil uNTu*
Unni Kochi-LOC be.PRS
'Unni is in Kochi.' (Swenson 2017: 124)

b.# *koci kerala-thil uNTu*
Kochi Kerala-LOC be.PRS
Intended: 'Kochi is in Kerala.' (Swenson 2017: 124)

Swenson explains that (215b) "sounds comical, because [it seems] like Kochi, a city, has just arrived in Kerala" (Swenson 2017: 124), which - for an immovable entity - would cause a pragmatic clash at least.

For examples of psychological predicates, Swenson shows that feelings expressed with *aaNu* provide general sentiments that are ever-present, while *uNTu* expresses sentiments that are novel or situationally motivated. For the examples below, Swenson claims that the most typical way to express love to another person would be in (216b), because "generally, people do not love each other so fully and permanently" (Swenson 2017: 128). However, in (216a), a child would use *aaNu* to express love for his mother, because that type of unconditional love is unbound by situation or events and that it is "generally positive to make such strong statements about ones feelings towards one's mother" (Swenson 2017: 128).

(216) Psychological Predicates in Malayalam

a. *unni-kku sneeham aaNu*
Unni-DAT love be.PRS
'Unni loves someone.' (Swenson 2017: 128)

b. *unni-kku sneeham uNTu*
Unni-DAT love be.PRS
'Unni loves someone.' (Swenson 2017: 128)

Lastly, Swenson (2017: 129) provides evidence that "predicates describing medical conditions also show this special 'immediacy' behavior" when *uNTu* is used. In the context of a medical condition like diabetes, Swenson claims that examples like (217a) should be used as a characterizing property of a person who permanently has diabetes, or in the instance of a medical pamphlet that informs people about the condition. Examples like (217b) should be used when a diabetic is undergoing symptoms of the disease or if they are sharing new information about themselves (Swenson uses the context of a diabetic telling a new employer about their condition):

(217) Medical Predicates in Malayalam

a. *enikku prameham aaNu*
1SG.DAT diabetes be.PRS
'I am a diabetic.' (Swenson 2017: 130)

b. *enikku prameham uNTu*
1SG.DAT diabetes be.PRS
'I am a diabetic.' (Swenson 2017: 130)

My speakers rejected the dative-marked subject in (217a). They corrected me when prompted with the utterance to use *nyaan* '1S.NOM' instead, so there may be some dialectal variation at play in the case selection on some of these sentences. In fact, one speaker provided the following sentence as substitute, suggesting that the derived nominal *prameham* was unacceptable in predicational sentences with *aaNu*:

(218)

avaL	*prameha*	*roogi*	*aaNu*
avaL	prameha	roogi	aaNu
1SG.F.NOM	diabetic	patient	COP

'She is diabetic.'
Literally: 'She is a diabetic patient.'

These, among other examples, exemplify Swenson's claim for there to be an immediacy requirement motivating the selection of *uNTu* in cases of situational, new, or otherwise impermanent conditions. But, the question that is raised to the forefront by the introduction of this new requirement is: what motivates an immediacy reading? The answer, I propose, is that it is a focus operation driven by the existential itself and not a pragmatic feature.

According to Cruschina et al. (2012: 80), "semantically, an existential sentence asserts the existence or the presence of some entity. However, the pragmatic function is to introduce the NP referent into the discourse world of interlocutors by asserting its presence in a given location." Thus, the pivot DP is focused in existential sentences as a consequence of its structure. My main claim is that possessive constructions in Malayalam that use *uNTu* are underlyingly specificational. The reason the dative subject exists in existential sentences is linked to the subject DP staying low in PredP and being assigned case, then moving up to fulfill a topic requirement in SpecTP. The new information in possessive sentences is the possessee, not the logical, dative-marked affectee subject, so in order to get the ordering that is seen in (216), there needs to be a low-focus structure for the complement.

Jiménez-Fernández and Rozwadowska (2017: 234) explain this affectee topicalization by highlighting dative experiencers in Spanish psychological predicates that raise to SpecTP and take on subject-like properties. The authors claim that subject-like dative experiencers

would "show non-canonical marking of [the subject] which is normally not dative," and that, "in case marking languages [like Malayalam] the subject" is canonically marked nominative. Jiménez-Fernández and Rozwadowska (2017) show that dative experiencers in Spanish raise to SpecTP (as in (219)):

(219) Dative Experiencer Subjects in Spanish

a. *a Angela parecen gustarle las patatas fritas*
to Angela-DAT seem-PRS.3PL to.like.her-DAT the potatoes fried
'Angela seems to like crisps.'
(Jiménez-Fernández and Rozwadowska 2017: 239)

b.# *Las patatas fritas parecen gustarle a Angela*
the potatoes fried seem-PRS.3PL to.like.her-DAT to Angela-DAT
Intended: 'Angela seems to like crisps.'
(Jiménez-Fernández and Rozwadowska 2017: 239)

In (219a) above, the dative experiencer *a Angela*, has raised to the SpecTP position to fulfill subject requirements, and the complement *las patatas fritas* must stay low in order to retain acceptability.

In Malayalam psychological predicates, there is a similar syntactic reaction which displays the dative experiencer as a non-canonical subject:

(220) Dative Subject Requirement in Property Concept Clauses

a. *enikku saNkaTam uNTu*
enikku saNkaT-am uNTu aaNu-∅
1SG.DAT sad-NMLZ EXIST COP-NPST
'I am sad.'
Literally: 'There is sadness for me.'

b. * *nyaan saNkaTam uNTu*
nyaan saNkaT-am uNTu aaNu-∅
1SG.NOM sad-NMLZ EXIST COP-NPST
Intended: 'I am sad.'

This underlying topicalization mechanism for possessive sentences extends to non-property concept DPs as well:

(221) Dative Subject Requirement in Possessives

a. *enikku naaya uNTu*
enikku naaya uNTu aaNu-∅
1SG.DAT dog EXIST COP-NPST
'I have a dog.'
Literally: 'There is a dog for me.'

b. **nyaan naaya uNTu*
nyaan naaya uNTu aaNu-∅
1SG.NOM dog EXIST COP-NPST
Intended: 'I have a dog.'

So, what is the dative doing in the initial position in (221a)? I argue that, as in the previous chapter, property concept constructions are just possessive constructions, which we have identified (in Malayalam) as being existential constructions underlyingly. As a reminder, Swenson (2019) argues that there is a feature on the head of PP which drives case assignment, and I claim that the PP structure is the coda of an existential clause. Thus, the dative case is assigned to the possessor within that coda PP. The theoretical proposal provided by Jung (2011) corroborates these claims. Jung (2011) claims that one possibility is that the dative subject is a type of sentence-initial PP which denotes the existence of the entity, and that possession is ultimately a "special case" of existentialism. In normal existential constructions the subject is focused as the new information, prompted by its existing, but in possessive constructions, the possessee is the new information, so Jung (2011: 91) insists that there must be a LOW-FOCUS structure available to host it, and that "in this respect, the possessive/existential construction involving the possessive/locative phrase as their essential component should be regarded as non-thetic[7], containing a low focus phrase devoted to the narrowly focused item." Jung (2011) proposes the following structure as a foundation for the working syntactic assumptions where FocP is below TP instead of above it as is considered traditional in Rizzian terms:

[7]This is categorical, where the two arguments function as topic and focus respectively.

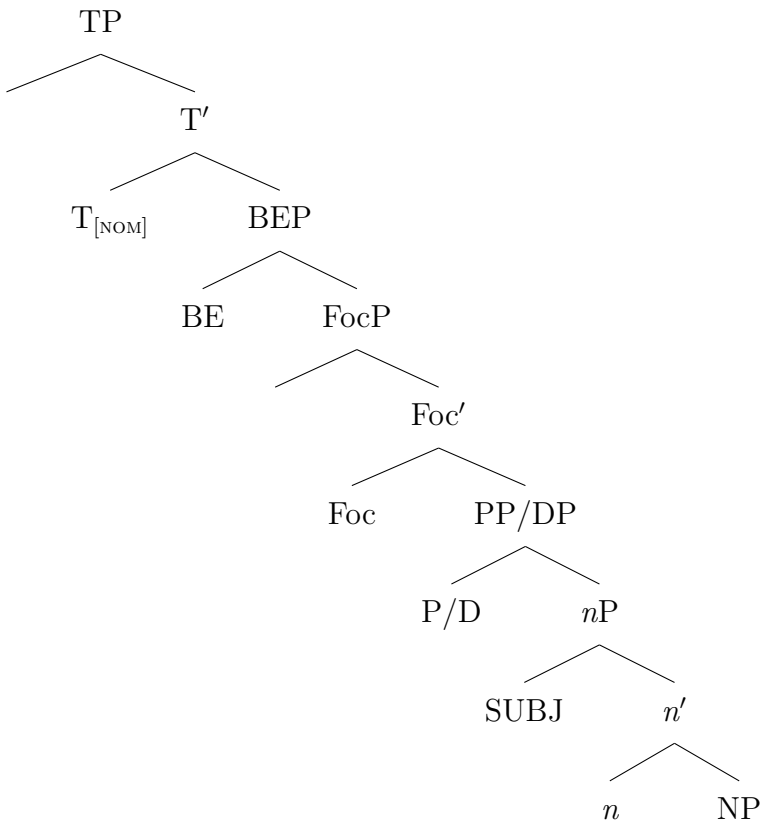

Figure 5.1: Jung (2011) Low-Focus Syntax

In order to provide some data for this foundational structure, Jung (2011) uses Russian as an example:

(222) Russian Possessive Clause

У	*меня*	*есть*	*книга*
u	menja	est'	kniga
at	me	COP	book

'I have a book.' (Jung 2011: 92)

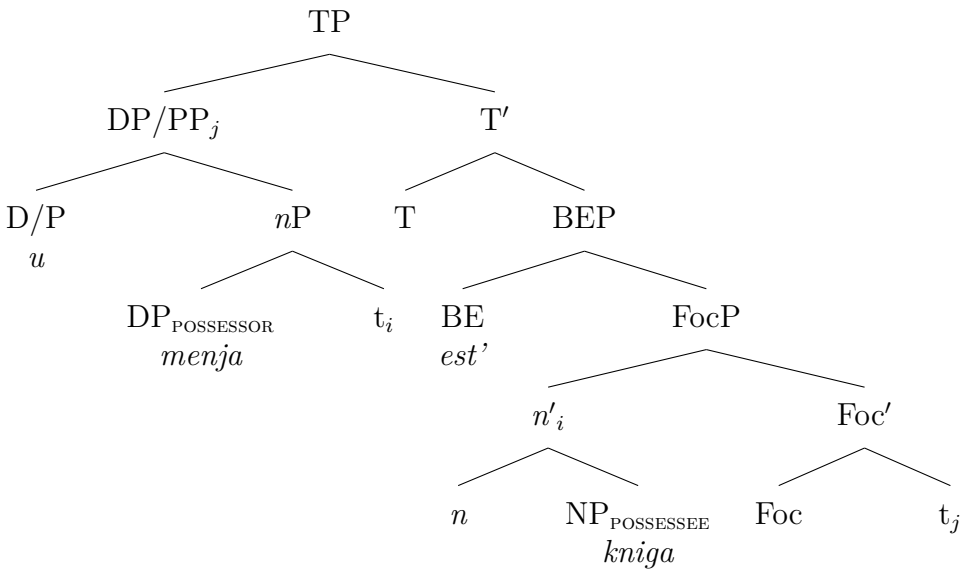

Figure 5.2: Jung (2011) Tree for Example (222)

The n' that "contains the possessee is attracted by Foc since it is new information" and "after the n' moves to SpecFocP, the PP undergoes remnant movement to SpecTP" (Jung 2011: 92). It is unclear if Malayalam possessive constructions require this low-focus construction, or if underlyingly, possessive constructions are really just copular constructions that have a semantic affectee subject. The possessive example below shows that Malayalam only allows a canonical topic/focus ordering of its possessor/possessee arguments[8]:

(223) Dative Subject Requires Topicalization

a. *titakku* *doktor* *uNTu*
tita-kku doktor uNTu aaNu-∅
Tita-DAT doctor EXIST COP-NPST
'Tita has a doctor.'

b. * *doktor* *titakku* *uNTu*
doktor tita-kku uNTu aaNu-∅
doctor Tita-DAT EXIST COP-NPST
Intended: 'Tita has a doctor.'

It is clear that the dative-marked argument needs to be in the subject position, but it is not clear if this possessive strategy is a different structure than the existential structures for

[8]Note that in (223a), it would be unacceptable for *aaNu* to be overt.

which *uNTu* is available. For instance, if we say that *uNTu* has the meaning of [EXIST], then a potential schema for (223a) could be as in (224):

(224) $_{DP}$Tita's doctor EXIST →
$_{DAT_i}$For Tita EXIST ϕ_i a doctor =
'For Tita, there is a doctor.'

This schema shows that *titakku* is marked with the dative and moves from its possessor position away from its possessed DP, and Malayalam retains the expected possessor/possessee word order. It also suggests that, instead of a X HAVE Y relationship, there is an existential relationship where Y EXIST (for X). In the latter relationship, X is affected by Y's existence. X is the subject here, and Y is providing a context for its existence; it is giving it a spatio-temporal domain to exist in. This is especially true for property concept lexemes, where the possessive relationship is more characterizing in nature. The meaning of *She has diabetes* and *She is diabetic* take on the same sort of affectedness characteristics where the diabetic person is a clear affectee subject and not a traditional owner in the same way that the possessor is in an example like *She has a dog.* Ultimately, the essence of ownership does not matter, and there is no reason (at least in Malayalam) to be concerned that a possessor is being affected in some way by its possession or property. The possession or property in question is the pivot, and the possessor is the coda which provides the pivot with a contextual spatio-temporal domain.

This section argues that property concept constructions are inherently possession constructions. The reason why sentences with both *aaNu* and *uNTu* are acceptable is due to the fact that canonical property concept clauses (which are typically APs) are general, unmarked predications where there is a subject DP with no existential focus syntax to affect the structure. However, for the case of *uNTu* clauses, the property concept lexemes are coda PPs, and thus they are able to enter into an existential PIVOT + CODA structure. This aligns with the findings in Francez and Koontz-Garboden (2015, 2016, 2017) which claim that property concept roots are substance-characterizing, which is how derived nominal DPs in Malayalam can assign substances to their dative PP possessors. Sentences with canon-

ical (*aaNu*) interpretation involve individual-characterizing denotation as is expected from APs. So, along with Francez and Koontz-Garboden (2015), I predict that property concept sentences with DP lexemes are existential constructions which communicate a possession relationship, while those formed with *aaNu* and adjectival lexemes will be canonical-predicating and assign characterizing properties to a non-pivot subject.

5.2 Locative Constructions

The term LOCATIVE CONSTRUCTION used in this section aims to refer to sentences where some DP is being spatio-temporally constrained. In Malayalam, most of these sentences are easy to spot due to the locative case suffix *-il*. Because this is a case suffix, any reference in the text to prepositions or prepositional heads should be able to affect postpositions and postpositional heads as well. This is not the only locative suffix that Malayalam uses, but it is the one that will be employed in the data to follow. This section includes a general discussion about locative constructions in §5.2, a discussion about locatives in Malayalam with input from previous literature in §5.2.1, and a brief conclusion in §5.3.

Francez (2007: 117) claims that existentials are sentence focus constructions, not predicate focus like copular constructions are. Importantly, "the function of existentials is to mark that the pivot NP is not topical but focal," and that "since pivots are the main predicates of their constructions they must be focal, and that the crucial property of NPs determining their compatibility with pivot position is their topicality." This is in line with our general hypothesis for existential constructions in this chapter.

According to Francez (2007: 12), in English, existential *there* and deictic *there* are two different morphemes. For instance, *There*$_{\text{EXIST}}$ *are always going to be good people* does not make any implications about where those people are in space or in time. Moreover, not even locative PPs like *on the menu* are required to produce a deictic reading, as in *There*$_{\text{EXIST}}$ *are some meat dishes on the menu*. This does not imply that the menu is covered in meat

dishes (Francez 2007: 53). For Francez, locative phrases in existential constructions are essentially codas[9]. According to Francez (2007: 93), "codas are contextual modifiers that combine by function application with the meanings of bare existentials before contextual closure." The key descriptor here is *modifiers*, because under this definition, the coda cannot be the predicate of a clause.

The author tests this hypothesis by claiming that "codas - but not copular predicates - license free choice *any*," as shown in (225):

(225) Codas License Free Choice *any*

a. There is a common flaw in any study that uses the knockout model.

b.?? A common flaw is in any study that uses the knockout model.

(Francez 2007: 60)

In (225b), the free choice *any* in *in any study that...* cannot be licensed without the existential structure that is available in (225a). Francez (2007: 60) argues that "if codas are predicates, it is completely mysterious why they should license free choice *any* when postcopular predicates do not." Ultimately, the author claims that "codas behave semantically not like predicates, but like modifiers" (Francez 2007: 58). Francez proves this point by showing that there are some codas in existential constructions that have readings which are unable to be parsed by copular predicates, as with (226):

(226) Coda PP Predicates

a. There is space in the margin.

b.?? Space is in the margin. (Francez 2007: 52)

For examples like (226), Francez (2007) claims that while "existentials can express part-whole/constitution relations," as in the *space* is a part of the *margin*, the same relation does not hold "between a subject and a predicate in a copular clause" like (226b) where the *space* is no longer necessarily a constitutive part of its *margin* (Francez 2007: 53). This type of part-whole relationship adds to the argument that locative phrase codas in existential

[9]See Chapter 4 for an overview of codas as elements of existential constructions.

constructions are not the same as copular predicates; in fact, Francez (2007) claims that these part-whole relationships can be thought of as a type of possession.

If codas are not available as the predicates for an existential construction, what is? According to Francez (2007: 92), it is the existential pivot that is the predicate of its existential clause, and pivots thus denote generalized quantifiers, as in the following derivation (where P's value is a contextual domain):

(227) CONTEXTUAL DOMAIN OF ENTITIES

For every element α of type τ, let d_α be the *contextual domain* of α,
where $d_\alpha =_{def} \lambda y_{\tau'}[R_{\langle\tau,\langle\tau',t\rangle\rangle}(\alpha, y)]$

This means that, for existential pivots to be licensed in an utterance, they must be constrained by the coda which provides some contextual domain. Simply saying *There is a dog* without situating *a dog* in a spatio-temporal context causes a derivation to fail. Although codas are not obligatory, the contextual domains that they provide are, and existentialism without context cannot participate in the discourse. In fact, these contextual domain expressions do not need to be stated explicitly if their spatio-temporal context is recoverable from the larger discourse.

The following derivation shows that an existential pivot like *a prophet* must be bound by P, the contextual domain:

(228) Francez (2007) Existential Derivation

a. 'There is a prophet.'

b. [[there is a prophet]] = [[a prophet]] = $\lambda P_{\langle e,t\rangle}[\mathbf{a}(\lambda x[\text{prophet}(x)],\ P)]$

Thus, in (229), the coda *on every ship* binds the pivot *a prophet* to a spatio-temporal domain. Codas contribute a value for R and determine a value (or range of values) for u, as shown below:

(229) Francez (2007) Existential Pivot + Coda Derivation

a. 'There is a prophet on every ship.'

b. [[on every ship]]([[there is a prophet]]) =
$\lambda P_{\langle\langle e,t\rangle,t\rangle}[\mathbf{every}(\lambda x[\text{ship}(x)], \lambda y[P(d^{on}{}_y)])]@(\lambda P[\mathbf{a}(\lambda z[\text{prophet}(z)], P)]) =$

$$\textbf{every}(\lambda x[\text{ship}(x)], \lambda y[\lambda P[\textbf{a}(\lambda z[\text{prophet}(z)], P)]])@({d^{on}}_y) =$$
$$\textbf{every}(\lambda x[\text{ship}(x)], \lambda y[\textbf{a}(\lambda z[\text{prophet}(z)], {d^{on}}_y)])$$

The above derivation shows that *on every ship* situates the pivot *a prophet* in a contextual domain, providing some spatio-temporal information thus binding it to that context.

5.2.1 Locative Constructions in Malayalam

With property concept constructions accounted for, the main issue remaining for Malayalam arises when locative PPs are the predicate complements as opposed to DP predicate complements, as in (230):

(230) Locative Constructions in Malayalam

a. *kuutti viiTil aaNu*
kuutti viiT-il aaNu-∅
child house-LOC COP-NPST
'The child is in the house.'

b. *kuutti viiTil uNTu*
kuutti viiT-il uNTu aaNu-∅
child house-LOC EXIST COP-NPST
'The child is in the house.'

For sentences like (230b) Swenson (2019) claims that there is a so-called pragmatic immediacy requirement needed for acceptability. In (231b) below, ET includes UT, whereas in (231a) there is no such implication:

(231) Locatives with Pragmatic Immediacy

a. *kerala indiayil aaNu*
kerala india-yil aaNu-∅
Kerala India-LOC COP-NPST
'Kerala is in India.'
NB: Kerala is always in India and cannot relocate. This is a general statement about its position.

b. *nyaan delhiyil uNTu*
nyaan delhi-yil uNTu
1SG.NOM Delhi-LOC EXIST
'I am in Delhi.' (Swenson 2019: 226)
NB: Right now, I am in Delhi and this statement implies this is not a general fact about my usual/expected location.

As Swenson points out, using *uNTu* instead of *aaNu* in (231a) is unacceptable since Kerala would never move from India, and it cannot participate in any immediacy reading about its location since its location is static.

Swenson (2019: 227) uses Freeze (1992) to explain the structural similarities between locative, existential, and possessive constructions that occur in Malayalam. The main claim from Freeze (1992) is that, when base word order is taken into account, the locative, existential, and possessive constructions of certain types of languages is highly predictable. Swenson summarizes Freeze's claims, noting that "the [word] order of the phrase that receives the theme theta role, and the [word order of the] phrase that receives the location theta role in locative constructions, are reversed in existential and possessive constructions." For an SOV language like Malayalam, this means that locative constructions should default to THEME-LOCATIVE-COPULA and existential/possessive constructions should default to LOCATIVE-THEME-COPULA word orders.

Freeze's syntactic account, which attempts to unify the underlying structure of locative and existential sentences, is displayed below in Figure 5.3 and Figure 5.4.

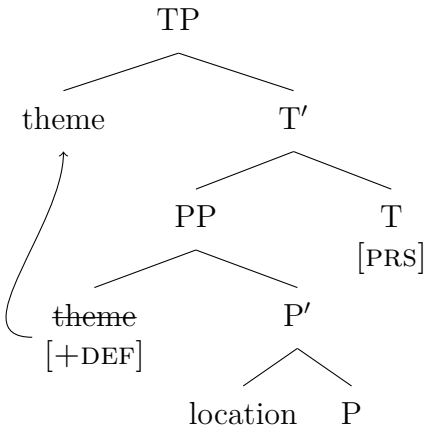

Figure 5.3: Freeze (1992) SOV Locative Structure

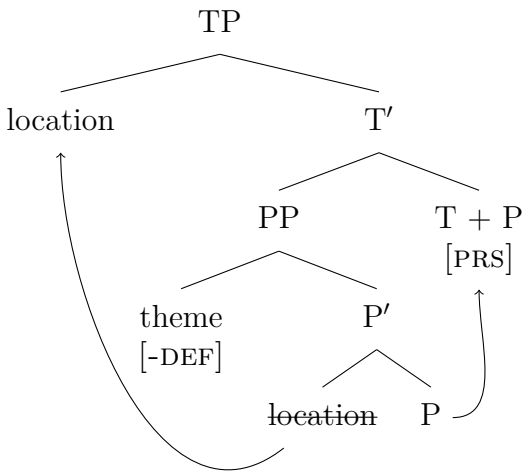

Figure 5.4: Freeze (1992) SOV Existential Structure

Swenson (2019: 227) adapts her account of these copular structures from Freeze (1992), where she claims that there is an IMMEDIACY REQUIREMENT feature that catalyzes the use of *uNTu* instead of *aaNu* in locative phrases where the two elements appear to be in overlapping distribution. Swenson (2019: 229) summarizes the proposal from Freeze (1992) that claims definite, but not indefinite, themes "can move to the Specifier [position] of the Tense Phrase," otherwise the locative argument will move there instead.

Swenson (2019: 232) modifies Freeze's analysis and exemplifies the immediacy feature that causes this particular selection of *uNTu* over *aaNu* by noting that these constructions also have certain pragmatic requirements. In this dissertation, I have claimed that this immediacy feature is actually existential focus.

In Figure 5.5, there is a noticeable absence of the aforementioned immediacy feature that is present in Figure 5.6. It is this immediacy feature that catalyzes the need for *uNTu*, according to Swenson. In opposition to the analysis I pursue in this dissertation, Swenson claims that *uNTu* generates in T and hosts the stranded tense features that need to be pronounced there.

(232) Malayalam Locative Structure Example for Figure 5.5 and Figure 5.6

nyaan *Delhiyil* *aaNu/uNTu*
nyaan Delhiy-il aaNu/uNTu
I Delhi-LOC be.PRS
With *aaNu*: 'I am in Delhi.' [general statement]
With *uNTu*: 'I am in Delhi.' [has some immediate effect] (Swenson 2019: 233)

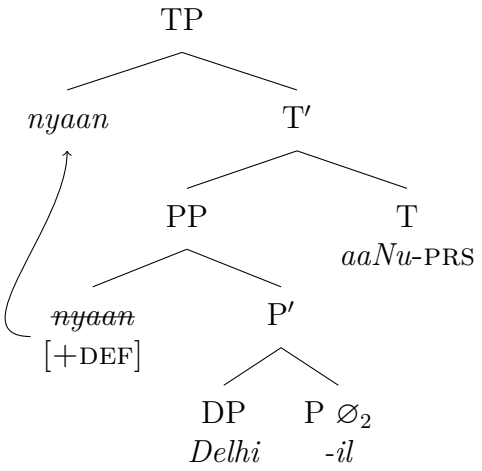

Figure 5.5: Swenson (2019) *aaNu* Locative Structure

Swenson (2017) argues in this analysis that *aaNu* generates in T to host tense, and the subject moves out of SpecPP to the subject position in SpecTP. Note that there is no immediacy requirement present in this projection.

In the following structure, Swenson (2017) postulates an immediacy feature on the PP head that causes *uNTu* to generate in T instead of *aaNu*. The subject moves to SpecTP as expected.

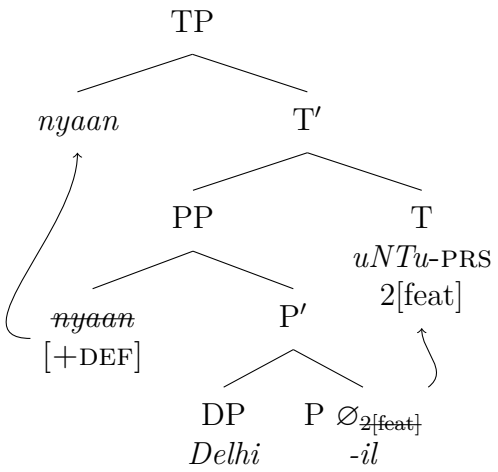

Figure 5.6: Swenson (2019) *uNTu* Locative Structure

According to Swenson (2019: 231), the word order in base existential sentences in Malayalam (provided in Figure 5.7) is driven by the locative argument's ability to move to SpecTP over the indefinite theme - which matches the pattern found in Freeze (1992). Swenson posits a null P which assigns locative case to the locative argument, and it is this "resulting agreement relationship between the Preposition head and the Tense head [that] results in the spell out of *uNTu*" (Swenson 2019: 232). Note that the same immediacy feature is present in P which triggers the presence of *uNTu* over *aaNu*.

(233) Malayalam Existential Structure Example for Figure 5.7

bencil	*puustakam*	*uNTu/*aaNu*
benc-il	puustakam	uNTu/aaNu
bench-LOC	book	be.PRS

'There is a book on the bench.' (Swenson 2019: 232)

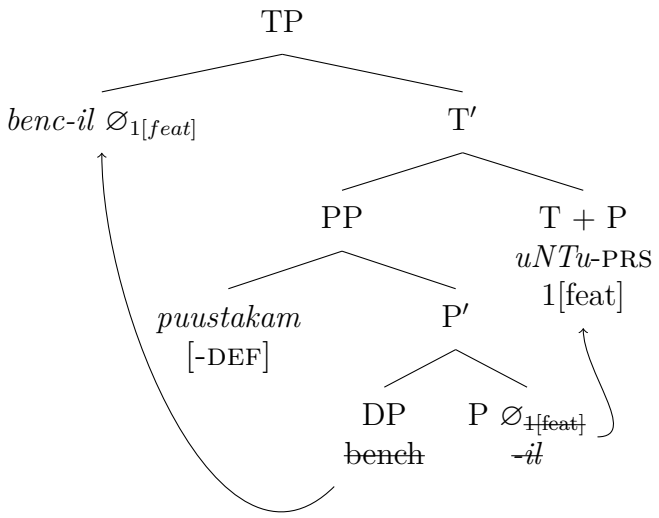

Figure 5.7: Swenson (2019) Existential Structure

For the following example, Swenson (2019: 232) claims that there is "a [+HUMAN] feature on the locative argument in the possessive structure" that triggers the locative argument to move to SpecTP. She posits a second null preposition which assigns it dative case, and just as in (233)/Figure 5.7, the P head agrees with the T head which catalyzes the spell out of *uNTu* (Swenson 2019: 232).

(234) Malayalam Possessive Structure Example for Figure 5.8

Anitakku *kaaru* *uNTu*
Anita-kku kaaru uNTu
Anita-DAT car be.PRS
'Anita has a car.' (Swenson 2019: 232) via (Menon 2016: 152)

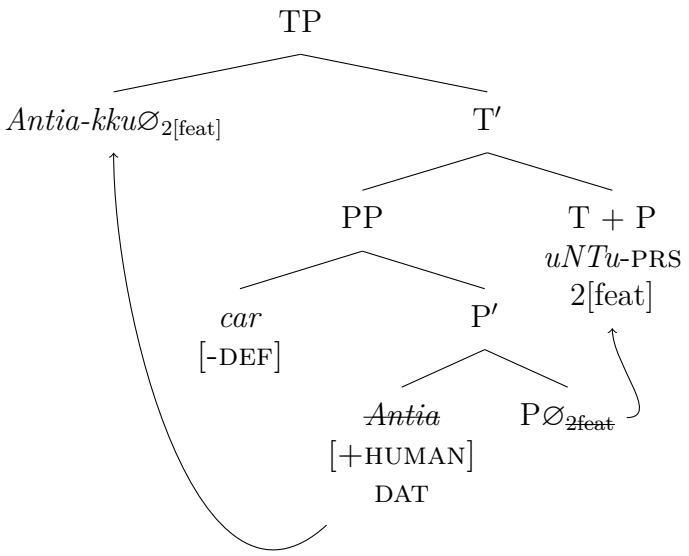

Figure 5.8: Swenson (2019) Possessive Structure

I agree that the locative structure that Swenson (2017) posits in Figure 5.5 lacks any immediacy because the sentence is a -TOP/-FOC canonical copula structure with no new information being introduced. It is a general statment that could be uttered in "out of the blue" contexts. In Figure 5.6, the immediate reading is present due to the low focus of new information that is borne from the existential structure which *uNTu* signals. Instead of an immediate, animate or [+HUMAN] distinction in Figure 5.8, I posit that, as has been previously stated, existential constructions focus new information. The pivot moves to a low-focus phrase and the PP can topicalize, as in (235b), or the PP can stay low as long as it is not dative-marked, as in (235a).

(235) Word Order Alternation in Locative Existentials

a. *puustakam* *bencil* *uNTu*
puustakam benc-il uNTu aaNu-∅
book bench-LOC EXIST COP-NPST
'There is a **book** on the bench.'

b. *bencil* *puustakam* *uNTu*
benc-il puustakam uNTu aaNU-∅
bench-LOC book EXIST COP-NPST
'There is a book **on the bench**.' (Swenson 2019: 232)

Reiterating my assertions from this and the previous chapters, I argue that the below derivation follows the PredP analysis provided in Mikkelsen (2005) while still allowing *uNTu* to generate in the required SpecFocP slot, giving it the ability to signal existential meaning in the predicate. As displayed below, there is not a topicalized subject as with specificational clauses. Instead the pivot raises due to its focus assignment from *uNTu*. Because Malayalam is verb-final, the head symmetry is manipulated below to reflect the surface structure. The following tree directly reflects the structure proposed by Mikkelsen (2005: 167) where the little v is an unaccusative small clause PredP.

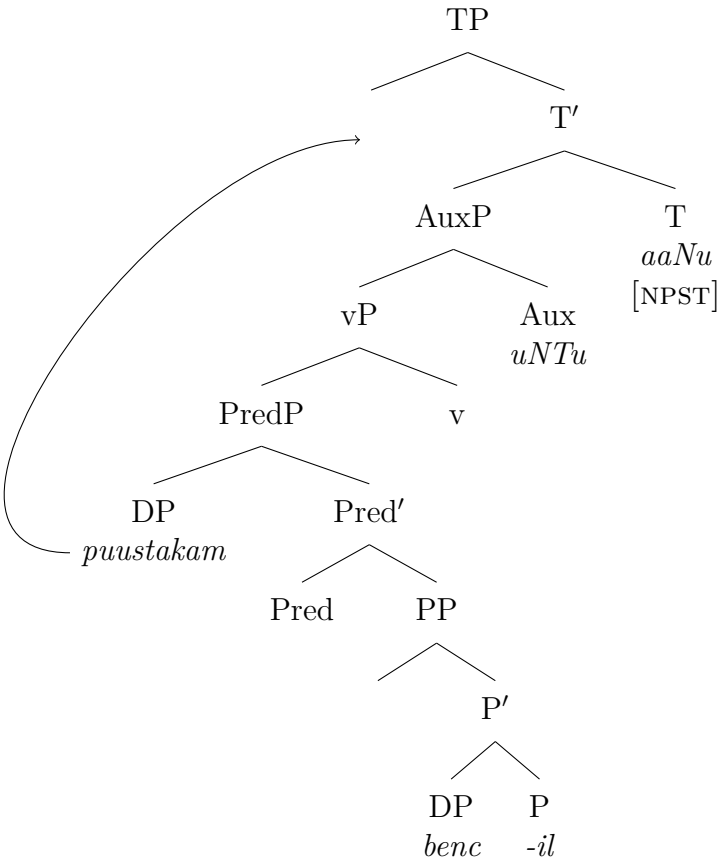

Figure 5.9: Existential Syntax in Malayalam for Example (235a)

Although the above structure proposed by Mikkelsen (2005) shows no overt ordering or assignment issues at first glance, what motivates the presence of *uNTu* and how does it signal existential focus? I argue that the low-focus structure proposed by Jung (2011) provides the answer. Instead of its own AuxP, I claim that *uNTu* generates along with the existential focus phrase. In the tree below, I incorporate Jung's low-focus phrase to show what that analysis entails:

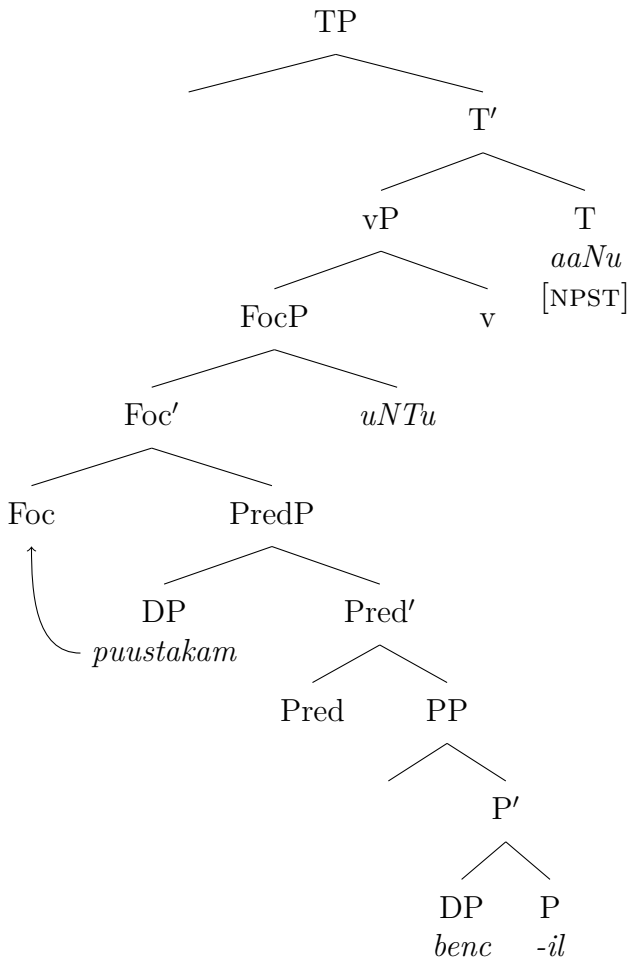

Figure 5.10: Existential Syntax in Malayalam for Example (235a) with Low-Focus Phrase

So, what is the structural trigger for the presence of *uNTu*? In Figure 5.10, it is the presence of an existential pivot. The focused DP will still be available to move into SpecTP from its SpecFoc position, so EPP is satisfied, and there are no other complications.

As has been discussed in the preceding sections, my main claim is that - overtly or covertly - *aaNu* is present in all copular sentences, be they specificational, predicational, existential, possessive, property concept, or locative. The presence of *uNTu* signals that there is an existential construction in the underlying structure of the sentence: either that it is existentially focusing some new information, or that it is creating a possession relationship between a topicalized dative PP coda and a focused possessee pivot.

(236) +*uNTu* with DP+PP: Possessive

a. *lorenkku* *puustakam* *uNTu*
loren-kku puustakam uNTu aaNu-∅
Lauren-DAT book EXIST COP-NPST
'Lauren has a book.'

b. **lorenkku* *puustakam* *aaNu*
loren-kku puustakam aaNu-∅
Lauren-DAT book COP-NPST
Intended: 'Lauren has a book.'

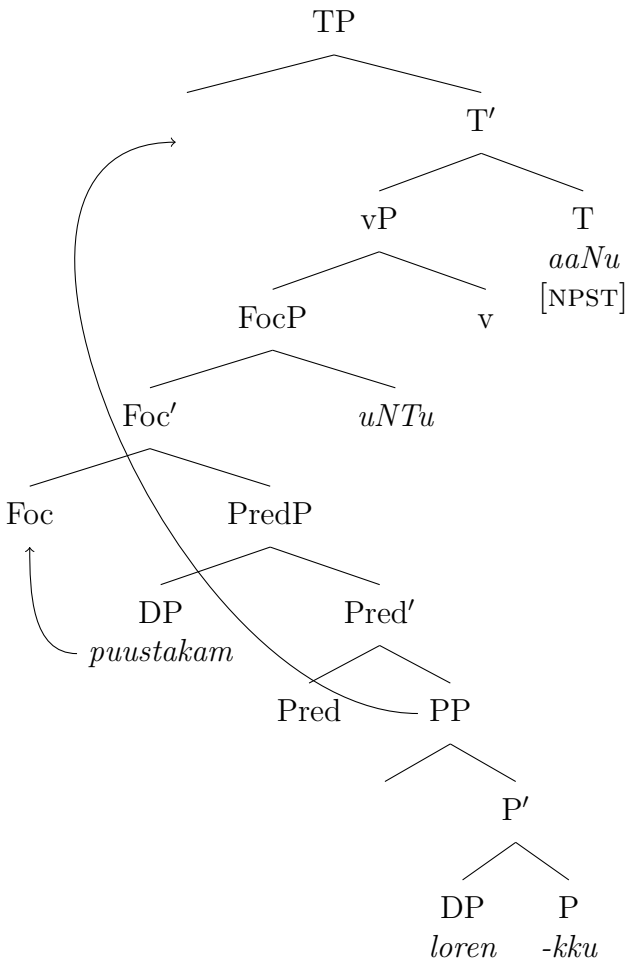

Figure 5.11: Possessive Syntax in Malayalam for Example (236a) with Low-Focus Phrase

(237) -*uNTu* with DP+DP: Specificational

a. *ticar* *loren* *aaNu*
ticar loren aaNu-∅
teacher Lauren COP-NPST
'The teacher is Lauren.'

b. **ticar* *loren* *uNTu*
ticar loren uNTu aaNu-∅
teacher Lauren EXIST COP-NPST
Intended: 'The teacher is Lauren.'

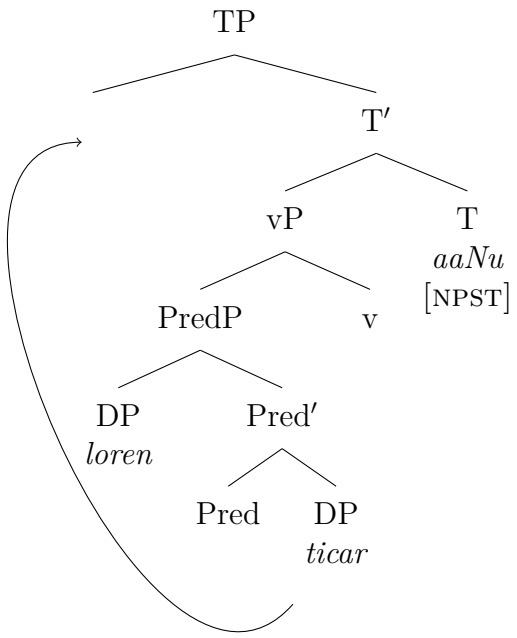

Figure 5.12: Specificational Syntax in Malayalam for Example (237a)

(238) +*uNTu* with DP+PP: Existential Focus

a. *bencil* *puustakam* *uNTu*
benc-il puustakam uNTu aaNu-∅
bench-LOC book EXIST COP-NPST
'There is a book on the bench.' (Focus reading)

b.# *bencil* *puustakam* *aaNu*
benc-il puustakam aaNu-∅
bench-LOC puustakam COP-NPST
Intended: 'The book is on the bench.' (Focus reading)

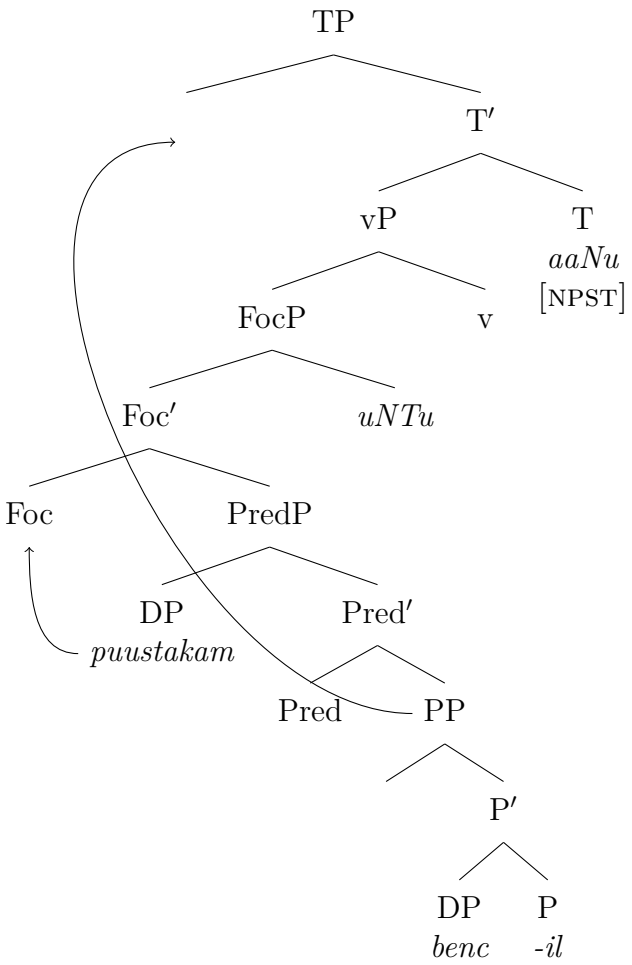

Figure 5.13: Existential Syntax in Malayalam for Example (238a) with Low-Focus Phrase

(239) -*uNTu* with DP+XP: Predicational

a. *puustakam* *bencil* *aaNu*
puustakam benc-il aaNu-∅
book bench-LOC COP-NPST
'The book is on the bench.' (Characterizing reading)

b.# *puustakam* *bencil* *uNTu*
puustakam benc-il uNTu aaNu-∅
book bench-LOC EXIST COP-NPST
Intended: 'The book is on the bench.' (Characterizing reading)
NB: Instead of a characterizing reading, this utterance produces a reading where *puustakam* is focused.

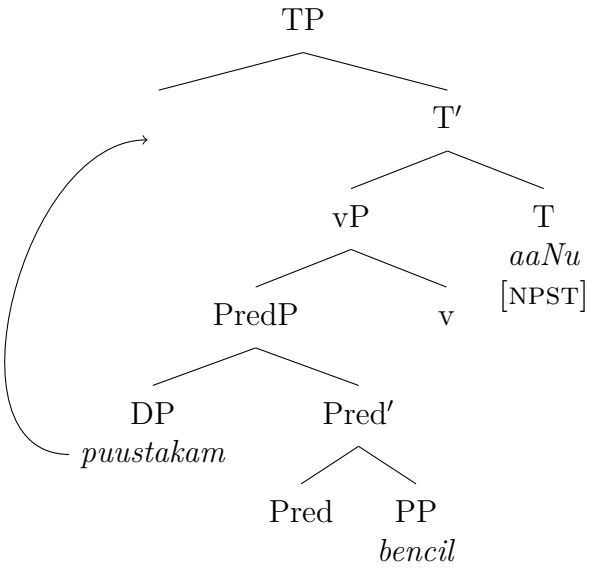

Figure 5.14: Predicational Syntax in Malayalam for Example (239a)

It should also be noted that the non-canonical word order proposed by Swenson (2017) (using Freeze (1992)) is still available with this low-focus projection, as shown in (240).

(240) +*uNTu* with DP+PP: Existential Focus

a. *bencil* *puustakam* *uNTu*
benc-il puustakam uNTu aaNu-∅
bench-LOC book EXIST COP-NPST
'The book is on the bench.' (Focus reading, PP is topicalized)

b.# *bencil* *puustakam* *aaNu*
benc-il puustakam aaNu-∅
bench-LOC book COP-NPST
Intended: 'The book is on the bench.' (Focus reading, PP is topicalized)

In this case, the non-canonical word order is triggered by the PP being topicalized since it is the information that is already available in the discourse, while *puustakam* is the new information and cannot fulfill the topic requirement on SpecTP.

As shown in the four examples and their figures above, specificational constructions pattern with *uNTu* possessive constructions, and predicational constructions can either have an *uNTu* low-focus phrase or not. Without any accompanying semantics, these trees do not provide the full picture, but the specificational/predicational semantic analysis of copular clauses proposed in Mikkelsen (2005, 2006) still applies in spite of the addition of the low-focus structure to these predicational sentences. In the next chapter, I revisit this low-focus structure from Jung (2011) to see how it applies to the motivations for dative case assignment, which in turn triggers a ownership reading. I also explain how the semantics of *uNTu* affects its structure and components.

5.3 Conclusions

This chapter displays data which show that property concept and locative sentences can be constructed with and without *uNTu*. The result of this alternation is argued by Swenson (2017, 2019) to be pragmatically motivated by an immediacy requirement; however, I argue that sentences with *uNTu* are existential. Property concept constructions come in two types

in Malayalam: canonical (*aaNu*) and possessive (*uNTu*), but the possessive constructions in Malayalam syntactically mirror existential sentences. The difference between the two is the type of coda (either dative or non-dative) that licenses the pivot.

For the case of locative constructions as existentials, I argue that locative PPs in Malayalam are existential codas and the only argument of locative constructions are existential pivots. Francez (2009) argues that the pivot of existential sentences is the predicate and the coda is a contextually determined domain over the pivot which spatio-temporally situates it in the discourse. I determine that, syntactically, all of these sentence types can be unified. In order to account for word order allowances in the language, I have also implemented the low-focus phrase that is provided by Jung (2011), and I showed that locative sentences can have word order alternations.

In the following chapter, I will go into depth on the syntactic and semantic analyses that I propose for these phenomena. Since it is not a copula, *uNTu* occupies the Focus phrase head in order to signal the existence of an existential pivot. Thus, instead of an immediacy requirement pragmatically motivating -/+[*uNTu*] alternations, *uNTu* is correlated with topic/focus information structure in the syntacto-semantic interface of its clauses.

Chapter 6

Theoretical Analysis of *uNTu*

This chapter aims to provide a theoretical proposal for the structure and meaning of *uNTu* and the meanings that arise from clauses in which it occurs. My hypothesis states that Malayalam *aaNu* and *uNTu* constructions are copular in nature, and in all of those copular sentences, *aaNu* is present either overtly or covertly. However, *uNTu* only appears in conditions where there is some focus material; either via existential meaning or through possessive relationships. I show that *uNTu* cannot host tense, aspect, or mood morphology, and that it cannot appear in a phrase without *aaNu* to provide the necessary concatenative environment to host inflectional morphemes. I argue that *aaNu* is the copula and *uNTu* is an existential pivot auxiliary.

I propose that there are particular conditioned environments that require the presence of *uNTu*, copied from Chapter 4 for convenience:

(241) Requirements of *uNTu*

a. *aaNu* is present overtly or covertly in all *uNTu* constructions.

b. All *uNTu* constructions are existential clauses.

c. When there is an overt coda, it will either be assigned dative case by a PP head for possessive clauses, or it will be a locative PP construction for clauses with existential meaning.

Although *uNTu* clauses are conditioned in this way, copular sentences without *uNTu* are the unconditioned elsewhere case. Locative and property concept sentences without *uNTu*

do not have special existential focus constraints[1], and do not communicate any existential meaning.

In the sections that follow, I will discuss my analysis in detail, including my decision to categorize *uNTu* morphologically as the existential pivot auxiliary, the implications of my syntactic analysis that was introduced in the previous chapter, and the semantic mapping to the syntax of existential clauses.

6.1 Morphological Categorization of *uNTu*

Since I claim that *uNTu* is not a copula, I must provide a new morphological categorization for it. In Chapter 4, I entertained the possibility that *uNTu* may be a proform, but - without defining the features and restrictions of existential proforms in Malayalam - it is just an arbitrary categorization. I would like to abandon this classification, because of the possible confusion it would cause, since *uNTu* is not deictic nor does it seem to provide any agreement features or referent relationship that may be required of some pro-form of another kind (pro-noun (*they, we, it*), pro-verb (*do*), etc.). Instead, in Chapter 5, I label it as an EXISTENTIAL PIVOT AUXILIARY with the specific meaning of EXIST and the syntactic function of FOCUS. The term "existential pivot auxiliary" is not meant to be borrowed from any other work[2]. It is simply a descriptive label for the morpheme *uNTu* and, potentially, any morphemes with the same syntacto-semantic pattern. The definition is provided below:

(242) EXISTENTIAL PIVOT AUXILIARY
An existential pivot auxiliary is a morpheme or combination of morphemes which introduce the pivot of an existential construction. It provides focus phrase structure as a landing site for the new information in the pivot, and semantically it assigns the meaning EXIST to the predicate.

[1]Importantly, *aaNu* can still exist without *uNTu* with focused material, but the copula cannot do the job of providing existential or possessive meaning without *uNTu*. Also, *aaNu* is still the only morpheme of the two which can provide contrastive focus (or contrastive topic) via cleft constructions, as discussed in §3.4.

[2]There may be a term that exists for this type of morpheme, like "focus marker" or something that highlights its ability to signal existential focus structure, but since other types of syntactic focus do not use *uNTu*, I chose to promote its relationship to existential syntax and semantics.

In Malayalam, the pivot cannot exist on the surface without an overt pivot auxiliary:

(243) *uNTu* is Obligatory in Existential Sentences

a. *pratiikSa uNTu*
pratiikSa uNTu aaNu-∅
hope EXIST COP-NPST
'There is hope.'

b. **pratiikSa aaNu*
pratiikSa aaNu-∅
hope COP-NPST
Intended: 'There is hope.'

c. **pratiikSa*
pratiikSa
hope
Intended: 'There is hope.'

As shown in previous chapters, unlike auxiliary verbs, *uNTu* cannot host TAM/Agree information. Instead, its job is to signal that the underlying information structure of the clause is changed. I will discuss how this is accomplished syntactically and semantically in the following sections.

6.2 Structural Composition of *uNTu* Clauses

I explore a number of theories from various sources in the earlier chapters of this dissertation, and I will briefly reiterate the key observations from those discussions here. For predicational and specificational copular syntax and semantics, I adopt the formalism from Mikkelsen (2005, 2006). The discussion of the two types of copular clauses hinges upon the following statements. As referenced from Chapter 3, there are two types of copular clauses: specificational and predicational. Specificational clauses necessitate that the subject is the topic of the clause, and in predicational clauses, the subject is a referential argument. Predicational copular clauses are the unconditioned phrase, or the elsewhere condition for copular clauses, and specificational clauses are the special case. In a specificational clause, the sub-

ject must be topic and the complement is focus, so these types of clauses have a fixed focus structure.

Syntactically, for a specificational clause, Mikkelsen (2005) claims that a structure like Figure 6.1[3] is required in order to have the low DP subject topicalize up to SpecTP.

(244) Specificational Clause (via Mikkelsen (2005: 188)):
The actress is Ingrid Bergman.

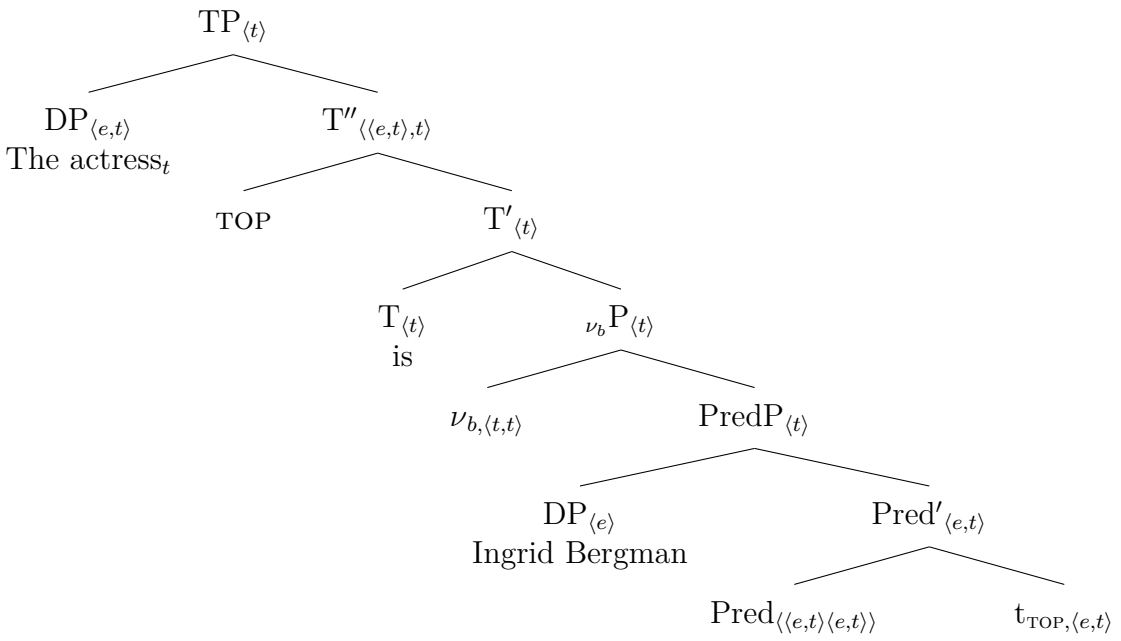

Figure 6.1: Mikkelsen (2005) Specificational Clause Structure

A key feature of this analysis is that the low DP is essentially a small clause construction where *the actress* is a full $\langle e, t\rangle$ domain. In Malayalam, specificational copular clauses are of the type [-*uNTu*]. This is shown in (245)[4]:

(245) -*uNTu* with DP+DP: Specificational

a. *ticar* *loren* *aaNu*
ticar loren aaNu-∅
teacher Lauren COP-NPST
'The teacher is Lauren.'

[3]Repeated from Figure 3.1
[4]Repeated from (237).

b. * *ticar* *loren* *uNTu*
ticar loren uNTu aaNu-∅
teacher Lauren EXIST COP-NPST
Intended: 'The teacher is Lauren.'

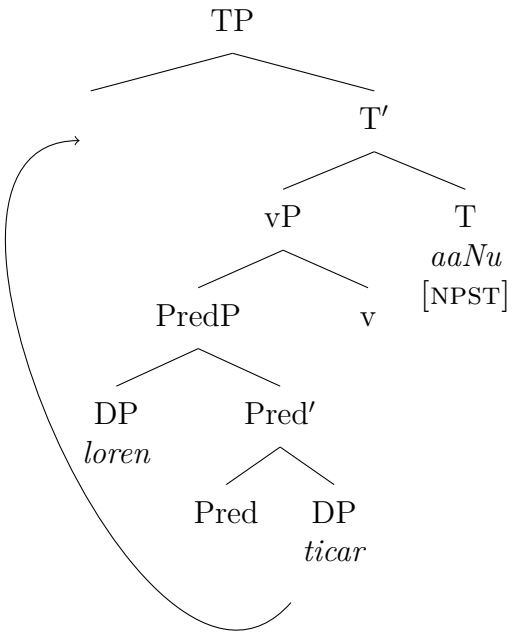

Figure 6.2: Specificational Syntax in Malayalam for Example (245a)

This tree shows that Mikkelsen's topic-raising proposal for the lower DP_{pred} is possible. For Malayalam, the expected word order is SOV, so for *ticar* 'the teacher' to be in the initial position tells us that it must be higher in the structure and so it is: it moves to SpecTP and carries with it the required topic assignment.

This same structure with *uNTu* cannot yield the same translation, since *uNTu* forces existential focus on a pivot DP and a coda PP, as shown below[5]:

[5]Copied for convenience from (236).

(246) +*uNTu* with DP+PP: Possessive

a. *ticarkku* *klassil* *loren* *uNTu*
ticar-kku klass-il loren uNTu aaNu-∅
teacher-DAT class-LOC Lauren EXIST COP-NPST
'The teacher has Lauren in the class.'

b. * *ticarkku* *klassil* *loren* *aaNu*
ticar-kku klass-il loren aaNu-∅
teacher-DAT class-LOC Lauren COP-NPST
Intended: 'The teacher has Lauren in the class.'

In (246a), *loren* 'Lauren' is still the focused, new information. How do we account for this divergence? I claim that this variation is caused by the inclusion of *uNTu* and its ability to provide a low-focus position (as in Jung (2011)), which yields the following structure[6]:

[6]Repeated from Figure 5.11

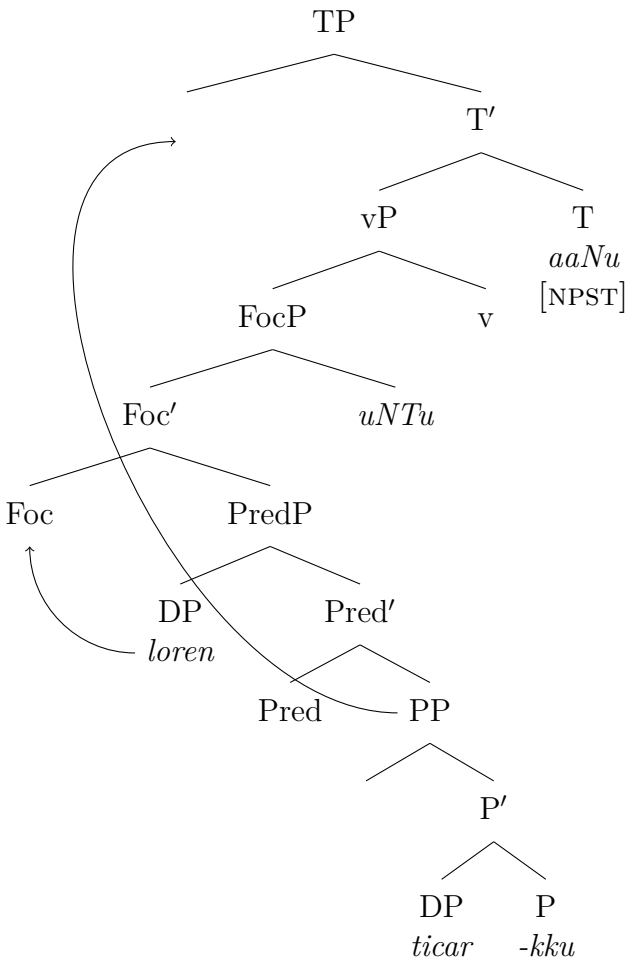

Figure 6.3: Possessive Syntax in Malayalam for Example (246a) with Low-Focus Phrase

When *loren* gets focalized, it shifts into a generalized quantifier. The coda, *ticarkku* provides a contextual location for *loren* to exist. As mentioned previously, the analysis proposed by Jung (2011) requires that the logical subject (the locative coda in this case) is the "sentence initial PP denoting the domain of existence of the entity" (Jung 2011: 91) and that possession is ultimately a case of existentialism, where (in normal existential constructions) the subject is focused as the new information, prompted by its existing, in possessive constructions, the possessee is the new information. So, Jung (2011: 91) insists that there must be a LOW-FOCUS structure available to host the possessee, and that "in this respect, the possessive/existential

construction involving the possessive/locative phrase as their essential component should be regarded as non-thetic, containing a low focus phrase devoted to the narrowly focused item."

So, the next question that comes from this analysis is: why is there a dative possessor? The structure proposed above allows the lower material to retain its focus environment, but it does not provide any answers for the dative subject in these Malayalam external-possessive sentences.

To explain how Malayalam gets its word order where the dative coda must be in the topic position, I will maintain that clauses with *uNTu* are still copular clauses, but that the existential that it provides is either stage-level or individual-level predication, as proposed by Husband (2012).

Husband (2012: 9) claims that existential interpretation is "an interpretation where a new individual who was not presupposed in the context or shared as a part of the common ground is introduced into the discourse." If I am claiming that *uNTu* has a meaning of EXIST, then its sentences should pattern with *exist* sentences as well. Existence is location-independent (as shown in (247)), but Husband (2012: 53) points out that, in English, if "the location is somehow tied to the existence of the individual, then locative modification would become acceptable." This idea of some locative phrase - or coda of an existential construction, for instance - having a modificational effect on the existential pivot is also borne out in Francez (2007) for Modern Hebrew, where the locative coda provides a contextual domain over the pivot (which I will discuss at length in the following section).

(247) *uNTu* = [[EXIST]]

a. *pambukaL* *uNTu*
pambu-kaL uNTu aaNu-∅
snake.NOM-PL EXIST COP-NPST
'There are snakes.'/'Snakes exist.'

b.# *palapoLuum* *pambukaL* *uNTu*
palapoLuum pambu-kaL uNTu aaNu-∅
often snake.NOM-PL EXIST COP-NPST
Intended: 'There are often snakes.'/'Snakes often exist.'
NB: This reading is only acceptable when snakes are contextually spatially situated.

In (247b), it is impossible to get a generic reading where snakes as a general set of entities in some world only pop into existence every now and then, whereas if some snakes are often in some field - and are contextually and spatially constrained - then the reading is acceptable. How does this tendency for spatio-temporal constraint affect its possessive interpretation in DP + PP existential environments? I claim that the new information (which I am claiming is +FOCUS) being introduced by the existential is the possessee. So, in (248), the possessee exists in some low-focus position (per Jung (2011)) because it is the new information for the discourse whereas the possessor is pre-contextualized:

(248) *enikku* *naaya* *uNTu*
enikku naaya uNTu aaNu-∅
1SG.DAT dog EXIST COP-NPST
'I have a dog.'

To reiterate, in (248), *enikku* is the known information and *naaya* is the new information that is situated in some low-focus structure, as is seen in examples[7] from Jung (2011). So, using a structure like the one found in that analysis, (248) would have a structure like Figure 6.4:

[7]Shown in Figure 5.1.

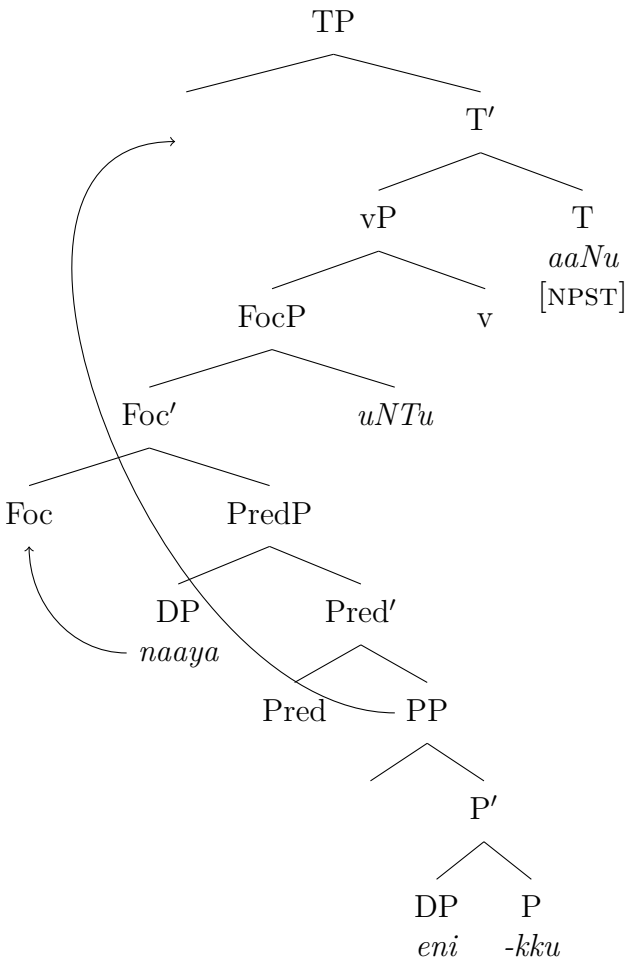

Figure 6.4: Low-Focus Syntax in Malayalam

As this tree shows, the possessor *enikku* is assigned dative case[8] and satisfies the +AFFECTEE role in SpecTP. The possessee *naaya* moves to the low focus position. The *aaNu* and *uNTu* heads may mirror onto the other side so that the sentence can retain SOV word order, but I have decided to show this syntactic derivation in-line to match the structure provided in Jung (2011). Moreover, in relation to what is proposed in Husband (2012), this is still a stage-level predicate where new information is focused by the existential pivot auxiliary.

[8]The concatenation

But, one problem still exists: why do some possessees show accusative case assignment, as in (249)? In Malayalam, animates are marked for the accusative and inanimates[9] are not:

(249) Dative, Accusative, *uNTu*

a. *avaLkku* *enne* *uNTu*
avaL-kku enne uNTu aaNu-∅
3SG.F.DAT 1SG.ACC EXIST COP-NPST
'She has me.'

b. * *avaLkku* *nyaan* *uNTu*
avaL-kku nyaan uNTu aaNu-∅
3SG.F.DAT 1SG.NOM EXIST COP-NPST
Intended: 'She has me.'

Accusative case is assigned in the DP in which the possessee generates. But, having only a dative and an accusative argument in a sentence violates the case hierarchy which predicts that if case is assigned, it will be nominative. It could be the case that Malayalam, which is a pro-drop language, has some null subject in existential constructions which checks nominative case and then moves up to a SpecCP position when topicalized.

(250) Null Subject

a. *avaLkku* *enne* *uNTu*
PRO avaL-kku enne uNTu aaNu-∅
EXPL.NOM 3SG.F.DAT 1SG.ACC EXIST COP-NPST
'She has me.'

The glaring problem here is that existential constructions only license one argument. Additionally, Malayalam does not have overt agreement on its verbs, so agreement with person and number are not available for interpretation. Nizar (2010: 32) addresses this issue by claiming that although an indirect object analysis would explain the case assignment, it fails to explain why examples like (251) are perfectly grammatical. The author claims that these sentences should not be grammatical because "the dative NP is an indirect object and there is a null pleonastic pronoun that is the syntactic subject" (Nizar 2010: 32):

[9]The term ANIMATE here refers to classes of nouns and does not necessarily depend on any "living" or "moving" animation.

(251) Dative Control over and by Nominative NP

a. *avaL* *oruu* *manikkoor* *odiyiTTu* *daahiccuu*
avaL-$\varnothing_i$ oruu manikkoor odiyiTTu PRO_i daahiccuu
3SG.F-NOM one hour run.PTCP 3SG.F be.thirsty.PST
'She ran for one hour and (she) became thirsty.' (Nizar 2010: 32)

b. *avaLkku* *daahicciTTu* *vellam* *kuTiccuu*
avaL-kku$_i$ daahicciTTu PRO_i vellam kuTiccuu
3SG.F-DAT be.thirsty.PTCP 3SG.F water drink.PST
'She became thirsty and drank water.' (Nizar 2010: 32)

Nizar (2010) claims that these examples show that the nominative pronoun *avaL* can control the dative PRO in (251a), and that the dative-marked *avaLkku* controls the nominative PRO in the lower clause in (251b). So, why is this allowed? Nizar (2010: 33) claims that "behavioral properties are acquired prior to coding properties," so an +AFFECTEE behavior would be licensed before case. Thus, Nizar (2010: 34) argues that "the restriction against object control of datives is semantic in nature" - not syntactic. Control, in this instance, is "determined by thematic roles assigned by some head." So, if this is true, verbs should not be able to assign dative to actional complements - only to experiencer complements. This is exactly what we observe. In (252a), the dative subject is an experiencer, but in (252b), there is a clash because while the sociative case is needed for an embedded clause for the verb *parayaan* 'to tell,' the dative is also needed because the embedded subject *avaL* is still an experiencer. Thus, if two cases need to license the same argument, the derivation fails:

(252) Double Case Marking is Unavailable

a. *avaLkku* *santooSam* *toonuunnuu*
avaL-kku santooSam toonuunnuu
3SG.F-DAT happiness feel.PRS
'She feels happiness.' (Nizar 2010: 35)

b. * *avan* *avaLootu* *santooSam* *toonaan* *paranynyuu*
avan-$\varnothing$ avaL-ootu$_i$ PRO_i santooSam toonaan paranynyuu
3SG.M-NOM 3SG.F-SOC 3SG.F happiness feel.INF tell.PST
Intended: 'He told her to feel happiness.' (Nizar 2010: 35)

Nizar (2010: 35) claims that this example of equi-NP deletion failing for the dative subject *avaL* in the embedded clause of (252b) shows that "verbs that allow for object control

necessarily select for actional complements which eliminates dative subject constructions as possible complements" because of their inherent undergoer meaning. Nizar only targets experiencer predicates like (252a), but in my analysis, property concept constructions with *uNTu* (like (253a)) and possession constructions with *uNTu* (like (253b)) are one and the same structure: existentials.

(253) a. *enikku* *santooSam* *uNTu*
enikku santooSam uNTu aaNu-∅
1SG.DAT happiness EXIST COP-NPST
'I am happy.'
Literally: 'I have happiness.'

b. *enikku* *naaya* *uNTu*
enikku naaya uNTu aaNu-∅
1SG.DAT dog EXIST COP-NPST
'I have a dog.'
Literally: 'There is a dog for/at me.'

Thus, the dative coda that is assigned case by the PP head has different restrictions than dative assignment in non-existential constructions.

6.3 Semantic Composition of *uNTu* Clauses

In the previous chapter, I argue that Malayalam constructs locative sentences with either *aaNu* for general readings or *uNTu* for focus readings.

(254) -*uNTu* with DP+XP: Predicational

a. *puustakam* *bencil* *aaNu*
puustakam benc-il aaNu-∅
book bench-LOC COP-NPST
'The book is on the bench.' (General reading)

b.# *puustakam* *bencil* *uNTu*
puustakam benc-il uNTu aaNu-∅
book bench-LOC EXIST COP-NPST
Intended: 'The book is on the bench.' (General reading)
NB: Instead of a general reading, this utterance produces a focus reading where *bencil* is new information and *puustakam* already exists in the discourse.

(255) +*uNTu* with DP+PP: Existential Focus

a. *puustakam* *bencil* *uNTu*
puustakam benc-il uNTu aaNu-∅
book bench-LOC EXIST COP-NPST
'There is a book on the bench.' (Focus reading)

b.# *puustakam* *bencil* *aaNu*
puustakam benc-il aaNu-∅
book bench-LOC COP-NPST
Intended: 'There is a book on the bench.' (Focus reading)
NB: Instead of a focus reading, this utterance produces a general reading where no focus affects are occurring.

As shown in (255), there is some focus restriction that occurs with *uNTu*. According to Francez (2009), and discussed briefly in Chapter 4, the locative phrase in existential sentences is the coda, and the entity being located is the pivot. More than that, Francez (2009: 2) argues that pivots are the predicates of their clauses, and codas are contextual modifiers. Their semantic contribution and their role in the sentence, is that of frame adverbials (much like the dative PPs and locative PPs in *uNTu* clauses). Sometimes codas are quantifiers which scope over the existential quantification over events in the sentence they modify Francez (2009: 9). So, in (256), *There are monsters* is the bare existential and *in the closet* is the contextually-limiting coda.

(256) There are monsters in the closet.

Francez (2009) aims to prove this claim by using tests with (i) the licensing of "free choice" *any*, (ii) the interpretation of free relatives, and (iii) the interpretation of duration PPs. I will use Malayalam data to explore these tests and the related framework provided by Francez (2009) in order to show that *uNTu* locatives are in fact typical existential sentences.

6.3.0.1 Licensing Free Choice *any*

Francez (2009: 37) claims that codas license free choice *any*, as in (257):

(257) a. There's a drummer in any punk band.
b.?? A drummer is in any punk band.

(Francez 2009: 37)

Example (257a) shows that the coda *in any punk band* accepts the licensing of *any*, but the predicate locative in (257b) is not able to produce the same acceptability. Free choice *any* has the possibility for a generic indefinite reading since (257a) can be paraphrased with the generic indefinite phrase in (258) (Francez 2009: 38).

(258) a. There's a drummer in any punk band.
b. There's a drummer in a punk band.

The generic reading in (258b) is available in (258a) as well, so Francez (2009: 38) concludes that a coda that allows for free choice *any* licensing can be interpreted as a quantificational coda with generic quantification. This use of *any* "entails that codas can contribute a restriction to a quantification not explicitly contributed by the NP in the coda" (Francez 2009: 38). This means that codas can be mapped to sentential adverb phrases as well, like (259):

(259) a. There is usually a zoo-keeper in a zoo.
b. $\textsc{usually}_x[\text{zoo}(x)]\ [\mathbf{a}(\lambda y[\text{zoo-keeper}(y)], <_x)]$

This formula shows that the adverb *usually* is what modifies the scope of the coda, even though that information is not "explicitly contributed" by *zoo* in the coda *in a zoo* (Francez 2009: 38). The author contrasts the existential reading from (259) with that of a copular clause (i.e. non-existential reading) in (260):

(260) A zoo-keeper is usually in a zoo.

According to Francez (2009), the subject *a zoo-keeper* in (260) forms the restriction for the quantificational adverb. In the existential clause in (259a) on the other hand, the DP *zoo* in the coda forms the restriction, and the DP *a zoo-keeper* is part of the scope. This is exactly what we would expect to see from the coda in an existential sentence if it was indeed a modifier. For copular clauses like (260), the subject *a zoo-keeper* is the topic. Francez (2009: 39) says that we should expect, then, that "the relevant NP is mapped to the scope in an existential, [but instead] to the restriction in a copular clause." This variation in the information structure contributes to the different interpretations of existentials and non-

existential copular clauses. As a reminder, pivots are the focused elements of an existential clause as well as the main predicates. In contrast, codas are sentential modifiers.

For Malayalam, this would mean that the reason why we see the focus variation in examples like (261), or the immediacy readings, is due to the fact that there is a bare existential pivot being modified by a coda. This pivot is its own sentential phrase, and the coda - while it does constrain the scope of the pivot - is ultimately an optional component.

(261) +*uNTu* with DP+PP: Existential Focus

a. *puustakam* *bencil* *uNTu*
puustakam benc-il uNTu aaNu-∅
book bench-LOC EXIST COP-NPST
'There is a book on the bench.' (Focus reading)

b.# *puustakam* *bencil* *aaNu*
puustakam benc-il aaNu-∅
book bench-LOC COP-NPST
Intended: 'There is a book on the bench.' (Focus reading)
NB: Instead of a focus reading, this utterance produces a general reading where no focus effects are occurring.

Example (261a) locates the pivot, *a book*, at a coda, *on the bench*. However, in (261b), there is no pivot predicate - it is the locative phrase that is the predicate. The subject *the book* cannot be sentential. It does not have the ability to participate in the kind of small clause reading that the pivot in (261a) does. In (261b), without *on the bench*, there is no predicate available for interpretation.

6.3.0.2 Free Relatives

According to Francez (2009: 39), "free relatives receive different interpretations when they function as codas." This is shown in (262) where the phrase, *where I come from*, is the free relative:

(262) a. There is a zoo where I come from.
b. A zoo is where I come from.

(Francez 2009: 39)

The free relative in (262a) reads as if it was the PP, *in the place from which I come*, (Francez 2009: 40), so if I come from Houston, (262a) entails that there is a zoo in Houston. But, (262b) cannot provide that same reading. The free relative in (262b) is instead interpreted as an NP as in, *the place I come from*. Francez points out that this NP "is predicated of the subject, *a zoo*, and the sentence is true iff some zoo is the place I come from" (40). Francez (2009: 40) concludes that "as far as the semantic contribution of codas and their semantic relation to pivots is concerned, free relatives following a pivot are indistinguishable from paradigmatic PP codas." In simpler terms, the free relative in (262a) can only be replaced by some PP, and the free relative in (262b) can only be replaced by some NP.

These types of generalizations about free relatives lead to some problems. Francez (2009) points out that the restrictions on codas from McNally (2011) are that codas must express some spatiotemporal information in order to follow the claim that "codas are restricted to stage-level" predication which should not allow for temporal binding. However, Francez (2009: 43) asserts that "NP interpretations for free relatives can involve temporally bound properties (as in (263a)), and when they do they are still unavailable for codas (as in (263b)):"

(263) a. Until last year, a downtown bus station was where I used to live.
b. Until last year, there was a downtown bus station where I used to live.
(Francez 2009: 43)

So, the (263a) free relative *where I used to live* spatiotemporally binds to the subject - entailing that I lived at the bus station, but it does not provide that same reading in (263b) - wherein I have the possibility to not have been living at a downtown bus station. It is possible instead that I lived in Houston and they removed a downtown bus station there last year.

It goes beyond the scope of this dissertation to adequately test this free relative behavior, but example (264) may at least be able to corroborate the argument in Francez (2009: 43) that free relatives provide scope for the pivot in existential clauses.

(264) a. *nyaan taamasicciiruunnaa oruu viiTuNTu*
nyaan taamasicc-ii-r-uunnuu-aa oruu viiT-uNTu aaNu-∅
1SG.NOM live-PST-E-IPFV-REL ART house-EXIST COP-NPST
'There is a house where I used to live.'

b. *nyaan oruu viiTil taamasikkaaruNTaayiiruunnuu*
nyaan oruu viiT-il taamasikk-aar-uNTu-aa-y-ii-r-uunnuu
1SG.NOM ART house-LOC live-HAB-EXIST-COP-E-PST-E-IPFV
'I used to live in a house.'

We have made no claims yet in this dissertation about scope for *uNTu*, but the difference between the existential sentence with the free relative in (264a) and the copular predication in (264b) without the free relative shows that both sentences have an existential operator acting on them. The free relative is morphologically marked by the relativizer *-aa*.

What this means for Malayalam's *uNTu* situation is that we should expect codas to not be of the form DP and instead to be of the form PP. In fact, this may provide some support for the use of the dative subject in [+*uNTu*] property concept clauses - which I have likened to possessive structures:

(265) a. *avaL prameha roogi aaNu*
avaL prameha roogi aaNu
1SG.F.NOM diabetic patient COP
'She is diabetic.'
Literally: 'She is a diabetic patient.'

b. *avaLkku prameham uNTu*
avaL-kku prameham uNTu aaNu-∅
1SG.F-DAT diabetes COP-NPST
'She is diabetic.'
Literally: 'She has diabetes.'

The literal translation of (265b) to be equivalent to *There is diabetes for/at her*, where *avalkku* is our PP coda and *prameham uNTu* is our pivot predicate which is being modified by the coda. These findings from Francez (2009) restrict my analysis of *uNTu* possessive sentences - if I plan on interpreting them with some existential force - to never being able to have a DP nor AP coda. Thus, the dative marking in possessive constructions should be obligatory, because it is a PP coda structure.

6.3.0.3 Duration PPs

Francez (2009: 44) uses PPs that relate duration, like *until noon* or *for an hour*, to contrast between existential codas and copular predicates. The author claims that "PPs receive a durational interpretation as post-copular predicates, but as codas they are ambiguous between this reading and one in which they locate a situation within some temporal coordinates" (Francez 2009: 44). This contrast is shown in (266a) where *until December* provides an ambiguous reading which can be either that exactly one strike started before December - independent of when it ended - or that one strike lasted until December. But, for (266b), *until December* can only mean that the strike lasted until December. So, if one strike ends before December 1^{st}, (a) is still true but (b) is false:

(266) a. There was exactly one strike until December.
b. Exactly one strike was until December.
(Francez 2009: 44)

So, for (266a), it could be that until December there was one strike, but then on December 1^{st} two more started up, or it could be that the one strike lasted until December and then stopped. According to Francez (2009), Hebrew shows the same semantic pattern:

(267) a. *yeS harbe tisot ad xacot*
EXIST many flights until midnight
'There are many flights until midnight (but few later).' (Francez 2009: 44)
b. ?*harbe tisot hen ad xacot*
many flights COP.3PL.F until midnight
'Many flights are/run until midnight.' (Francez 2009: 44)

Francez claims that the reading in (267b) shows that only a durative reading is possible, but (267a) can have a punctual reading - as in (268a):

(268) a. He was sick until last night. [Durative]
b. He didn't arrive until last night. [Punctual]
(Francez 2009: 45)

Francez claims that this durative/punctual distinction is related to telicity. The durative interpretation in (268a) is an atelic sentence while (268b) is telic.The author sums up this

argument, claiming that "in a copular clause, a duration-PP contributes a property of events, the property of having a certain duration (for example, having a duration with a specific right boundary)." On the other hand, "in existentials, [...] codas are modifiers. Thus, the contribution of a duration-PP coda is, as with all temporal modifiers, to locate an eventuality or a time within some temporal coordinates" (Francez 2009: 45).

In Malayalam, this same distinction between copular PP predicates and existential codas is borne out in a similar way. In (269a), the meaning is ambiguous. Either two employees will be here until Friday when more then arrive, or two employees will be here until Friday and then they will leave. However, in (269b) two employees will not be mine after Friday.

(269) a. *raNTu jiivanakkaar veLLiyaazhica vare iviTe uNTaakuum*
raNTu jiivanakk-aar veLLiyaazhica vare iviTe uNTu-aak-uum
two work-NMLZ Friday until here EXIST-COP-MOD
'There are two employees here until Friday.'

b. *raNTu jiivanakkaar veLLiyaazhica vare ende aayirikkuum*
raNTu jiivanakk-aar veLLiyaazhica vare ende aa-y-irikk-uum
two work-NMLZ Friday until 1SG.GEN COP-CONT-MOD
'Two employees will be mine until Friday.'

Interestingly, the copular sentence in (269b) has the continuous marker *irikk-* - which is absent on (269a) - but there is no durative marker *-kondu*. As a reminder from §2.4.3 that if *-kondu* was present, the employees would still need to be mine at UT. However, the punctual reading that Francez (2009) predicts would prevent that.

Based on the framework outlined in Francez (2009), *uNTu* clauses fit into the expected existential framework. Since PP codas of existential constructions are not obligatory, and since they are modifiers, then we can conclude for Malayalam what Francez (2009) concludes in general: "existentials serve to assert about a certain contextual domain, such as a spatio-temporal location" and that "codas provide further evidence that context-sets must also be made available for binding" meaning that their contribution to existential clauses is semantic in nature. This allows *uNTu* locatives - which other authors have argued overlap with (copular) *aaNu* locative constructions - to be classified as existential sentences with a

different underlying structure with different semantic contexts than those of a non-existential nature.

6.3.1 Possessive Semantics in Malayalam

The previous section brought up a questionable topic surrounding possessive constructions in Malayalam that are obligatorily marked with the dative case. I asserted that we should expect codas to not be of the form DP and instead be of the form PP. In order to test this assertion, I will use the Lexical Semantic Variation Hypothesis outlined by Francez and Koontz-Garboden (2015, 2016, 2017) which states that possessive predicating property concept lexemes are quality denoting and non-possessive property concept lexemes are individual-characterizing. This means that property concept constructions with *uNTu* must be cases of possession where there is affectee assignment on the possessor and the possessee is a DP that denotes a quality or substance.

The key to this argument is that the types of property concept lexemes (like (270b) below) are substance characterizing in that they characterize a set of portions of whatever substance that they refer to. The reason why both *uNTu* and *aaNu* are available to interpret property concept lexical items is because of "variation in the form of property concept sentences [that] is tied to variation in the lexical semantics of property concept lexemes" (Francez and Koontz-Garboden 2016: 33). If the property concept is individual-characterizing, then *aaNu* is used, but if it is substance-characterizing, then *uNTu* must be used because it is a substance, which is a DP, and it must enter into a possessive relationship with another DP.

(270) a. *avaL nallavaL aaNu*
avaL nalla-vaL aaNu
she good-F.SG AANU
'She is good.' (Francez and Koontz-Garboden 2016: 29)

b. **avaL nallavaL uNTu*
avaL nalla-vaL aaNu
she good-F.SG UNTU
Intended: 'She is good.'

c. *avaLkku pokkam uNTu*
avaLkku pokkam uNTu
she.DAT tallness UNTU
'She is tall.'
Literally: 'She has tallness.' (Francez and Koontz-Garboden 2016: 29)

d. **avaLkku pokkam aaNu*
avaLkku pokkam aaNu
she.DAT tallness AANU
Intended: 'She is tall.'

The juxtaposition in (270a) and (270b) shows that when there needs to be an individually characterizing property concept, *uNTu* is unacceptable, because the underlying structure and semantics that *uNTu* signals is not available. It cannot enter into an identity function like *aaNu* can. In the same way, *aaNu* is unacceptable in (270d). It cannot enter into a possession relationship because it lacks the syntacto-semantic information that *uNTu* provides. This means that the syntacto-semantic structure of (271a) and (271b) are wholly the same:

(271) a. *avaLkku pokkam uNTu*
avaLkku pokkam uNTu
she.DAT tallness EXIST
'She is tall.'
Literally: 'She has tallness.' (Francez and Koontz-Garboden 2016: 29)

b. *avaLkku naaya uNTu*
avaL-kku naaya uNTu aaNu-∅
3SG.F-DAT dog EXIST
'She has a dog.'

This would mean that there is no immediacy on experiential constructions. These are possession constructions. However, one item of business remains: are possession constructions

in Malayalam existential constructions in disguise? If so, the following interpretation would have to be possible:

(272) a. *avaLkku naaya uNTu*
avaL-kku naaya uNTu aaNu-∅
3SG.F-DAT dog EXIST
'She has a dog.' = 'There is a dog for/at her.'

Because the dative is required for all possessive constructions with an affectee possessor, and all property concept constructions with *uNTu* are possessive, there is no negative data against these claims. Perhaps the affectee possessor is the PP coda that contextually defines the spatio-temporality of the focused possessee pivot. The structure of a normal PP locative and a possessive PP affectee mirror one another, as in (273):

(273) Possessive vs Locative Coda Structure

a. *paampinu pallukaL uNTu*
paamp-inu pallu-kaL uNTu aaNu-∅
snake-DAT tooth-PL EXIST COP-NPST
'The snake has teeth/fangs.'

b. *paampil pallukaL uNTu*
paamp-il pallu-kaL uNTu aaNu-∅
snake-LOC tooth-PL EXIST COP-NPST
'There are teeth/fangs in the snake.'
NB: Although this could mean that the fangs are in its mouth, it is more natural to read that it was bitten by another snake and has fangs in its body.

In the possessive data in (273a), the logical subject is dative-marked, but in (273b) it is marked with locative case. This dataset suggests that without an affectee subject, the resulting reading is existential and not possessive. So, how do we justify that these possessive data are really just special cases of existentialism like the experiential data are?

In order to derive an existential construction using this hypothesis, Francez (2006: 11) provides the following semantic model:

(274) Existential Meaning via Francez (2006)

a. Assume a model $M=<E,I,L,T>$ where L and T are non-empty sets of locations and times respectively. [E is a set of entities (of type e) and I is a set of intervals (of type i)] The denotation of a pivot is a property of sets of type $<< e,t >, t >$ [...]

> The 'semantic subject' of an existential, the sole argument of the pivot predicate, is a contextually given domain of quantification. Such a domain can be defined by a domain function: F_d: L × T → 2^E. This function associates some sub-domain of E to any spatio-temporal coordinate. [When TT is introduced at UT,] the topic time and location are fed to this function, and the resulting domain acts as the argument to the generalized quantifier pivot.

This definition shows that the existential pivot is the predicate of an existential clause, which implies that the coda is indeed a contextual modifier that provides spatio-temporal information to the pivot. In the case of (273), the pivot is *pallukaL* 'teeth' and the coda is *paamp-ine/-il* 'snake-DAT/LOC.' Using an example from the Modern Hebrew existential *yeS*, Francez (2006: 11) provides a sample derivation:

(275) Hebrew *yeS*

a. $[[yeS]] = \lambda P_{<<e,t>,t>} P(F_d(< l_c, t_c >))$ (Francez 2006: 11)

(276) Sample Derivation

a. *yeS mayim xamim*
yeS water.PL hot.PL
'There is hot water.'

b. $[[yeS]] = \lambda Q[Q(F_d(< l_c, t_c >))]$

c. $[[\text{mayim xamim}]] = \lambda P \exists x[\mathbf{hot - water'}(x) \wedge P(x)]$

d. $[[yeS\ mayim\ xamim]] = \lambda Q.[Q(F_d(< l_c, t_c >))](\lambda P \exists x[\mathbf{hot - water'}(x) \wedge P(x)]) = (\lambda P \exists x[\mathbf{hot - water'}(x) \wedge P(x)(F_d(< l_c, t_c >))] =$
$\exists x[\mathbf{hot - water'}(x) \wedge x \in F_d(< l_c, t_c >)]$

(Francez 2007: 12)

About the above derivation, Francez (2009) proposes that "existential propositions consist of a single second-order predicate with a single implicit argument. The main predicate of an existential construction, the pivot, expresses a (possibly complex) property of sets." The pivot must be contained in some contextual location and in some contextual time in order to capture its meaning of [[EXIST]] - even if that context is achieved by entering into a relationship with itself via contextual closure. The entity relative to which the contextual domain is defined is the time and place of utterance, and in this case, the pivot is entering

into that domain relationship with itself and has no external coda licensing its contextual domain.

For existential sentences that do have coda modifiers which contribute spatio-temporal meaning, Francez (2009: 13) uses the following example and derivation to capture how the time or location applied to a pivot restricts it to that contextual domain:

(277) There was a war in 1967.

(278) Derivation for (277)

a. $[[There\ was\ a\ war\ in\ 1967]] = [[in\ 1967]]([[There\ was\ a\ war]]) =$
$\lambda Q_{<<i,t>,t>}[Q(\lambda i[i \subseteq 1967])](\lambda P_{<i,t>}[\mathbf{a}(\lambda j[war(j)], P)]) =$
$\mathbf{a}(\lambda i[war(i)], \lambda j[j \subseteq 1967])$

In the above derivation, the pivot is a generalized quantifier, and it is being spatio-temporally constrained by a temporal coda, *in 1967*. If the bare existential lacked this coda phrase, it would undergo contextualization as defined by Francez (2009) in (279).

(279) CONTEXTUALIZATION
In the absence of overt modification, the meaning of BE is applied to a contextually salient set or contextual domain C.

a. $[[there\ is\ no\ bread]]_{contextualized} =$
$\lambda P_{<e,t}[\mathbf{no}(\lambda x[bread(x)], P)](C) =$
$\mathbf{no}(\lambda x[bread(x)], C)$

Thus, for Malayalam, we can use the model from (278) and show that the locative phrase is actually the coda modifier which supplies the pivot with a contextual domain for spatio-temporal information. Using (273) as the data (repeated below), the following derivation would be expected:

(280) Derivation for (273a)

a. *paampinu pallukaL uNTu*
paamp-inu pallu-kaL uNTu aaNu-∅
snake-DAT tooth-PL EXIST COP-NPST
'The snake has teeth/fangs.'

b. $[[paamp - inu]] = [[snake - at]] = \lambda Q_{<<l,t>,t>}[Q(\lambda l[l \subseteq snake])]$

c. $[[pallukaL - uNTu]] = [[teeth - exist]] = \lambda P_{<l,t>}[\lambda l'[teeth(l')], P]$

d. $[[snake - at]]([[teeth - exist]]) =$
$\lambda Q_{<<l,t>,t>}[Q(\lambda l[l \subseteq snake])](\lambda P_{<l,t>}[\lambda l'[teeth(l')], P]) =$
$\lambda l[teeth(l)], \lambda l'[l' \subseteq snake]$

The derivation above captures the meaning of (273a) in that there is a location which is *paamp-inu* 'snake-DAT' at which *pallukaL* 'teeth' exist. Moreover, at least for Malayalam, I am arguing that the exact same derivation should be available for (273b) as well. This is shown in parallel below:

(281) Derivation for (273b)

a. *paampil* *pallukaL* *uNTu*
paamp-il pallu-kaL uNTu aaNu-∅
snake-LOC tooth-PL EXIST COP-NPST
'There are teeth/fangs in the snake.'

b. $[[paamp - il]] = [[snake - in]] = \lambda Q_{<<l,t>,t>}[Q(\lambda l[l \subseteq snake])]$

c. $[[pallukaL - uNTu]] = [[teeth - exist]] = \lambda P_{<l,t>}[\lambda l'[teeth(l')], P]$

d. $[[snake - in]]([[teeth - exist]]) =$
$\lambda Q_{<<l,t>,t>}[Q(\lambda l[l \subseteq snake])](\lambda P_{<l,t>}[\lambda l'[teeth(l')], P]) =$
$\lambda l[teeth(l)], \lambda l'[l' \subseteq snake]$

The main point is that pivots are bare existentials that are being modified by codas. The semantic meaning of (273a) and (273b) is the same. The difference in interpretation between them is caused by the difference in case assignment from the PP head, which stems from the information structure. Dative possessors are required to be the topic of their clause, and their high position in the control structure prevents their possessees from gaining scope over them. In locative existential clauses, there is no such restriction, because the coda PP is not in a relationship hierarchy with the pivot; it is simply providing locative information. These codas contribute a value for the relation R between the pivot and its context.

6.4 A New Morphological Ordering Proposal for Malayalam Verbs

The data and theoretical frameworks outlined in this and the previous chapters allow for a new morphological ordering proposal for the internal structure of the Malayalam verbal concatenative stem, shown below in a few available types[10]:

(282) Morphological Ordering in the Malayalam Verb

a. Main Verb Constructions:
VERB - TENSE - (ASPECT) - (MOOD/NEGATION)

b. Copular Constructions:
(uNTu) - aa(k) - TENSE - (ASPECT) - (MOOD/NEGATION)

c. Participle Constructions:
PARTICIPLE + aa(k) - TENSE - (ASPECT) - (MOOD/NEGATION)

These morphological orderings show that all copular constructions obligatorily use the copula *aaNu* to host tense since tense is the only obligatory inflectional morpheme for any given sentence. Either the sentence is existential and requires *uNTu* to operate over the pivot as the pivot auxiliary, or it is not and so *uNTu* is absent. If the verb root is marked with the participle, the derivation stops and a copular auxiliary is required in order to continue the concatenation chain. Verb string examples of the above morphological ordering proposals are provided below:

(283) a. *enikku naaya uNTaayiiruunnilla*
enikku naaya uNTu-aa-y-ii-r-uunnuu-illa
1SG.DAT dog EXIST-COP-E-PST-E-IPFV-NEG
'I didn't have a dog.'

b. *nyaan oruu puustakam vaayicciTTilla*
nyaan oruu puustakam vaayi-cc-iTT-illa
1SG.NOM ART book read-PST-PRF-NEG
'I had not read a book.'

[10]The reader should be aware that this ordering proposal does not factor in the incredible array of concatenation available to the verb. This analysis is a broad stroke meant to provide a foundation for a mono-copular system to be productive.

c. *jan muunnu kilo mango ariyuukayaayiirikkuum*
jan muunnu kilo mango ariy-uuka-y-aa-y-ii-irikk-uum
John three kilo mango cut-PTCP-E-AUX-E-PST-CONT-MOD
'John will be cutting three kilos of mangoes.'

These examples show all of the available options, but note that aspect or modality may not be necessary. The only overt inflection is tense.

6.5 Theoretical Conclusions

The theoretical conclusions in this dissertation begin with my overarching claim that Malayalam has only one copular verb - *aaNu* - and that *uNTu* is not a copula. Instead, I argue that *uNTu* is an existential pivot auxiliary which introduces a pivot and signals a low-focus phrase in the syntax for new information to land in and achieve focus marking. On the surface, affirmative present temporal clauses with *uNTu* do not show an overt *aaNu*, but I claim that *aaNu* is still functioning as a copula covertly, participating in regular copula-drop mechanics. In all cases where some inflectional morphology needs to be applied to the clause, *aaNu* becomes overt and can concatenate with *uNTu*.

I showed that the low-focus phrase proposed by Jung (2011) allows for new information to enter the discourse to achieve focus marking while still allowing for topicalized codas to raise above it to the position in SpecTP or into the upper projection. I argue that, in property concept clauses where some property is assigned to a benefactor, dative-marked codas must be topicalized to maintain the possessor-possessee relationship. Based on the analysis proposed by Swenson (2017), the dative case is assigned within the PP by a locative head in P.

I claim, using Francez (2006, 2007), that (in sentences with *uNTu*) the property concept lexeme and the possessee in possessive clauses are actually existential pivots. This implies that the possessor dative in each of these clause types is a coda modifier which provides a contextual domain of spatio-temporal information for the pivot. Because *uNTu* carries with it

the meaning of [[EXIST]], these sentences are actually copular sentences which have undergone changes to their information structure, and this gives these sentences their different readings.

Ultimately, sentences with only *aaNu* and sentences with *uNTu* (that has a covert *aaNu*) are copular sentences. The main difference is that *uNTu* introduces the pivot which is the focused predicate of the sentence, while *aaNu* is only able to host TAM information.

Chapter 7

Issues, Future Research, & Overview

In this dissertation, I explored the morphemic composition of the copula *aaNu* and the existential pivot auxiliary *uNTu* in Malayalam. In this chapter, I will summarize my claims from previous chapters, and I will comment on future research possibilities concerning Malayalam's copula and other possible conclusions pertaining to the pivot auxiliary.

Malayalam uses a mono-copular system. Depending on the type of copular clause (specificational or predicational), the topic/focus assignments and the information structure of these phrases can vary. I found that in specificational phrases that use only *aaNu*, there is an equative reading where some predicative DP is topicalized and a lower DP referent stays in its lower position. In clauses that use *uNTu*, there is an existential reading where some DP pivot that is new information to the discourse is the focused constituent. These existential clauses are semantically restricted by a coda PP which limits the contextual spatio-temporal domain of the existential pivot. I argue that *uNTu* is a signal for this pivot, and it is actually a member of the extended pivot phrase as the existential pivot auxiliary. In predicational clauses without *uNTu*, there is no prevailing reading to be expected, and this situation is treated as the elsewhere case.

The remainder of this chapter will discuss issues, which were not solved here, but that may be solved by future work on the language. I also provide a more expanded overview of the ongoing issue surrounding *uLLuu*, a suspected morphological counterpart of *uNTu*. I end with a brief summary of all chapters.

7.1 Issues

This dissertation lacks a discussion concerning the position and purpose of *uNTu* after non-copular main verbs, as in (284) below:

(284) Main Verbs with *uNTu*

a. *jan kilo mango arinyiTTuNTaayiiruunnuu*
jan kilo mango ariny-ii-TT-uNTu-aa-y-ii-r-uunnuu
John kilo mango cut.PST-PST-PRF-EXIST-COP-E-PST-E-IPFV
'John had been cutting a kilo of mangoes.'

b. *jan kilo mango ariyuukayaayiiruunnuu*
jan kilo mango ariy-uuka-y-aa-y-ii-r-uunnuu
John kilo mango cut-PTCP-E-COP-E-PST-E-IPFV
'John was cutting a kilo of mangoes.'

In the previous example, *uNTu* follows the main verb string of *ariyaan* 'to cut' and there is no case marking nor non-canonical ordering to provide any clues that this sentence is existential in nature. Even more curious is that the main verb is marked with the perfect, and the auxiliary *aaNu* is marked with the imperfective. This could be a case of some sort of clausal subordination where aspect-stacking needs to apply in a particular order for the correct meaning to be conveyed. For instance, if *mango* 'mangoes' is in the low-focus position, could it be the case that the reading here is that there was a kilo of mangoes (which are not bound by any perfectivity) that were then cut by John and that action is over with (since the cutting event is bound by the perfect aspect morpheme)? My hypothesis is that *uNTu* is still providing a low-focus phrase for *kilo mango*, and *aaNu* is providing sentential TAM information while the main verb is concerned only with event-internal aspectual morphology. There is no comment here about whether or not John is still cutting the mangoes, and in fact, he could be, but it does imlpy that there was a kilo of mangoes and that John did cut them. Unlike (284b), example (284a) requires that some mangoes were cut. For (284b); however, his cutting could have been interrupted. This verbal position for *uNTu* is not unusual, and since it is so prevalent in the language, any further work will need to account for its business in the middle of this verbal string.

Another issue that arises from this research is the more obvious question of why *uNTu* is in the verbal string at all. Using the analysis from Swenson (2019), I confirmed that existentials and possessives are linked and that the dative case is assigned to the possessor within a PP. If we return to earlier chapters where arguments from Malayalam historical linguists like Kunjan Pillai (1965) claim that *uNTu* is the past tense stem of *uLLuu*, our answer may be centered around grammaticalization. Although *uNTu* has lost all of its verbal function, it may be in position in the verbal stem precisely because it was a verb to begin with. Since *aaNu* acts as the auxiliary for main verbs, it is possible that the language simply applies that same V+AUX paradigm to this situation with *uNTu*. There is very little work on this topic, but it is essential in understanding *uNTu*'s strange behavior. It is different from all other verbs - even light verbs - so, any diachronic links that can be established would be valuable in diagnosing its synchronic activity.

The two negative forms have matching paradigms, and *illa*, like *uNTu*, also needs *aaNu* for inflectional morphology. But, so does *alla* - *aaNu*'s supposed counterpart. This is displayed in (285):

(285) Auxiliary Support for *alla*

avaL	*ende*	*ticar*	*allaayiiruunnuu*
avaL	ende	ticar	alla-aa-y-ii-r-uunnuu
3SG.F.NOM	1SG.GEN	teacher	NEG-COP-E-PST-E-IPFV

'She was not my teacher.'

So, even if *illa* is the counterpart for *uNTu*, *alla* is not the exact counterpart for *aaNu*. Negation was largely avoided in this dissertation, but the distinction between these affirmative and negative pairs needs to be uncovered more thoroughly.

7.2 Future Research

The main avenue for future research for this dissertation's result is to repeat the test to determine if languages like Modern Hebrew and Palauan are actually using existential pivot auxiliaries like Malayalam does. By expanding the search among other language families, a

clearer pattern can emerge. Other opportunities for future research include Question Under Discussion tests and more data collection on *uLLuu* clauses in Malayalam. A brief discussion of those topics is provided below.

7.2.1 Question Under Discussion and Intonation Patterning

According to Benz and Jasinskaja (2017), questions under discussion (QUD) are an analytic tool designed to isolate the context of a given utterance. A sentence in a discourse addresses a (often implicit) QUD either by answering it, or by bringing up another question that can help answering it. The linguistic form and the interpretation of a sentence, in turn, may depend on the QUD it addresses.

The QUD approach was first described by von Stutterheim and Klein (1989) and van Kuppevelt (1995). Originally, it was used to analyze discourse structure where "structural relations between sentences in a coherent discourse are understood in terms of relations between questions they address" (Benz and Jasinskaja 2017).

Intonation patterns in Malayalam that result from QUD tests may be able to illuminate the boundary of the FocP phrase, allowing researchers to map the proposed syntax to the intonational data. Beaver and Clark (2008) used QUD to analyze focus particles. An answer to a question is appropriate only if its focused constituent corresponds to the wh-phrase of the question.

7.2.2 Exhaustivity Restrictions with *uLLuu*

The morpheme *uLLuu* is mentioned in some of the Malayalam literature[1], but it is not as well-studied as its counterpart, *uNTu*[2]. Like *uNTu*, *uLLuu* occurs in existential and possessive constructions, but only in situations of exhaustivity restrictions. Exhaustiveness refers to situations where a "focused item must denote the unique (or maximal) entity having the property ascribed to it by the remainder of the sentence" (Beaver and Clark 2003: 327).

Jiang (2010) displays interesting preliminary conclusions about *aaNu* and *uNTu* that will be explored through the lens of my proposed mono-copular system. Jiang (2010) labels *uNTu* as an existential predicate and, like other Malayalam scholars, notes its contribution to locational, possessive, and existential constructions; however, the author claims that *uNTu* becomes *uLLuu*, and the subject of the phrase is marked with emphatic *-ee*, when that subject is "the one and only thing that exists" - as in (286b).

(286) a. *frijil* *oruu* *kooRi* *uNTu/*uLLuu*
frij-il oruu kooRi uNTu
fridge-LOC one chicken EXIST
'There is a chicken in the fridge.' (Jiang 2010: 38)

b. *frijil* *oruu* *kooRiyee* *uLLuu/*uNTu*
frij-il oruu kooRi=yee uLLuu
fridge-LOC one chicken=EMPH EXIST.PRS
'There is only one chicken in the fridge.' (Jiang 2010: 38)

(Jiang 2010: 38) also claims that "the same *-ee* plus *uLLuu* construction is used if the possessum is the only entity that is possessed" as shown in the juxtaposition below in (287):

[1](Asher and Kumari 1997; Mohanan and Mohanan 1999; Jiang 2010; Fernández and Antonini 2017; Swenson 2017, 2019)

[2]According to Kunjan Pillai (1965), historically, *uNTu* belonged to Malayalam verbal class in which double retroflex present tense stem *LL* alternates with double retroflex *NT* in the past tense stem, so it is possible that *uLLuu* and *uNTu* are morphological variants of the same root verb, but perhaps some grammaticalization has taken place since *uNTu* now retains the *NT* root in all temporalities. I do not discuss this idea any further in this dissertation, but wanted to offer it as an area to be further explored in the future.

(287) a. *enikku* *oruu* *sahooteran* *uNTu/*uLLuu*
enikku oruu sahooteran uNTu
1SG.DAT one brother EXIST
'I have a brother.' (Jiang 2010: 38)

b. *enikku* *oruu* *sahooteranee* *uLLuu/*uNTu*
enikku oruu sahooteran=ee uLLuu
1SG.DAT one brother=EMPH EXIST.PRS
'I have only one brother.' (Jiang 2010: 39)

Even stranger is the method of exhaustive restriction in different temporalities. Malayalam uses an *uNTu+aaNu+uLLuu* construction in past temporal environments, and in future temporal environments, the *uLLuu* is clipped:

(288) *uLLuu* in Past and Future Temporal Environments

a. *enikku* *keraLattil* *oruu* *divasam* *maatramee*
enikku keraLa-ttil oruu divasam maatramee
1SG.DAT Kerala-LOC ART day only
uNTaayiiruunnuuLLuu
uNTu-aa-y-ii-r-uunnuu-uLLuu
EXIST-COP-E-PST-E-IPFV-uLLuu
'I had only one day in Kerala.'

b. *enikku* *keraLattil* *oruu* *divasam* *maatramee* *uNTaakuu*
enikku keraLa-ttil oruu divasam maatramee uNTu-aak-uu
1SG.DAT Kerala-LOC ART day only EXIST-COP-PST
'I will have only one day in Kerala.'

But, in the negative form of the same sentences, *uLLuu* is unavailable:

(289) Negative Exhaustive Sentences

a. *enikku* *oruu* *viiTu* *maatram* *illa*
enikku oruu viiTu maatram illa
1SG.DAT ART house only NEG
'I do not have only one house.'

b. * *enikku* *oruu* *viiTu* *maatram* *uLLilla*
enikku oruu viiTu maatram uLLuu-illa
1SG.DAT ART house only uLLuu-NEG
'I do not have only one house.'

c. *enikku oruu viiTu maatramaayiiruunnilla*
enikku oruu viiTu maatram-aa-y-ii-r-uunnuu-illa
1SG.DAT ART house only-COP-E-PST-E-IPFV-NEG
'I did not have only one house.'

d. * *enikku oruu viiTu maatramaayiiruunnuLLilla*
enikku oruu viiTu maatram-aa-y-ii-r-uunnuu-uLLuu-illa
1SG.DAT ART house only-COP-E-PST-E-IPFV-uLLUU-NEG
'I did not have only one house.'

So, why does an exhaustive restriction like 'only' trigger *uLLuu* in affirmative constructions? Also, why is it not available in negative constructions of the same type? According to Beaver and Clark (2003: 324), exhaustive polarity items like *only* quantify over individuals, not over domains or sets of individuals. In English, "the lexical meaning of *only* encodes a dependency on focus marking" (Beaver and Clark 2003: 348) with polarity items like *only* producing exhaustivity on the focused constituent (Beaver and Clark 2003: 351).

Given these assumptions, I make a preliminary hypothesis that the existential morpheme *uNTu* quantifies over a set of individuals that exist, *illa* quantifies over a set of individuals that does not exist, while *uLLuu* quantifies over an exhaustive list of individuals that exist from within a given set.

7.3 Chapter Conclusions

In Chapter 1, I explained that the motivation for this research is centered around the prior treatment of *uNTu* in Malayalam literature as an existential copula verb that alternates with *aaNu* as the elsewhere copula.

In Chapter 2, I provided my own labeling conventions for much of the bound TAM morphology that occurs on Malayalam verbs, and I proposed a particular morphological ordering pattern for internal verbal concatenation.

In Chapter 3, I used the analysis provided in Mikkelsen (2005, 2006) to show that Malayalam uses *aaNu* for both specificational and predicational copular clauses, but that underlyingly the syntax for both types is identical. Instead, the motivation for different readings is

driven by the information structure of a clause's constituents and the relationship between them. I also discussed how only *aaNu* is able to be used in common copular environments like clefting and main verb auxiliary support.

In Chapter 4, I examined existential and possessive constructions in Malayalam and concluded that only *uNTu* is able to communicate existential meaning. I also suggested that existentials and possessivea may be linked phenomena as many languages of the world use the same markers for both types of readings. Using the analysis from Swenson (2019), I confirmed that existentials and possessives are linked and that the dative case is assigned to the possessor within a PP. I determined that these PPs - in both cases - are existential codas. Chapter 4 showed that, following Francez (2009), the existential pivot is the predicate of its clause which is optionally modified by a contextually determined coda that assigns some spatio-temporal information to that predicate.

In Chapter 5, I showed that two special information structure cases in Malayalam - locative and property concept constructions that use *uNTu* - are actually existential sentences, just like I previously discussed with possessives. Because *aaNu* and *uNTu* both seem to occupy locative and experiential constructions, I discuss the argument from Swenson (2017, 2019) which claims that *uNTu* occurs in these types of constructions due to a pragmatic driver called the immediacy requirement. I argue instead that these constructions with *uNTu* are inherently existential, and because existential sentences can focus new information, the newness (or immediacy) comes from the existential pivot being focused. So, I label *uNTu* as an existential pivot auxiliary. It is required for existential sentences in Malayalam, and it is not a verb. It still needs to be situated within a traditional *aaNu* copular sentence in order to syntactically succeed. I supported my hypothesis with findings from Francez and Koontz-Garboden (2015, 2016, 2017) about property concept lexemes. Their claim is that, in Class II Malayalam property concept clauses, the property is nominal, but the logical subject is a dative-marked PP. This shows that Malayalam's property concept clauses with *uNTu* are really an instance of existentials in the same way possessives are.

Chapter 6 attempted to unify the claims from Chapter 3, Chapter 4, and Chapter 5 under a syntactic and semantic theoretical framework to account for the structural and meaningful contribution of *uNTu* in Malayalam. I ultimately conclude that, syntactically, the matching structures provided in Mikkelsen (2005, 2006) are valid for Malayalam in -*uNTu* clauses, but that for +*uNTu* clauses which provided a existential reading, there was a low focus phrase, proposed by Jung (2011), which is headed by *uNTu* and provides a focus landing site for the pivot. Semantically, I provided basic derivations to show that *uNTu* carries existential meaning, and that it can be constrained by a contextual domain-driven coda.

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