COPULA-LESS, NON-VERBAL PREDICATION IN COLLOQUIAL SINGAPORE ENGLISH AND THE GENERAL ANCHORING CONDITION

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SUMMARY OF THESIS

This thesis examines the phenomenon of copula-omission in non-verbal predication in Colloquial Singapore English (CSE), which has been widely noted to be one of the prominent characteristics in the literature on CSE. It is observed that copula-omission in CSE is not uniform; the copula can be omitted with prepositional predicates, but not nominal and adjectival predicates. We account for this by postulating a general anchoring condition which requires all sentences in natural language to be anchored to a salient reference point, with time being one such reference point. We suggest that in the absence of tense on the copula in CSE, events are anchored to time through event structure (aspect). Nominal and adjectival predicates are individual-level predicates (ILPs) which lack an event argument and cannot be anchored to time via aspect. Prepositional predicates, being stage-level predicates (SLPs), contain an event argument and can be anchored to time through aspect. We further show that the various strategies that facilitate omission of the copula even with nominal and adjectival predicates, such as modification by aspectual markers, degree morphemes and negation, all make reference to event structure and involve some form of coercion of ILPs into having SLP-like interpretations. CSE sentence-final particles (SFPs), being expressions of epistemic modality, require true eventualities as their arguments and thus modification by SFPs permit omission of the copula, since the presence of SFPs suggests that the copula-less eventualities already hold at utterance time and are thus anchored to the present by default. Finally, we discuss a nonsentential analysis to tense-less and copula-less sentences even in Standard

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English (StdE), which suggests that these are small clause (SC) structures with no projections of IP and Infl. Key pieces of evidence from CSE are presented against this analysis, suggesting that CSE does project a Infl node, and that CSE copula-less sentences cannot be analysed as SC structures. We suggest that the Infl node in CSE is underspecified as compared to StdE. Whereas the Infl node in StdE contains overtly specified values for the features of case and tense, CSE only overtly specifies the case feature, leaving the tense feature unvalued. Tense is valued and erased either through aspect, or pragmatically through the use of SFPs. We further hypothesise that this current state of the Infl node in the grammar of CSE represents an intermediate stage of decreolisation, a process of approximating towards the standard variety, and suggest further lines of sociolinguistic and variationist inquiry that might go some way toward validating this hypothesis.

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LIST OF ABBREVIATIONS

CP   Complementizer Phrase

TP   Tense Phrase

IP   Inflectional Phrase

AspP   Aspect Phrase

NP   Noun Phrase

VP   Verb Phrase

AP   Adjective Phrase

NegP   Negation Phrase

EvP   Event Phrase

ForceP   Force Phrase

LF   Logical Form

PF   Phonetic Form

ILP   Individual Level Predicates

SLP   Stage Level Predicates

PVC   Perception Verb Complement

StdE   Standard English

CSE   Colloquial Singapore English

GAP   Generalized Anchoring Principle

SFPs   Sentence-final Particles

CHAPTER 1: INTRODUCTION

This thesis is concerned with accounting for the omission of the copula verb *be* in non-verbal predication in Colloquial Singapore English (CSE). Specifically, it examines the predicative use of the copula in predicative contexts. Predicates in grammar generally refer to verbs (verbal predication), which express a relation between arguments within an event or a state denoted by the verbs. Predicates can also be non-verbal and nominal, adjectival or prepositional in nature. Generally speaking, non-verbal predicational clauses describe something about the referents of the subjects (Mikkelsen 2005: 1); or in set-theoretic terms, predication involves an 'intersective relationship between two sets, one (corresponding to the function) denoting a property ascribed to the other (the argument)' (den Dikken 2006: 17). The copula is traditionally seen as a semantically vacuous verb that serves simply to mediate the predicational relationship in non-verbal predication, in addition to its function of carrying tense and agreement features. Structurally, it is analysed as are other verbs; it is generated as the head of a VP, and raises to Infl or T, the head of IP or TP[1], in order to take on tense and agreement features (see for example Emonds 1976 and Stowell 1981).

We observe in this thesis that CSE copula-omission in non-verbal predicative contexts is not uniform. Specifically, copula-omission is permitted with prepositional predicates, but not nominal predicates and adjectival

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[1] TP and T are the standard terms used in more recent generative work. We will use IP and Infl throughout this thesis to reflect the fact that this particular functional projection serves not only as the locus of tense, but also phi-features agreement with subjects. These phi-features will become important for our discussion in a later chapter, where we examine if CSE contains this particular functional projection.

predicates. However, there are various strategies that facilitate the omission of the copula with nominal and adjectival contexts. These include: negation, degree modification of adjectives, and the occurrence of CSE sentence final particles (SFPs). While prepositional predicates readily allow the omission of the copula, these strategies cut across all predicate types; they occur frequently in CSE, and readily facilitate copula-omission even when it is not licensed.

We suggest in this thesis that the copula-omission pattern observed in CSE can be explained by appealing to a universal requirement for natural language: all events expressed by sentences must be anchored to some reference point in order to be used for communication in discourse. In Standard English (StdE), sentences are anchored to time, specifically utterance time. Tense morphemes in StdE thus serve to assert sentences as holding either at utterance time (present) or before utterance time (past). In addition, aspectual morphemes such as *–ing* and *–en* also help to anchor propositions or events to time by appealing to the event structure of predicates (aspect). These aspectual morphemes can thus impose boundaries, indicate that an event is still ongoing, or mark a change in state of various predicates. CSE readily allows copula-omission when non-verbal predicates can be anchored to time via aspect through an event argument, a property it shares with languages like child English. We show that the aforementioned strategies that permit the omission of the copula can likewise be analysed as modification of the event structure of predicates. We also explore the significance of the analysis here to other analyses of verb-less and copula-less languages, such as a

nonsentential approach, and outline the theoretical implications for our understanding of CSE as a contact language.

This thesis is organised as follows. Chapter 2 provides a brief history of the development of CSE, and introduces the main set of data with which we will be concerned. Chapter 3 discusses the anchoring requirement in natural language, and shows how this helps explain copula-omission with certain types of predicates but not others. Chapter 4 examines in detail the distribution of copula-omission in CSE. Chapter 5 presents the various strategies that permit omission of the copula, and suggests that they can all be understood as anchoring sentences to time through aspect in CSE. Chapter 6 compares the approach outlined previously to the alternative, nonsentential approach to copula-less sentences in other languages. It further demonstrates that CSE is unique in that it is a language undergoing decreolisation and that the nonsentential approach, while not directly applicable, may help us better understand the nature of CSE as a decreolising language. Chapter 7 concludes this thesis.

CHAPTER 2: COLLOQUIAL SINGAPORE ENGLISH AND COPULA-OMISSION

2.1 COLLOQUIAL SINGAPORE ENGLISH

Singapore has always had a unique language contact situation. Her strategic location near the tip of the Malay Peninsula made it an ideal stopover for sailors and traders from all over Asia who plied the Southeast Asian region, even during pre-colonial times (Lim 2010). In those early days, a pidgin variety of Malay, namely Bazaar Malay (Bao 2001), served as the *lingua franca* between traders who came from such diverse regions as China and India. Following the arrival of the British and the establishment of Singapore as a British trading colony in 1819, English-medium education was introduced on the island. However, it was administered only to selected natives to groom them as English-speaking intermediaries for the colonial government, a role that granted elite status within society (Brutt-Griffler 2002, Lim 2010). Nevertheless, this marked the beginning of the spread of some English proficiency amongst the general population through these English speaking intermediaries. The establishment of Singapore as a British trading colony also led to a large scale influx of immigrants throughout the 1800s. This included Chinese from the Southern coast of China comprising mainly Hokkiens, Teochews and Cantonese as well as from South India (Lim 2010). The resultant diversity of the languages within Singapore's linguistic ecology, which included English, the Southern Min dialects (Hokkien, Teochew), the Yue dialects (Cantonese) and various South Indian languages like Tamil, Telugu and Malayalam, coupled with the existing *lingua franca* Bazaar Malay, made for a fascinating language contact situation. This vibrant contact

situation gave birth to a creole-like variety of English that most probably served as the precursor to the informal variety of English spoken in Singapore today.

After World War Two, during which immigration rates stagnated and language contact was minimised due to the imposition of Japanese as the official language, Singapore began to gain some measure of independence from the British. This began with self-government in 1959, followed by unification with Malaysia from 1963-1965, and finally full independence as a sovereign state in 1965. The unsuccessful merger and subsequent expulsion of Singapore from Malaysia due to political differences left Singapore in what its leaders perceived as dire straits. Singapore had no natural resources and its population comprised a disparate group of former immigrants without any sense of national identity or unity. Faced with the task of creating a nation from these disparate communities, language naturally became an issue of major concern for Singapore's leaders. This concern with language is reflected in many subsequent social and educational policies, even to the present day. English had already been implemented as either a first or second language in all schools in accordance to the bilingual education system set out in the 1956 White Paper on education, and was subsequently implemented as the medium of instruction for all schools in 1987 (Lim 2010). The rationale behind institutionalising English was economic and social in nature. It was felt that competence in English, the international language of science and technology, would facilitate international trade and commerce and equip Singapore's workforce with the linguistic skills necessary to partake in the global economy; also, English would serve as a neutral language for

inter-ethnic communication, since English was not the native language of any of the ethnic groups and would not raise concerns of any particular ethnic group being afforded a privileged position in terms of language policy and planning (Wee 2003, 2010; Lim 2010).

However, it was also felt that the widespread use of English might compromise what were perceived as desirable 'Asian' values such as thriftiness, filial piety and valuing group over individual interests. Singapore's leaders therefore implemented the Mother Tongue policy, whereby the state assigned an official language to each ethnic group: Mandarin for the Chinese, Malay for the Malays and Tamil for the Indians (Wee 2002; Lim 2010). As Wee (2002) notes, the Mother Tongue policy is not without its contradictions; the term Mother Tongue as understood by the Singaporean government does not actually reflect what language is spoken at home. For current purposes, it is sufficient to note that the introduction of these two policies led to a general stabilisation of the language contact situation. English started displacing Bazaar Malay as the *lingua franca*, while Mandarin started displacing the dialects as the dominant language of the Chinese community due to the efforts of the Speak Mandarin Campaign (SMC), and Malay remained the home language of many ethnic Malays. The Indian community, on the other hand, remained fragmented even with Tamil being the designated official language of the Indian community (Lim 2010). Overall, this meant that the main languages exerting influence on Singapore English after the 1980s were Mandarin and Malay, which strengthened the substrate influences from earlier periods due to the similarities in the structures of the substrate

languages: between Mandarin and the Southern Min dialects, and between Standard Malay and Bazaar Malay (Bao 2001).

So far the discussion has centred on Singapore English as a distinct, unified variety. Indeed, it has been previously classified within Kachru's (1992) World Englishes model as an Outer Circle variety, which refers to varieties of English that have developed in the context of former English colonies, and as a New English with a distinct developmental pattern by Schneider (2003). Other scholars, however, note the existence of a range of forms of Singapore English. For example, Platt and Weber (1980) describe Singapore English as existing along a continuum of forms in their lectal continuum model. The acrolectal variety is almost identical to Standard British English, the mesolectal variety exhibits some differences from the standard, and finally the basilectal form exhibits the greatest deviation from the standard variety and where influences from other languages are most obvious. Other models that aim to capture Singaporean speakers' movement between the range of forms include Pakir's (1991) Expanding Triangles model and Alsagoff's (2010) Cultural Orientation Model, which suggest that Singaporean English speakers move between the standard and the non-standard varieties based on their level of proficiency, domains of use and the need to project a global or a local Singaporean identity, a phenomenon described by Siegel (2008) in his characterisation of a post-creole continuum. Speakers with higher levels of English proficiency are more likely to have a greater range of social domains in which they participate, and hence show greater variation along the acrolectal-mesolectal-basilectal clines, while speakers

with lower levels of English proficiency typically show variation between only the mesolectal-basilectal clines (Alsagoff 2010).

Amongst the Singaporean population, the mesolectal-basilectal variety, which encompasses the varieties of those who have not undergone English-medium education (the older generation) and the colloquial variety of Singapore English spoken by the English-educated (Michaelis et al. 2013), is often affectionately referred to as Singlish. The labelling of this variety as Singlish began in the late 1990s with the airing of the local sitcom *Phua Chu Kang*, in which the protagonist Phua speaks Singlish as a way to portray a down-to-earth, unpretentious identity. It was also around this time that the Singaporean government began to take notice of the rising use of Singlish. Amidst fears that speaking Singlish would affect Singaporeans' grasp of the standard variety and jeopardise the country's economic competitiveness, they set out to encourage the use of Standard English (StdE) by referring to Singlish as bad, ungrammatical English. This culminated in the inauguration of the Speak Good English Movement (SGEM) in 2000 (Bokhorst-Heng 2005; Wee 2010). In the literature exploring the various grammatical features of the basilectal-mesolectal variety, Singlish is commonly referred to as Colloquial Singapore English (CSE), which scholars describe as an English-lexified variety showing diverse substrate influences from the languages present within Singapore's diverse linguistic ecology.

2.2 COPULA-OMISSION IN COLLOQUIAL SINGAPORE ENGLISH

CSE exhibits deviations from standard varieties of English on all the major linguistic levels: phonetics, phonology, morphology, syntax and semantics. These deviations have been the subject of inquiry and description in a wealth of publications. The reader may refer to the work of Platt and Weber (1980), Alsagoff and Ho (1998), Lim (2004), Low and Brown (2005), Deterding (2007) and Leimgruber (2011), amongst many others, for complete descriptions of CSE on all the major linguistic levels. There has also been recent work comparing syntactic phenomena in CSE to those of the other languages in Singapore's linguistic ecology, most notably Mandarin Chinese and Malay (see Bao 1995, 2001, 2005; Bao and Lye 2005; Sato 2011, 2013, 2014; Sato and Hiramoto 2012; Sato and Kim 2012 amongst others). Here, we focus on the omission of the copula in various contexts in CSE.

Various scholars such as Platt (1975), Ho and Platt (1993) and Chang (2009) have noted that copula-omission is one of the defining features of CSE. It is important to note, however, that copula-omission is non-absolute in CSE. That is, there are no instances where copula-omission is *necessary* in order for a sentence in CSE to be considered grammatical. Thus, some environments require the presence of the copula and some environments may encourage its omission, but there are crucially no contexts in which copula-omission is *obligatory* for grammaticality (Chang 2009). In fact, Ho and Platt (1993) note in their study that the copula is realised 86.3% of the time in their corpus. Strikingly, it was observed that the frequency of copula-omission can be correlated to the amount of

formal English medium education speakers had undergone; shown below is data from Ho and Platt showing the realisation of the copula with adjectival predicates.

BE realization in the context of ___ *Adj* according to educational levels (in %)
Group I (Tertiary graduates) 94.2
Group II (6 years secondary education) 91.6
Group III (4 years secondary education) 85.1
Group IV (1-3 years of secondary education) 68.9
Group V (Primary school only) 59.4
Overall 81.8

(Ho and Platt 1993, quoted in Kim 2011: 41, 2013: 15)

As seen from the data, copula-omission is least widespread among speakers with high levels of English medium education (only about 6% in group I) as compared to speakers with little English medium education (almost 40% in group V). That does not mean, however, that speakers with high levels of English medium education do not use copula-less structures. As noted by the Pakir (1991) and Alsagoff (2010), who attempted to capture the range of variation of forms in spoken English in Singapore, these highly-educated speakers often style-switch and include various CSE features in their speech based on the social contexts of interaction for various purposes. That is to say, many highly-educated speakers who are able to command the range of forms from the acrolect to the mesolect-basilect still have intuitions about the grammatical structure of CSE, suggesting that the grammar of CSE has stabilised enough for it to be clearly distinguished from StdE.

This thesis draws on empirical data from CSE from either one of the following sources unless otherwise stated: data presented in the literature, in which case due acknowledgement is provided, or through the author's native

speaker's intuitions verified with other native speakers of CSE, and observations of everyday speech in Singapore. The primary set of data that we will be concerned with, drawn mainly from Chang (2009), is presented below. The dashes indicate the canonical position of the copula verb in predicational contexts.

(1) Predicative nominals
a. *Mary __ a doctor[2].
b. Mary __ only a doctor.
c. Mary __ not a doctor.
d. Mary __ a doctor lah/meh?[3]

(2) Predicative prepositional phrases
a. Tom __ at home. (Locative)
b. Breakfast __ in the morning. (Temporal)
c. Tom __ not at home.
d. Breakfast __ not in the morning.
e. Tom __ at home lah/meh?
f. Breakfast __ in the morning lah/meh?

(3) Predicative adjectives
a. */? Tom __ clever.
b. Tom __ very clever.
c. Tom __ not clever.
d. Tom __ clever lah/meh?

(Adapted from Chang 2009, Kim 2011 and Yu 2013)

Some observations are immediately apparent here. Firstly, the copula can be freely omitted when the following predicates are prepositional, even without the addition of other words like adverbials, negation or discourse particles, as shown by (2a-b). The addition of morphemes is possible, but not necessary. On the other

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[2] All data that are not in StdE will be italicised in this thesis, with glosses and translations provided where necessary.
[3] *Lah* (falling intonation) and *meh* are SFPs which serve to soften the force of an utterance and to form a polar yes/no question respectively. The semantics and pragmatics of SFPs like *lah* also change based on the intonation with which the SFPs are uttered. For detailed discussion of the semantics, pragmatics and intonational qualities of CSE SFPs, see Richards & Tay (1977), Wee (2004) and Deterding (2007).

hand, omission of the copula results in ungrammaticality or oddness when it is followed by nominal or adjectival predicates, as indicated by (1a) and (3a). Copula-omission is deemed more acceptable when there are adverbs, negation or sentence-final discourse particles (SFPs), as shown by examples (b-d) in (1) and (3).

In his study of copula-omission, Chang (2009) provided a detailed description of the contexts in which the copula can be omitted in CSE. He also compared the contexts in which the copula can be omitted to various other languages, such as African-American Vernacular English (AAVE), and Chinese, the major substrate language of CSE. No attempt, however, was made at accounting for *why* copula-omission is permitted in some contexts but not others. Neither was there a principled account of why certain strategies can facilitate the omission of the copula in contexts when it is usually not permitted. The following chapters attempt to understand exactly how such strategies facilitate the omission of the copula, under the key guiding questions as below:

- What factors determine when the copula can or cannot be omitted in CSE?

- Why and how do adverbials, negation, degree modification and SFPs facilitate the omission of the predicational copula in CSE?

It will be shown that the omission of the copula is sensitive to the nature of the post-copular predicate itself, and that the omission of the copula can be tied to the universal requirement of anchoring in natural language. CSE thus presents interesting new evidence and perspectives for the interfaces between syntax, semantics and pragmatics from the point of view of temporal anchoring, as well as for theories of contact linguistics.

CHAPTER 3: ANCHORING AND COPULA-OMISSION

3.1 THE ANCHORING CONDITION

Language is undoubtedly a tool for communication and for human expression. We use language to express a variety of things, both linguistic and non-linguistic. On the non-linguistic side, language serves as an expression of our personal identities and emotions. On the linguistic side, language can be said to express and make reference to a variety of objects. These objects could be concrete or abstract. Abstract objects could be propositions or facts, and concrete objects would be events or individuals (see Asher 1993 for detailed discussion).

A specific linguistic object has been particularly well-studied: that of the notion of eventualities[4] in natural language. Work on the idea of an event can be traced back to Davidson (1967), whose work continues to influence theories of syntax and semantics today[5]. The basic idea is that certain linguistic phenomena can be accounted for if we assume that language makes reference to eventualities.

(4) Jones buttered the toast slowly with a knife in the bathroom.
(5) Jones buttered the toast slowly with a knife.
(6) Jones buttered the toast slowly.
(7) Jones buttered the toast.

(4-7) illustrate classic examples as used by Davidson. (4-6) illustrate a verbal predicate *butter* together with its arguments *Jones* and *the toast* being modified by adverbial modifiers. Crucially, (4-6) all entail (7); that is, adverbial modifiers all

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[4] Eventuality is a cover term encompassing events and states (Bach 1986). I will use the term eventuality when referring to copular constructions henceforth.
[5] I concentrate on events and states here, which have been well-studied by scholars like Vendler (1957) in the classification of verb types, and are of most relevance to the discussion in this thesis. For a more detailed discussion of abstract linguistic objects, the reader may refer to Asher (1993).

entail that the event of Jones buttering the toast actually happened. This point is even clearer with anaphoric sentences.

(8) John asked Mary to the party. <u>It</u> made her depressed.
(9) John thought Mary liked him. <u>This</u> lasted until he asked her to the party.

<div align="right">(Louie 2008: 100)</div>

The anaphoric pronoun and determiner in (8) and (9) clearly refer to the event of John asking Mary to the party, and John thinking that Mary likes him respectively. They cannot be interpreted as referring to any other constituent within the first sentence. On the basis of these pieces of evidence, Davidson proposes that in addition to its arguments such as agent, patient, or theme, a verb further takes an abstract event object as its argument. Eventualities, according to Davidson, are spatio-temporal entities with functionally integrated participants (Maienborn 2005); because of the spatio-temporal nature of eventualities, they can be modified by spatio-temporal and manner modifiers (as shown in (4-6)), and can be directly perceptible. Put simply, it is the event argument of eventualities that anchors them to the spatio-temporal dimension of the actual world.

Since eventualities are spatio-temporal entities, it follows that time can be one of the major dimensions in which eventualities can be located and anchored. One of the earliest works of anchoring came from Enç (1987), who suggested that one way of anchoring expressions in natural language to time is through tense. The intuition is that past and present tense morphemes in languages such as English anchor sentences containing verbs temporally. They indicate whether the eventuality expressed by the verb happened at the time of the speaker making the

utterance (present), or before the time of the utterance (past). Other constructions, such as those involving the modal verb *will*, indicate that the event will happen in the future. We take all these to be one way of anchoring abstract linguistic objects to time and thereby allowing concrete reference to them.

Anchoring abstract objects such as events to time may seem like an intuitive strategy for English speakers, and indeed for speakers of languages with tense distinctions. There are, however, numerous other languages that do not have grammatical tense and tense morphemes. Chinese[6], a non-inflectional language, is such an example. In Mandarin, reference to time is not made using tense, but rather through aspect and reference to the structure and boundedness of events through a variety of aspectual markers (Smith 1997, 2008; Lin 2006). That is, the relation to time is indicated indirectly through the structure of events, rather than directly with reference to utterance time. This method of referring to time through the structure of events (henceforth aspect) is not unique to Chinese. It has been noted that even early child learners of English, who frequently omit tense, make reference to aspect when referring to time (Becker 2000; Hyams 2007). In addition, from her study of verb-less sentences in Mandarin, Tang (2001) suggested that yet another way of anchoring sentences is through focus structures, with focus referring to the inducing of a reference set of alternatives (see also Rooth 1985, 1992). Finally, Ritter and Wiltschko (R&W) (2005) studied Upriver

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[6] Chinese is a term that refers to a variety of related languages and varieties rather than a single unified language. Some varieties and dialects relevant to this thesis have already been introduced in the preceding section: the Southern Min dialects (Hokkien, Teochew), Yue dialect (Cantonese), and Mandarin, which is now considered the standard in Chinese countries like China, Hong Kong, Taiwan and Singapore. I will be referring largely to Mandarin Chinese when relevant in this thesis, as it has been noted to be one of the major substrate languages exerting influence on CSE due to historical and sociolinguistic processes.

Halkomelem and Blackfoot, both of which lack tense morphemes, and conclude that tense and time are not the only means of anchoring sentences; the two languages employ morphemes that indicate location (spatial) and person (speech-event participants) respectively in anchoring sentences. On the basis of their observations with Halkomelem and Blackfoot, in which anchoring does not make reference to time and tense, R&W propose a generalised anchoring condition as below.

(10) The Anchoring Condition: Events must be anchored to the utterance or some other salient reference point.

<div align="right">(R&W 2005 quoted in Louie 2008: 42)</div>

(10) rather simply and elegantly captures the intuition that abstract linguistic objects such as eventualities must be anchored to the physical world through a salient reference point in order to make reference to it. We will adopt this as a working principle for the remainder of this thesis.

3.2 COPULAR PREDICATES AND EVENTUALITIES

We have so far discussed verbs as the prototypical manifestation of eventualities. Scholars working in the (Neo-)Davidsonian tradition, however, have suggested that verbs are not the only predicates that contain an event argument; that is, all lexical classes, whether nouns, adjectives or prepositions may contain an implicit event argument (see for example Parsons 1990, 2000). The copular construction is particularly interesting in this respect. As noted above, the copula is traditionally taken to be a semantically empty link between the subject and the lexical predicate, and as such is considered by many within the literature to be part of the predicate. The entire copula construction itself is

considered in Davidsonian approaches to be a static eventuality i.e. a state (Maeinborn 2003). The question thus arises as to where the event argument in copular constructions, if any, originates.

Kratzer (1995) suggests that the event argument originates in the lexical predicate in her influential work distinguishing between individual- and stage-level predicates (ILPs and SLPs). ILPs denote properties and states of entire individuals (corresponding roughly to permanent properties). SLPs denote properties and states that apply only to stages of individuals, with a stage defined as a spatially and temporally bounded manifestation of an individual (temporary and transient properties) (Carlson 1977: 115). In other words, even static eventualities can be differentiated based on whether they are individual- or stage-level, and whether the state denoted by the predicate has natural boundaries. Under this view, nominal predicates (DPs and NPs) are classified as ILPs, prepositional predicates as SLPs, and adjectival predicates as being split based on whether they are individual- or stage-level adjectives. We provide the relevant diagnostics, for ILPs and SLPs, as well as an illustration of the difference between nominal and prepositional predicates, drawn from Kratzer (1995) and Becker (2000), as below. These have become standard diagnostics in the literature on eventualities and event arguments.

Interpretations of Bare Plural Subjects and Existential Readings

(11) a. Dogs are mammals.   (ILP: generic only)
      b. Dogs are in the park.   (SLP: generic/existential)

Occurring as Coda in Existential Constructions

(12) a. There are dogs in the park.   (SLP: permitted)

b. *There are dogs mammals.   (ILP: not permitted)

Occurring as Complements of Perception Verbs

(13) a. John saw Mary in the garden.   (SLP: permitted)
     b. *John saw Mary a teacher.   (ILP: not permitted)

Modification by Spatial and Temporal Modifiers

(14) a. Manon is dancing on the lawn.   (Verbal SLP: permitted)
     b. Manon is dancing this morning.
     c. Manon is a dancer.
     d. *Manon is a dancer on the lawn/this morning. (ILP: not permitted)

Occurrence in when-clause Conditionals

(15) a. When Mary is in the garden, she drinks iced tea.   (SLP: permitted)
      b. *When Mary is a doctor, she wears a white coat.   (ILP: not permitted)

We will adopt Kratzer's (1995) analysis for the structural difference between ILPs
and SLPs, which lies in the presence or absence of an event argument. Static
eventualities like copular constructions then can be classified as individual- or
stage-level, based on the nature of the post-copular predicate. The copula verb can
combine with SLPs (prepositional) with an event argument, or with ILPs (nominal
and some adjectives) that lack an event argument. As the examples below show,
there is a clear semantic difference in the availability of existential readings for
bare plural subjects, based on whether the post-copular predicate is an ILP or
SLP.

(16) Babysitters are temporary employees.   (ILP: generic only)

(17) Islands are in the Pacific.   (SLP: existential or generic)
                                                            (Becker 2000: 26)

The availability of existential readings, a key diagnostic for SLPs, clearly shows
that the ILP and SLP distinction has semantic consequences in copular

constructions as well. As we will see later, CSE copula-less data seem to support this analysis, with an asymmetry between ILPs and SLPs when it comes to copula-omission.

3.3 TENSE ANCHORING AND EXISTENTIAL CLOSURE

We have suggested thus far that a) eventualities need to be anchored to time, most notably through tense, and b) eventualities may contain an event argument based on whether they are ILPs or SLPs. We have yet to specify how exactly tense anchors eventualities. Scholars in the field of formal semantics have suggested that this is accomplished by an operation of existential closure, following the seminal work of Heim (1982), who examined the possibility of existential interpretations with (in)definite DPs. This is achieved by an existential quantifier, a logical operator used in formal semantics represented by the symbol ∃. Binding of a variable by an existential quantifier would thus assert that the entity denoted by the variable exists. The operation of existential closure has been extended from the nominal domain to the clausal domain and eventualities as well. It has been argued that existential closure within the clausal domain involves binding of the event argument by the existential quantifier. This binding is often associated with Infl, the locus of tense. Higginbotham (1985, 2000) suggests that the interpretation of Infl is obtained via existential closure, whereby the event is anchored to utterance time or some other time with relation to utterance time. A schematic representation is provided below.

(18) Infl + Past VP

    [∃e : e < e'] ϕ(e)

                                                                (Higginbotham 2000: 54)

The logical representation can be read as such: for some eventuality e, e occurs before the utterance time of the eventuality e'. The fact that e occurs before e' leads to the past interpretation of VP. The operation of existential closure associated with tense on Infl asserts the very existence of the eventuality itself. A variety of syntactic tests provided by Higginbotham (Ibid: 61) illustrates this point.

(19) Mary reluctantly left
(20) Mary was reluctant[7] [to leave][8].

Higginbotham notes that *reluctant* and *reluctantly* illustrate a crucial distinction. In (19), *reluctantly* is factive in that it assumes the existence of the event; that is, the event of Mary leaving actually did happen. (20), however, is not factive and remains neutral as to whether or not the event denoted by its infinitival complement actually happened. This can be made clearer with the examples below.

(21) Mary reluctantly left, *so I let her stay for the night.

(22) a. Mary was reluctant to leave, so I let her stay for the night.
     b. Mary was reluctant to leave, but she left anyway.

(Adapted from Louie 2008: 105)

Based on the observations above, Louie suggests that tense can be directly correlated to existential eventuality assertions. The presence of tense commits the

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[7] A reviewer pointed out that (20) contains two eventualities: one denoted by the predicative adjective and one by the infinitival predicate. Presumably, the eventuality denoted by the predicative adjective is existentially closed via tense on the copula and thus assumed to exist, while the predicative, infinitival complement of the predicative adjective is not as tense is absent.
[8] Note that this is the infinitival form of the predicate, which should be distinguished from the bare present tense form. Presumably, a predicate in the present tense form is also subject to anchoring via existential closure, and should show the same distinction in (20-21).

(i) Mary likes dogs, *but actually she doesn't like dogs.
(ii) Mary seems to like dogs, but actually she doesn't like dogs.
(iii) Mary seems to like dogs, and in fact she really does like dogs.

speaker to the assertion of an event, while its absence leads to a lack of such commitment.

(23) The Correlation between Morphological Tense and Existential Event
    Assertions

- Morphological tense ~ Assertion of Event Existence
- Lack of morphological tense ~ Lack of assertion of event existence

(Ibid: 106)

Existential closure of tense on Infl over the event argument leads to an assertion of the existence of an eventuality, and the existence of the eventuality is interpreted with respect to utterance time. This thus anchors the eventuality to time.

This leads to the question of how copular predicates are anchored to time. As noted in the literature (see again Emonds and Stowell)[9], the copula has been analysed as analogous to other main verbs in that they take on tense features, and is generated as head of VP before raising to Infl. Temporal anchoring of eventualities denoted by verbal predicates proceeds through existential closure of Infl over the event argument, leading to a temporal interpretation of VP. Copular constructions, however, can contain SLPs (prepositional) with an event argument, or ILPs (nominal and some adjectives) that lack an event argument. Assuming, as does Kratzer (1995), that SLPs contain an event argument, existential closure associated with Infl can presumably take place with SLPs and their event arguments to temporally anchor the copular eventuality. That, however, leaves the

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[9] Becker (2004) suggests, however, that the finite *be* (*am, is, are, was, were*) should be distinguished from the non-finite forms (*being, been*). She shows that the finite copula exhibits a range of syntactic and interpretive differences from the non-finite form, and argues that the finite *be* is inserted straight into syntax at Infl, while the non-finite *be* is base-generated as V. The difference will not be of too much concern here, since the main thrust of the discussion hinges on anchoring via tense in Infl. For expository purposes, I assume the raising verb analysis, but adopting Becker's account would not in any way cause issues for the analysis presented here.

question of how ILPs are anchored to time. Carlson (1977) suggests that the ILP and SLP distinction requires two different forms of the copula *be*. According to Carlson, the copula that occurs with SLPs has the semantic function of mapping predicates that apply to stages of individuals (Ibid: 180). On the other hand, the copula that occurs with ILPs is semantically empty and is added to the syntax as some sort of mediator between the subject and the predicate. Carlson does not provide a reason why this semantically empty copula is needed. However, we argue, based on the perspective of anchoring, that this semantically empty copula is inserted to satisfy the aforementioned anchoring condition that stipulates that all sentences must be anchored to some salient reference point. With SLPs, the copula and the tense it carries in Infl likewise anchors a copular eventuality to time. But it also has the additional function of binding the event variable projected by the SLP, and performs the function of mapping the predicate to stages of the individual. In effect, the function of tense is to specify whether or not the state denoted by the SLP still holds of the subject at utterance time. In the present tense, it means the state denoted by the predicate does not have an end point and remains open, and thus persists into the present. With the past, it means that the end point has been specified and that the state does not persist into the present. With ILPs, the copula only fulfils a formal requirement of temporal anchoring by carrying tense features, which is assumed to be in the present since ILPs denote permanent properties that hold of individuals regardless of time i.e. no boundaries[10].

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[10] Using the past tense with ILPs is possible, but it involves 'coercion' of an ILP into an SLP.

3.4 COPULA-OMISSION AND TENSE ANCHORING

      Returning to CSE and copula-omission, the question to ask then is how we might anchor copula-less, predicative sentences. Without the copula and tense, sentences cannot be anchored to time. Without any salient reference point, copula-less sentences violate the anchoring condition and should all be considered ungrammatical. As it is, the CSE data shows a clear split between predicate types. The relevant data is reproduced below for convenience.

(24) Predicative nominals
a. *Mary __ a doctor.*
b. *Mary __ only a doctor.*
c. *Mary __ not a doctor.*
d. *Mary __ a doctor lah/meh?*

(25) Predicative prepositional phrases
a. *Tom __ at home.* (Locative)
b. *Breakfast __ in the morning.* (Temporal)
c. *Tom __ not at home.*
d. *Breakfast __ not in the morning.*
e. *Tom __ at home lah/meh?*
f. *Breakfast __ in the morning lah/meh?*

(26) Predicative adjectives
a. */? Tom __ clever.*
b. *Tom __ very clever.*
c. *Tom __ not clever.*
d. *Tom __ clever lah/meh?*

Predicate nominals and adjectives resist copula-omission while prepositional predicates permit it. In addition, a variety of strategies seems to license the omission of the copula. At this point, one might wonder what prevents us from

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(i) Tom was a doctor.

In this case, it is interpreted as *Tom* was once a doctor, but now he is not. In other words, the ILP *a doctor* is being interpreted as stage-like in that it only applies to a particular spatio-temporal chunk of *Tom*. Such 'coercion' will be important in our discussion of CSE later on.

assuming a null copula hypothesis for prepositional predicates as in (25). Since the sentences are judged grammatical, we may simply assume that a null copula and covert tense are present to fulfil the anchoring requirement. The presence of a covert copula would enable sentences in (25a-b), for example, to be anchored and interpretable with respect to time. The problem with this analysis is that it predicts all predicative copula-less sentences in CSE to be grammatical, since there is in principle no reason why we cannot assume a null copula analysis with sentences in (24) and (26). As it stands, there is a clear split. (24a) and (26a) are ungrammatical, or at best highly unnatural as judged by CSE speakers. (24b-d) and (26b-d), on the other hand, are judged to be natural and likely to occur frequently in CSE. This split is not accounted for by the null hypothesis, which predicts that (24a) and (26a) should be grammatical along with the rest of the sentences.

It thus remains to be seen how we might account for the data presented in (24-26). The preceding discussion in this chapter hopefully has given a clue as to how we might do so. We move on in the next chapter to outline the specifics of a possible account based on the general anchoring condition outlined above.

3.5 CHAPTER SUMMARY

We discussed in this chapter the existence of implicit arguments of verbs, and indeed all predicates, that allow language speakers to make reference to linguistic entities like eventualities. We further discussed suggestions in the literature that it is these implicit arguments of verbs that enable linguistic utterances to be anchored to the concrete world. One particular method is with

reference to time, and the operation that accomplishes this is existential closure, which not only relates an eventuality to utterance time, but also asserts the very existence of an eventuality. Predicative copular constructions were shown to be similarly anchored to utterance time via tense, with the caveat that the nature of the predicate also plays a role in tense anchoring and possible temporal interpretations. The question of how copula-less sentences in CSE fit into the theoretical picture was raised, given the split observed in CSE copula-less data. Finally, the null copula analysis was rejected as it was shown to make the wrong empirical predictions, suggesting that a new analysis that can capture the CSE data is needed.

CHAPTER 4: ANCHORING ILPS AND SLPS WITHOUT THE COPULA

This chapter re-examines the distinction between ILPs and SLPs with respect to nominal and prepositional predicates, and suggests how the distinction might be related to the discrepancy in copula-omission between them in CSE. We show that prepositional predicates, considered SLPs with event arguments, are able to be anchored with respect to time through aspect. Temporal information can thus be recovered through aspect in the absence of overt tense. This is not possible with nominal predicates lacking an event argument. We then discuss the ILP-SLP distinction with regard to adjectives to determine why copula-omission is not permitted with adjectival predicates in CSE.

4.1 NOMINAL AND PREPOSITIONAL PREDICATES AGAIN

As already discussed in preceding chapters, the copula can be freely omitted without affecting grammaticality with prepositional predicates in CSE, which is not possible with nominal predicates. The relevant data is reproduced here for convenience.

(27) *Mary __ a doctor.

(28) a. Tom __ at home. (Locative)
    b. Breakfast __ in the morning. (Temporal)

As was suggested in the previous chapter, it seems that the possibility of copula-omission with prepositional predicates lies in its inherent event argument that nominal predicates lack. The (un)grammaticality of (27) and (28) falls out from this analysis. With the presence of the copula, the event argument is existentially bound by the existential quantifier associated with tense on the copula, leading to

either a past or present interpretation. The question then is *how* sentences in (28) are anchored *without* the copula.

To begin to answer this question, let us first return to one of the key diagnostics of SLPs: that they can appear as the complements of perception verbs.

Occurring as Complements of Perception Verbs

(29) a. John saw Mary in the garden.   (SLP: permitted)
    b. *John saw Mary a teacher.   (ILP: not permitted)

Felser (1999) observes that this context, which allows SLPs, also allows infinitival and participial verbal complements.

(30) a. We saw John draw a circle.   (Infinitival)
    b. We saw John drawing a circle.   (Participial)

Felser argues that the complement of the perception verb *saw* cannot be a full clause i.e CP or IP. This is evident as these constructions do not allow for a complementiser or the infinitival *to*, standardly assumed to occur as C and Infl respectively.

(31) a. *We saw that John draw/drawing a circle.
    b. *We saw that John to draw a circle.

Furthermore, there seem to be restrictions on the types of verbs that can occur as perception verb complements. Specifically, eventive verbs (which comprise activity, accomplishment and achievement verbs) can occur in the complement position while stative verbs[11] cannot (see Vendler (1957) for a detailed classification). As is well-known, eventive verbs are those that can take the progressive participial morphology (*–ing*) while stative verbs cannot.

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[11] This implies that stative verbs have no event argument.

(32) a. John is enjoying his banana split.   (Eventive)
    b. *John is liking his banana split.   (Stative)

(33) a. We saw John enjoy/enjoying his banana split.
    b. *We saw John like/liking his banana split.

Based on the fact that the verbal complements of perception verbs can be in the –*ing* form, Felser argues that an additional functional projection sits above the VP specifying the aspect of V, namely Asp(ect)P. This follows earlier proposals from scholars like as McClure (1993), Travis (1992), Heycock (1995), and Borer (1998), who argue for the projection of AspP between IP and VP. Participial complements would have the Asp head specified as [+progressive], while infinitval complements would be specified as [-progressive]. The event argument associated with the SLP is, according to Felser, generated in the specifier of AspP.

Becker (2000) points out some problems with Felser's analysis. While she agrees with the projection of AspP, she expresses doubt that the event argument is generated in its specifier. She shows, for example, that expletives can occur in the subject position of perception verb complements.
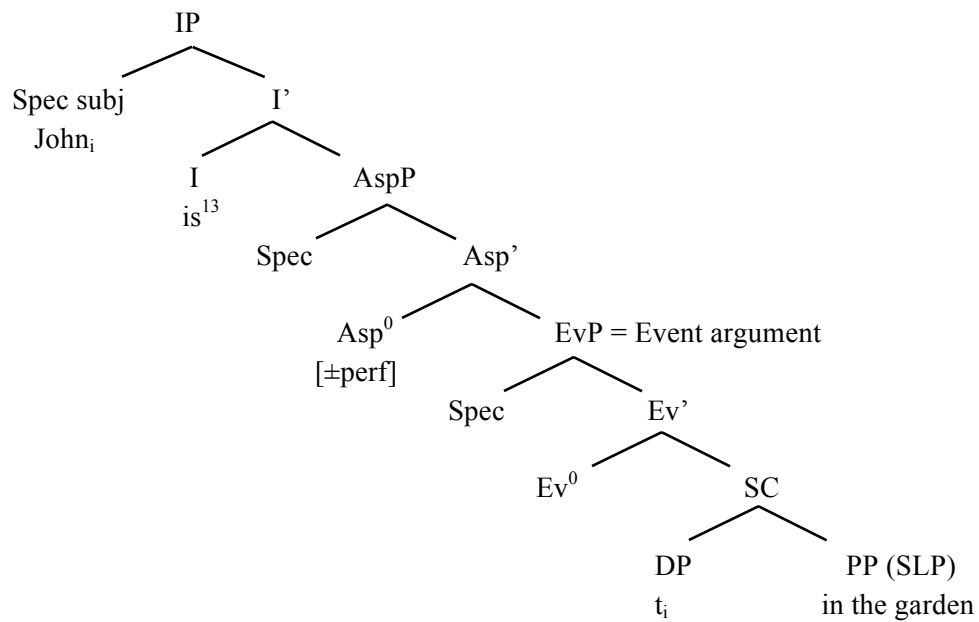
(34) I wouldn't like to see [there be so many mistakes].

(Felser 1999: 101)

Since the expletive subject *there* is non-thematic and argumental, it cannot be generated as the specifier of VP, a standard assumption in the generative literature under the VP-internal subject hypothesis. It thus has to be inserted directly in the specifier of AspP. If it is assumed that the event argument is generated there, the expletive subject would be excluded from that position and (34) would remain

unexplained. She thus suggests that the event argument is generated as the complement of AspP instead. Since there is a parallel between SLPs and verbal predicates in the complement position of perception verbs, she assumes that SLPs have a parallel structure as do progressive verbal predicates in the complement position, and extends it to copular clauses with SLPs. The respective structures of copular-SLP and copular-ILP combinations are presented below.
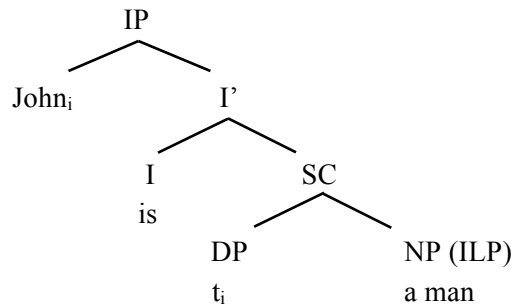
(35) a. John is in the garden. [12]   (SLP)

```
                         IP
                      /      \
              Spec subj       I'
               John_i       /    \
                          I        AspP
                         is^13    /     \
                              Spec       Asp'
                                       /      \
                                   Asp^0        EvP = Event argument
                                   [±perf]     /        \
                                            Spec          Ev'
                                                        /     \
                                                     Ev^0       SC
                                                              /    \
                                                            DP      PP (SLP)
                                                            t_i     in the garden
```

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b. John is a man.   (ILP)

```
                IP
             ╱      ╲
         Johnᵢ         I'
                    ╱      ╲
                   I          SC
                   is      ╱      ╲
                        DP          NP (ILP)
                        tᵢ          a man
```

(Becker 2000: 112-113)

For present purposes, it will be sufficient to note that the event argument of SLPs can be associated with the projection of an AspP. We will see in the next section how we may relate this AspP to the anchoring condition.

4.2 ANCHORING BY ASPECT

We have thus far suggested the projection of an AspP with SLPs. However, this does not itself constitute an account of how copula-less sentences with prepositional predicates in CSE are grammatical, while those with nominal ones are not. We thus suggest that aspect is one way of anchoring eventualities to time. This is by no means a novel suggestion. Scholars working on child English, such as Becker (2000) and Hyams (2007), have long suggested that child learners of English frequently omit tense and make reference to time through aspect. Assuming that the projection of an AspP is associated with an inherent event argument of the predicate, we should expect SLPs to be anchored temporally even without the copula, while ILPs cannot be anchored and would be ungrammatical. We have already seen this to be the case in CSE. Indeed, Becker observes this to be the case in child English as well.

Child	Predicate Nominal	Predicate Locative
Nina	74.1% (143)	14% (115) [14]
Peter	81.2% (401)	26.7% (90)
Naomi	89.7% (102)	38.1% (31)
Adam[15]	44.4% (303)	4.9% (26)
Eve[16]	39.8% (206)	54.8% (33)
avg. % overt *be*	65.8%	27.7%

Table 1: Average rate of overt *be* in children's nominal and locative predicative constructions)

(Becker 2000: 89)

Becker suggests that this pattern of copula-omission is accounted for if eventualities are anchored via aspect in child English. Hyams (2007) reaches the same conclusion for child English, and suggests a pragmatic principle for anchoring an eventuality to utterance time in tense-less sentences.

(36) The Temporal Anchoring Requirement: Events must be temporally interpreted, that is, they must be ordered with respect to a reference time (assumed to be utterance time).

(37) The Closed Event Hypothesis: In the early grammar temporal reference is assigned (to a non-finite clause) according to the topological property of event closure.

(38) The Punctuality Constraint: A closed event cannot be simultaneous with speech event/time.

(Hyams 2007: 244-246)

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[14] Number in parentheses indicate total number of the type of constructions coded, with the percentages representing the proportion of utterances in which *be* is overtly realized.

[15] While Adam showed the expected asymmetry between nominals and locatives, his rate of copula-omission with locatives and realisation of the copula with nominals are both much lower than the other children. Becker suggests that this could be due to the fact that Adam's files come from a slightly different age range. He is also claimed to show characteristics of AAVE in his speech, which utilises the copula *be* in different ways.

[16] Much of Eve's data was excluded in Becker's work for independent reasons; she showed a vastly different pattern of copula-omission, as well as a higher MLU for her age range as compared to the other children. For more precise arguments about the omission of her data, the reader is referred to pages 90-91 of Becker (2000).

According to Hyams, temporal reference can be recovered by appealing to the boundedness of eventualities. That is, reference to time may be pragmatically inferred by referring to the presence or absence of natural boundaries (starting or ending points) on the predicate. The boundedness of predicates has been well-studied in the literature. For example, Vendler (1957) classifies verbs into four broad categories: activity, accomplishment, achievement, and state. Activity verbs denote events with no built in boundaries and can stretch over time. Achievement verbs are interpreted as not located in time. Accomplishment verbs denote events with opening and closing phases, that is, with built in boundaries. Finally, state verbs denote continuous action with no expected end point.

Tense and aspectual morphemes on verbs in English thus serve to delineate and impose boundaries on the verbal predicate. With respect to anchoring by aspect in the absence of tense, Hyams suggests that events that are open and unbounded, either because boundaries are not specified or because there are no natural boundaries, are linked to utterance time and receive an ongoing interpretation. Closed events, on the other end, introduce boundaries that are linked to utterance time, leading to a past tense interpretation that focuses on the end state or result of an event.

We are now in a position to account for the asymmetry between copula-less sentences in CSE. As noted earlier, copular constructions can be classified as individual-level (no boundaries) or stage-level (natural boundaries) states based on the post-copular predicate. The post-copular predicate determines whether or not an event argument and AspP are projected. Copula-less sentences with

nominal predicates do not contain tense nor an inherent event argument and AspP and thus cannot be anchored with respect to time through aspect. Since this violates the anchoring condition, copula-omission is not licensed. Consider now the prepositional predicate *at home* as below.

(39) Tom is/was/will be at home.

Being an SLP combined with a copula, the predicate *at home* is taken to apply to *Tom* only at a specific temporal location. That is, it denotes a more or less temporary and conditional property of *Tom*. He could be at home in the present, past or in the future. At which point he is at home has to be determined by additional information. Simply speaking, the SLP *at home* combined with the copula is an eventuality that can be located in time i.e. it has natural boundaries delineating when the state holds of the subject. These boundaries are specified by some means, in this case tense on the copula. In the present tense, it means that the eventuality of being at home either began before utterance time, or at utterance time. In any case, the state denoted by the predicate holds at utterance time, and the endpoint is not specified, as showin in (40).

(40) John is at home.

Start   Start

           | | at home
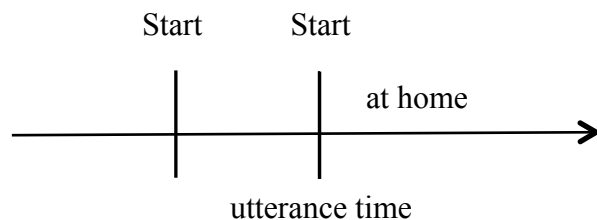
utterance time

In (41), the past tense on the copula indicates the eventuality held before utterance time, and thus does not hold in the present; the endpoint is specified as before utterance time. It could also indicate that the endpoint of the eventuality

corresponds with utterance time, and thus the eventuality ceases to hold at the point of utterance.

(41) John was at home.

End   End

at home
                    | |
    ——————————|——————————|——————————————————>

                         | |
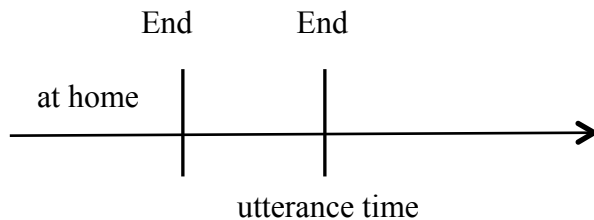
        utterance time

The modal auxiliary *will* together with the copula *be* suggests that the eventuality will hold some time after utterance time; that is, the starting point of the state is specified as being after utterance time, as shown by (42).

(42) John will be at home.

Start

                    | | at home
    ——————————————|——————————|————————————>

                    | |
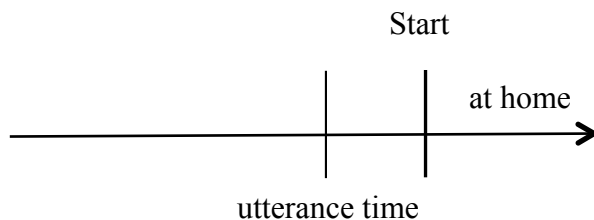
        utterance time

Since the prepositional predicate has starting and ending points, they can be located both in the present or past, based on the specification of the starting and ending points with respect to utterance time. This is in contrast to ILPs, which denote properties of entire individuals regardless of time and have no boundaries.

Consider now the copula-less CSE sentence containing the same prepositional predicate.

(43) *Tom at home.*
     Tom is at home. / ?/*Tom was at home.

Assuming that sentences can be anchored via aspect in the absence of the copula, we would need to make reference to the structure of the predicate. Since *at home*

34

is an SLP, it contains an event argument and projects an AspP. Without tense, however, it does not have its beginning or end point specified i.e. the state remains open as its natural boundaries are not specified. Given the lack of temporal information provided by tense, we expect speakers to recover temporal information by referring to the salient reference points in the communicative context at hand, which in the absence of any other overt markers of time[17] would be the time of utterance. Indeed, Hyams (2007: 246) suggests that in eventualities containing an event variable, the event variable is linked to the present and interpreted as ongoing at utterance time when tense is absent.

(44) Default Anchoring Requirement: In the absence of a tense specification,
      the event time coincides with utterance time, UT=ET.

                                                                              (Ibid)

This is evident in (43), where only the present interpretation is allowed, an observation that is further supported by the fact that in (45), a second utterance suggesting that a sentence like (43) existed in the past is infelicitous.

(45) *Tom at home. *He not at home now.*
      *Tom was at home but he is not at home now.

     We suggest then that the Asp head of AspP associated with the event argument can be featurally specified as [-bounded], following Hyams' (2007) claim that only bounded events must be located in the past. Schematically, it means the interval between the start and end points of the predicate *at home* (which is unspecified in copula-less sentences) overlaps with utterance time as shown below.

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[17] Overt markers of time could be temporal adverbials or adjuncts that make explicit reference to a particular time with respect to utterance time, such as *last time*, *now* etc. As we shall see in some later examples (see (80-81)), overt temporal adverbials or adjuncts do facilitate the omission of the copula in CSE.

(46) *Tom at home.*

unspecified start   unspecified end

```
                    |       at | home
  ─────────────────┼──────────────┼────────────┼──▶
                    |              |            |
                         utterance time
```

The feature specification of the Asp head thus determines the temporal location of the utterance. Since the prepositional predicate itself is open and unbounded in the absence of tense, it is expected that the state denoted by (43) should receive a present, ongoing interpretation when anchored by aspect in accordance with (38) and (44). Assuming anchoring in CSE can proceed via aspect, and that this is tied to the ILP and SLP distinction, we can accurately capture both the distribution of copula-omission between nominal and prepositional predicates, and the temporal interpretation of copula-less sentences.

To summarise, nominal predicates are ILPs lacking an event argument and AspP. Copula-omission is thus not licensed since these sentences cannot be anchored without tense or aspect. Prepositional predicates contain an event argument and AspP, and thus can be anchored by aspect even without the copula and tense that it carries, since the specification of boundedness on AspP can help recover temporal information. In the case of bare copula-less prepositional predicates, the state is asserted to exist at utterance time and receives an ongoing interpretation.

That concludes our discussion of the asymmetry in copula-omission between nominal and prepositional predicates. We move on to examine adjectival predicates in the following section.

4.3 COPULA-OMISSION WITH ADJECTIVAL PREDICATES

Adjectival predicates, based on their semantics, are the prototypical states. Like the distinction between ILPs and SLPs, adjectives can be roughly differentiated based on whether they denote permanent or transient properties.

(47) John is mean.

(48) John is available.

The adjective *mean* denotes a property of *John's* personality, and is taken to denote a permanent (or at least more long-lasting) property than *available*, since John could be or could be not *available* depending on contextual conditions. Becker (2000) notes, however, that the distinction between permanent and temporary properties, and thus ILP and SLP adjectives, is far from clear and appears to be weaker compared to nominal and prepositional predicates. The syntactic and semantic tests provided in Chapter 3 illustrate this point.

(49) a. Doctors are mean.   (ILP: generic only)
    b. Doctors are available.   (SLP: generic/existential)
    c. Doctors are dead.   (SLP: generic/existential)

(50) a. *There are doctors mean.   (ILP: not permitted)
    b. There are doctors available. (SLP: permitted)
    c. There are doctors dead.   (SLP: permitted)

(51) a. John saw Mary dead.   (SLP: permitted)
    b. *John saw Mary available.   (SLP: not permitted?)
    c. *John saw Mary mean.   (ILP: not permitted)

(52) a. *When Mary is mean, she drinks iced tea.   (ILP: not permitted)
    b. When Mary is available, she drinks iced tea.   (SLP: permitted)
    c. *When Mary is dead, she drinks iced tea.   (SLP: not permitted?)

(53) John is being mean. (ILP adjective but SLP, temporary meaning?)

(54) John is dead.   (SLP but ILP, permanent meaning?)

As illustrated in (49-54), there seems to be no clear distinction between ILP and SLP adjectives. ILP adjectives are easily 'coerced' into having SLP meanings, as in (53). Adjectives like *available* and *dead* are also problematic. The adjectives *available* is clearly an SLP based on its semantics, but does not pass all the tests (see (51b)). The adjective *dead*, on the other hand, clearly has ILP semantics, and yet passes most of the tests for SLP adjectives (except (52c)). Becker suggests that this weaker distinction is reflected in child English learners' realisation of overt *be* with adjectival predicates.

Child	Nominal	Locative	Adjectival
Nina	74.1% (143)	14% (115)	53.5% (62)
Peter	81.2% (401)	26.7% (90)	42.2% (116)
Naomi	89.7% (102)	38.1% (31)	59.8% (93)
Adam	44.4% (303)	4.9% (26)	42.9% (115)
Avg %	72.4%	20.9%	49.6%

Table 2: Average rate of overt *be* in children's predicative constructions by type

(Becker 2000: 134)

As shown in Table 2, the rate of overt realisation of the copula is generally close to 50%, and copula-omission occurs roughly about half the time. This is in stark contrast to that of nominal and prepositional predicates. Nominal predicates see rates of overt realisation of more than 50% (excluding Adam and Eve for reasons stated in footnotes 13 and 14), while prepositional predicates see overt realisation much less than 50%.

Copula-omission with adjectival predicates in CSE, on the other hand, seems to be disallowed, or at best highly unnatural. This is shown again by (3a). Taken together, child English and CSE data with adjectival predicates seem to cast doubt on whether adjectives show an ILP-SLP distinction. We suggest a way to capture the adjectival data is to assume that they behave like nominal predicates i.e. ILPs that contain no inherent event argument and apply to entire individuals. That is, they are states with no natural boundaries unlike prepositional predicates. However, we may assume adjectives to be much more amenable to aspectual modification and the imposition of boundaries by various means. Adjectives differ from nominal predicates in that the imposition of boundaries can be naturally interpreted without resorting to constructing some special context[18], so long as the imposition of boundaries is compatible with the semantics of the adjective itself (see also Chen (2010) for a similar suggestion of Mandarin adjectives being unspecified for boundedness). We illustrate some examples with the three adjectives exemplified as ILPs and SLPs in (49-54) above, using tense on the copula.

(55) a. John is mean.
    b. John was mean.

(56) a. John is available.
    b. John was available.

(57) a. John is dead.
    b. *John was dead.

As (55-57) show, the past copula can occur readily with both *mean* and *available*, previously classified as ILP and SLP adjectives. This is unexpected for (55b)

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[18] This will be discussed in the following chapter.

under the strict ILP analysis, where the adjective *mean* should denote a permanent property that cannot be bounded. Under our point of view, which adopts a looser definition of ILP adjectives, we can readily capture this fact. It is simply because adjectives are more amenable to the imposition of boundaries. (55b) thus has an end point imposed on *mean*, suggesting that John has become a much nicer person. (57b), on the other hand, is ruled out because of the semantics of *dead*; that is, *dead* cannot have an end point under normal circumstances (John cannot be dead for a while and not dead later). Even so, it is easy to think of contexts where (57b) can be construed as possible, such as in a movie where people can be brought back to life. As we will see in a later chapter, aspectual modification does permit the omission of the copula while returning a present interpretation with both nominal and adjectival predicates, supporting the view that aspectual modification can result in 'coercion' of predicates, and that they allow copula-less eventualities to be anchored to time.

4.4 CHAPTER SUMMARY

This chapter discussed the notion of anchoring eventualities to time through aspect. It also examined the distribution of copula-omission amongst non-verbal predicates in child English and CSE. We argued that prepositional predicates permit copula-omission in both child English and CSE because they contain an event argument and AspP, allowing copula-less sentences to be anchored to utterance time through the structure of the state denoted by the prepositional predicate. Nominal predicates lack event arguments and AspP and do not allow copula-omission. Finally, we argued that adjectives are better

analysed as ILPs that are readily amenable to coercion into having stage-level meanings. This allowed us to capture the fact that in CSE copula-omission with adjectival predicates is highly unnatural, but raised the possibility that they can be modified by aspectual markers and thus be anchored to time via aspect.

That concludes our examination of the distribution of copula-omission. We move on to address the other forms of modification that permit the omission of the copula in CSE, namely modification by SFPs, negation and degree modification.

CHAPTER 5: OTHER WAYS OF ANCHORING COPULA-LESS SENTENCES

The previous chapter discussed the distribution of copula-omission in CSE. We suggested that the distribution can be accounted for by the ability of a predicate to be anchored to time via aspect associated with an event argument. SLPs contain an event argument and are static eventualities with natural boundaries. Temporal information can be recovered by appealing to the boundedness of the predicate even in the absence of tense. ILPs, on the other hand, denote permanent properties with no natural boundaries and cannot be anchored without tense. We will, in this chapter, examine the various strategies that allow for copula-omission in CSE in contexts when it is usually not allowed, such as with nominal and adjectival predicates. We argue that they allow for the omission of the copula in two ways. One way is by appealing to event structure via the imposition of boundaries, thus modifying the aspect of eventualities, allowing them to be anchored to time. The other way is to anchor copula-less utterances pragmatically to discourse context and discourse time. This thus leads to the eventualities these strategies modify as being anchored with reference to utterance time even without the presence of tense on the copula.

5.1 ASPECTUAL MARKERS

As already mentioned, nominal predicates lack an event argument and AspP, and thus cannot be anchored to time without tense on the copula. Assuming adjectives to be ILPs also captures the fact that copula-omission is not permitted with adjectival predicates in CSE. However, we raised the possibility, based on StdE data, that adjectives are readily amenable to aspectual modification. This predicts

that should adjectives, and indeed nominals, be modified by aspectual markers, they will allow copula-omission since they can then be anchored to time. This is borne out by the data, as we will see below.
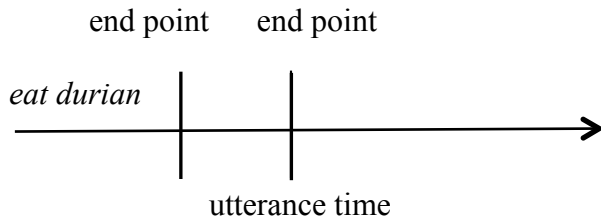
An aspectual marker that is frequently used in CSE is the aspectual marker *already*. Bao (2005) notes that CSE *already* expresses three different aspectual viewpoints: completive, inchoative, and inceptive. With non-stative predicates, *already* expresses the completive (perfect or simple past). With statives, it expresses the inchoative (state change) or inceptive (beginning of an action or state). The latter two are not functions observed with StdE *already*, and Bao concludes that CSE *already* patterns like the Chinese aspectual marker *le* (2005: 239-241). Li and Thompson (1981: 240) suggest that *le* serves to signal that a current state of affairs is relevant to some aspect of the particular situation, similar to the function of the perfective in StdE. In other words, *le* anchors some state of affairs, or eventuality, to the present discourse context.

(58) *Ta   chu   qu   mai   dongxi   le*
    he   exit   go   buy   thing   LE
    He's gone shopping.

<div align="right">(Ibid: 242)</div>

We may think of CSE *already* as being similar to Mandarin *le* in marking the relevance of an eventuality to the present. This is done by imposing starting or ending points on the eventuality. With non-stative predicates, such as event verbs, *already* imposes an ending point on the eventuality denoted by the verb. This could be prior to utterance time, or coinciding with utterance time. Since the verb has an ending point, it is a bounded eventuality and cannot be located in the present. Indeed, this is the case with verbal predicates.
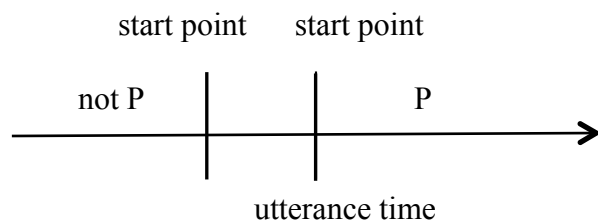
(59) *Tom eat durian already.*
      Tom has eaten the durian.

```
              end point     end point

  eat durian      |             |
  _____>
                  |             |

                      utterance time
```

Here the translation in StdE is rendered with the perfective, which suggests the event has ended and is thus situated prior to utterance time, even though no tense is expressed on the verb. The use of *already* asserts the relevance of the closed eventuality to the present discourse context.

      With statives, *already* leads to a state change or inceptive interpretation as described by Bao. We may assume *already* to impose a starting point on stative predicates that may be prior to, or coinciding, with utterance time. In other words, *already* asserts the existence of the state at a time of reference, or at the present time. This can be represented with the schematic diagram below.

(60) Inchoative/inceptive *already*

```
              start point     start point

  not P           |             |     P
  _____>
                  |             |

                      utterance time
```

<div align="right">(Adapted from Bao 2005: 244)</div>

The imposition of a starting point prior to, or coinciding with utterance time, suggests that the eventuality denoted by the stative predicate holds at utterance time and is interpreted as ongoing in the present.

Given the syntax and semantics of CSE *already*, we should expect it to allow for the omission of the copula, since the aspectual modification allows it to anchor eventualities to time. This is indeed borne out by the data with adjectival predicates, which usually do not permit copula-omission.

(61) a. *John mean already.*
　　　John has become mean.

　　b. *John available already.*
　　　John has become available.

　　c. *John dead already.*
　　　John has died.

Sentences in (61) all involve a state change; that is, a starting point was imposed on the state denoted by the adjective.

This seems to be true for nominals as well. Nominals that lack an event argument and AspP, and thus do not license copula-omission since they cannot be anchored to time, permit copula-omission with *already*.

(62) *Tom a doctor already.*
　　Tom has become a doctor.
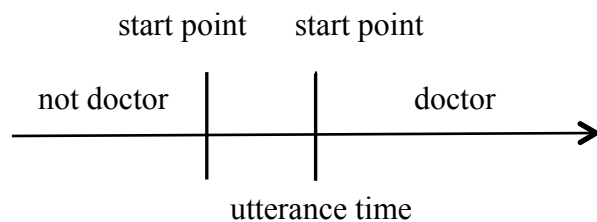
(62) is interpreted such that there was a change of state from John not being a doctor, to becoming one. That is to say, *already* has coerced what was originally a nominal ILP that applies to entire individuals into a stage level predicate that applies only to stages of an individual. This is done by imposing a starting point on the property denoted by the predicate, as represented above. Most importantly

for our purposes, (62) is now judged as possible and natural even without the copula. It receives the inceptive interpretation as expected, and the eventuality of John being a doctor persists into the present. This is in contrast to a copula-less bare nominal like (25a) which is judged as highly unnatural. Aspectual modification thus anchors eventualities to time through the modification of the structure of eventualities.

5.2 DEGREE MODIFICATION OF ADJECTIVAL PREDICATES

Adjectival predicates with degree modifiers also permit copula-omission, as compared to bare copula-less adjectives.

(63) a. ?/* *Tom happy.*
    Tom is happy.

  b. *Tom very happy.*
    Tom is happy. / Tom is very happy.

As seen in (57b), degree modification by degree words such as *very* licenses the omission of the copula. In addition, there are two different interpretations. (57b) could either mean that Tom is simply happy, or what is known in the literature as the positive form, or that Tom is very happy, where Tom is more than just normally happy. That is, the degree word *very* could be interpreted as bleached in meaning. Before attempting to explain why degree modification licenses copula-omission, let us consider the semantics of adjectives more carefully.

Doetjes et al. (1998) suggest that a bare adjectival predicate denotes a set of properties ordered in degrees, ranging from a minimal to a maximal value. For a bare adjective to be a predicate, an operation of existential closure, in which a specific degree is selected out of all possible degrees, has to take place. We may

thus take adjectives to contain an additional argument as do SLPs. This is, however, not an event argument, but a degree argument. In the positive form, the degree argument is bound by an existential quantifier, as is what happens with existential closure of events. They further suggest that degree modifiers are an instance of such existential quantification. Roughly speaking, degree modifiers split up the order set of degrees of properties denoted by the adjectival predicate. One set consists of degrees below the contextual reference point, while the other consists of degrees above the reference points. Degree words like *very* discard the first set, and predicate a particular degree of the second set of the subject. Other degree words like *less*, for example, discard the set with higher degrees and make use of the set with lower degrees, selecting a property from that set to predicate of the subject (Ibid: 342-343).

We might now begin to wonder how degree modification plays a part in anchoring bare copula-less adjectival predicates to time. The notion of boundedness is again relevant here. Recall that copular constructions denote static eventualities (states). States denoted by nominal predicates are taken to be ILPs and thus permanent, with no natural boundaries. We have also argued that adjectives in CSE could be taken to uniformly denote ILP states based on the unavailability of copula-omission because of the blurred distinction between ILP and SLP adjectives. This blurred distinction is alluded to in Becker (2000), and the under-specification of boundedness of adjectives suggested by Chen (2010) in Mandarin Chinese. We suggest then that degree modification seems to impose boundaries on the adjectival predicate. As suggested by Doetjes et al. (1998),

degree words like *very* and *less* quantify over a range of degrees based on a contextually salient reference point. *Very* scales upwards and quantifies over degrees above the reference point, and *less* does the reverse. This is akin to existential closure to obtain the positive form of the adjective, which must happen for the adjective to be used as a predicate.

The intuition is that the state denoted by an adjective exists on a scale. Without a reference point, the scalar nature of the properties denoted by the adjective cannot be used as a predicate. A salient reference point must thus be introduced. In the bare, positive form, this is achieved by existential closure of the degree argument as suggested by Doetjes et al (1998).

(64) John is happy.

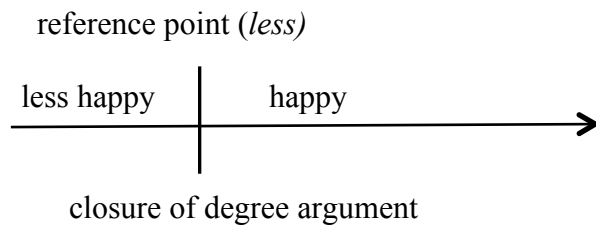reference point

happy

closure of degree argument
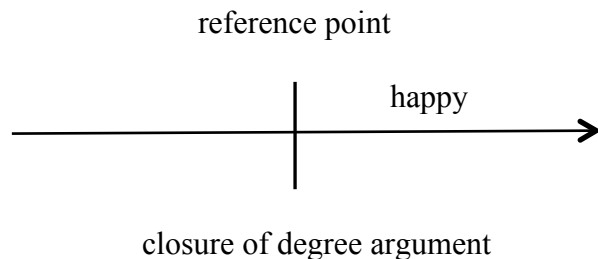
Degree modification, we propose, introduces this salient reference point by imposing an upper limit or lower limit on the adjectival predicate. In other words, degree modification serves to impose a boundary on the scale of degrees denoted by an adjectival predicate. There is, however, only one boundary imposed, and it is akin to the boundary that is imposed by *already* on adjectives. As we have already seen, *already* imposes a starting point for the eventuality denoted by the adjective. Crucially, modification by *already*, which marks a change of state reading, assumes the positive form of the adjective whereby a contextual standard

on the scale of degrees denoted by the adjective has already been picked out (c.f. existential closure of degree argument). In other words, a salient reference point has already been introduced into the scalar structure of the adjective. We suggest that degree modification by degree words like *very* and *less* do the same. They impose a salient reference point and range upward or downward from that reference point.

(65) *Tom very happy.*

      reference point (*very*)

happy | very happy   ⟶

      closure of degree argument

(66) *Tom less happy.*

      reference point (*less)*

less happy | happy   ⟶

      closure of degree argument
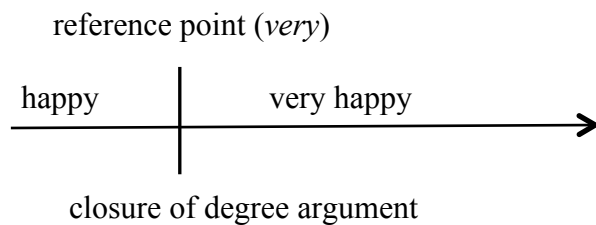
The scale, however, remains open since there is only one reference point. That is, degree modification imposes a boundary but does not close off the scale. In effect, the eventuality denoted by the adjectival predicate remains *open and unbounded*. Since the degree-modified adjective remains an open, unbounded scale, and open eventualities can only be located in the present, the degree-modified adjective is anchored to the present and receives a present, ongoing interpretation in the absence of tense. This imposition of a boundary thus predicts that degree modification can permit omission of the copula with adjectival

predicates, since the eventuality denoted by the adjectival predicate can be anchored via event structure (see also Smith 1997: 293; Chen 2010). Furthermore, according to Hyams (2007), the event should receive a present, ongoing interpretation and cannot be compatible with a past reading. As already observed, the first prediction is borne out, as shown by (63b). Indeed, it is observed that Mandarin, one of the major substrate languages of CSE, also displays obligatory degree modification with predicative adjectives in a verb-less construction (Smith 1997; Liu 2010; Chen 2010; Grano 2012).

(67) *Zhangsan   *(hen)   gao*
     Zhangsan   very   tall
     Zhangsan is tall. / Zhangsan is very tall.

<div align="right">(Chen 2010: 117)</div>

That degree-modified copula-less adjectival predicates can only receive a present ongoing interpretation is illustrated below with the addition of a second utterance that suggests the state of being *very happy* held in the past. As expected, this is infelicitous, since the eventuality denoted by the degree-modified adjective is an unbounded one and should be located in the present.

(68) *John very happy. *He not happy now.*
     *John was very happy. He is not happy now.

We may thus expect other forms of degree modification, such as the comparative form of adjectives (marked by the suffix *–er*), to license copula-omission. Like degree words, the comparative morpheme again splits up the scale of degrees denoted by an adjective into two sets, and predicates the set with higher degrees of the subject. Similar to degree word modification, it imposes a boundary on the scale of degrees of adjectives but does not close off the scale,

meaning that the eventuality denoted by the adjective remains open, thus locating the eventuality in the present. This prediction is indeed borne out, as shown by the examples below.

(69) *John happier.*He not happy now.*
    *John was happier. He is not happy now.

(70) *John more happy. *He not happy now.*
    *John was happier. He is not happy now.

As shown above, the eventuality has to receive a present interpretation, with the past interpretation ruled out. This suggests then that degree-modified, copula-less adjectives are always anchored to the present.

A final point to consider would be the bleached interpretation of degree words like *very* when used in copula-less contexts. It is curious why a bleached interpretation is available in copula-less contexts. We suggest that this falls out simply from the semantics of degree modification. Consider the degree word *very* for example. As Doetjes et al. (1998) argue, degree modification crucially requires a reference point. In the case of degree words like *very*, this reference point has to be pragmatically obtained, while reference points for degree words like *more* or *less* can be overtly present.

(71) a. John F. was [AP less [AP famous]] than Marilyn.
    b. John F. was [DegP too [AP famous]] to have any privacy.
    c. John F. was [DegP as [AP famous]] as Marilyn.
    d. John F. was [AP [AP famous] enough] to have bodyguards.

(72) a. *John F. was [DegP very [AP famous]] to have any privacy.
    b. *John F. was [DegP very [AP famous]] than Marilyn.
    c. *[DegP how [AP famous]] John F. is *t* to have any privacy.
    d. *[DegP how [AP famous]] John F. is *t* than Marilyn.
                                                    (Doetjes et al. 1998: 20)

The reference point for degree words like *very* is a fixed, contextually determined degree of the property denoted by the adjective, whereby having that particular degree of that property would qualify an entity as possessing that property. This is thus the positive form of the adjective. Importantly, scalar entailment is involved when degree modification by degree words like *very* takes place. That is, being *very X* necessarily entails that an entity possesses the positive form of *being X* as well. This can be seen in the following example, where the positive form cannot be negated.

(73) John is very tall. *He is not tall.

This is in contrast to other degree words like *less*, whose reference point varies and can be overtly realised, as shown in (66). In these cases, whether or not an entity possesses the positive degree of a property denoted by the adjective is not determined; it is a scalar implicature that can be cancelled.

(74) John is less tall. Actually he is not tall at all.

We suggest that it is this entailment that leads to the possibility of a bleached interpretation in CSE. Since the positive form in StdE involves the use of a copula construction with the adjective, which is optional in CSE, speakers seem to be making use of this entailment relation associated with degree modification in copula-less sentences with adjectival predicates to indicate the positive form, as shown in (63b). We can further predict, based on this view, that degree modification in copula-less sentences containing adjectives will disallow a bleached interpretation when the degree word is one that does not have a fixed

reference point, like *less*. This is again borne out by the data. As shown below, a positive, bleached reading is judged unnatural with the degree word *less*.

(75) *John less handsome.*
　　John is less handsome. / ?John is handsome.

Degree modification by certain degree words thus seems to be one strategy of expressing the positive form in the absence of the copula in CSE. It also permits the omission of the copula, since degree modification necessarily anchors the utterance to the present through the introduction of a reference point in the adjective's scalar structure, but leaving the eventuality denoted by the predicate open and unbounded.

5.3 NEGATION

　　Negation is another construction in CSE that permits the omission of the copula. Negation in CSE can be expressed by two negative particles: *never* and *not*[19].

(76) a. *John don't eat durian.*
　　　 John does not eat durians.

　　b. *John never eat durian.*
　　　 John didn't eat the durian.

　　c. *Why you don't believe me?*
　　　 Why don't you believe me?

　　d. *Why you never believe me?*
　　　 Why didn't you believe me?

(Bao 2005: 246-247)

Bao suggests that the use of *not* and *never* were directly transferred from Mandarin *bu* and *mei*. Like Mandarin *mei*, *never* expresses negation of the

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[19] Negation by *not* can be expressed with or without *do*-support. With verbal predicates, as is illustrated here, *do*-support is needed. With copula-less constructions, *do*-support is not necessary.

perfective while *not* expresses neutral negation. *Never* can also negate the experiential and habitual aspects, as shown below.

(77) a. *John never eat durian.*
     John never eats durians.

  b. *John never eat durian before.*
     John has never eaten durians before.

  c. *Why you never believe me?*
     Why do you never believe me?

The difference between (77a) and (76b) is that the object *durian* in (77a) is interpreted as generic, while negation of the perfective requires the object to be a referring expression, as in (76b). Negation by *never* can thus lead to ambiguity in interpretations. *Not*, on the other hand, conveys neutral negation in that it can negate the experiential or habitual like (76a), or a perfective like (76c).

    We might now address why negation permits copula-omission in predicative constructions in CSE. The preferred negation strategy for copula-omission in predicative constructions is *not*.

(78) a. *John not doctor.*
     John is not a doctor.

  b. *John not in the park.*
     John is not in the park.

  c. *John not happy.*
     John is not happy.

As noted by Bao (2005), the negative particle *not* in CSE seems to inherit its functions directly from Mandarin *bu*, while *never* is derived from *mei*. The first expresses neutral negation while the latter negates a perfective. This suggests that the two negative particles are sensitive to the structure of eventualities i.e. the

boundedness of a predicate. Indeed, Lin (2003) suggests that Mandarin *bu* occurs with unbounded events, while *mei* occurs with bounded events. Chen (2010) further suggests that *bu* and *mei* carry the features [-bounded] and [+bounded] respectively, and indicate the boundedness of the following predicates with which they appear.

(79) a. *Ta   mei/*bu   nong-dong   zhe-ge   lilun*
      he $_{NEG}$ make-understand this-$_{CL}$ theory
      He hasn't understood this theory.

   b. *Ta   bu/*mei   dong   zhe-ge   lilun*
      he $_{NEG}$ understand this-$_{CL}$ theory
      He does not understand this theory.

<div align="right">(Lin 2003:426)</div>

Smith (1997) further suggests that the Mandarin verb *nong* (to cause/make) is only compatible with SLPs and not ILPs. This is thus further evidence that *mei* can only occur with SLPs, which denote eventualities that contain inherent, natural boundaries as compared to ILPs which do not contain boundaries.

    We may thus assume that the properties of Mandarin negation were directly transferred to CSE negation, as is suggested by Bao (2005). Negation by *not* indicates that an eventuality is unbounded and must be located in the present. Evidence for this can be observed in (78), where the interpretations provided are in the present tense, suggesting that the eventuality holds at present time. This is made even clearer by the following examples, where the additions of sentences containing the temporal adverbial *now* that suggests the eventuality did not hold prior to utterance time but holds at or after utterance time, is infelicitous.

(80) a. *John not doctor. *He doctor **now** lah*[20].
       *John was not a doctor before but he is now[21].

   b. *John not in the park. *He in the park **now** lah.*
       *John was not in the park before but he is now.

   c. *John not happy. *He happy **now** lah.*
       *John was not happy before but he is now.

This is not expected if the first negated utterance is situated in the past, since the eventuality could be assumed to have changed at utterance time, which is the purpose of the second utterance. Rather, sentences in (80) are interpreted as being contradictory when uttered by the same speaker. The only way for the utterances above to be felicitous is to explicitly indicate that the negated, copula-less sentences are situated in the past. In CSE, this is achieved by making use of temporal adverbials that situate the utterance in the past, or indicate a change in state.

(81) a. *John not doctor **last time**. But he doctor **now** lah.*[22]
       John was not a doctor before but he is now.

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[20] The second utterances in (80) are not strictly ungrammatical. While they are infelicitous in an extended stretch of discourse like the ones in (80), where there is a contradiction in terms of the temporal interpretations, they are grammatical when uttered in isolation in out-of-the-blue contexts. Presumably, the temporal adverbial *now* explicitly indicates that an eventuality is situated in the present and can thus anchor an eventuality temporally, even with nominal and adjectival predicates such as in (80a) and (80c). We have also seen thus far that even without the temporal adverbial *now*, SFPs such as *lah* independently allow the copula to be omitted. This will be discussed in detail in the following section.

[21] Note that this refers to both utterances being spoken by the same speaker. It is different from when the second utterance is spoken by a second interlocutor, who is seeking to refute the first utterance, in which case it becomes felicitous and receives a change of state reading.

A: *John not doctor.*
     John is not a doctor.

B: *He doctor now lah.*
     He is a doctor now.

[22] Contrary to the previous example, the two utterances here could be uttered by the same speaker since there is no contradiction in interpretations. The first negated utterance is clearly situated in the past, and the second utterance indicates that the negated utterance has changed at utterance time.

b. *John not in the park **just now**. But he in the park **now** lah.*
   John was not in the park but he is now.

c. *John not happy **just now**. But he happy **now** lah.*
   John was not happy but he is now.

The fact that a temporal adverbial such as *last time* needs to be added in order to obtain a past interpretation is further evidence that the default temporal interpretation of a copula-less sentence containing negation is the present. Most importantly, negation renders copula-less sentences acceptable and natural, as compared to sentences without negation. We take this to be due to a general anchoring condition, and that negation by *not* anchors an eventuality to the present by indicating that the following predicate is an unbounded eventuality.

We may now finally consider negation by *never*. As suggested by Bao (2005), *never* patterns like Mandarin *mei* in negating bounded eventualities. Copular constructions, as noted earlier, denote static eventualities that do not have natural end points. In the event of copula-omission in CSE, the boundedness of the copula-less eventuality depends on the nature of the predicate and the ILP-SLP distinction. Given that nominals are ILPs, prepositional predicates are SLPs, and adjectival predicates in CSE can be taken as ILPs that can readily be modified aspectually, we predict that *never* should be able to occur with prepositional or adjectival predicates. As it is, negation by *never* rarely occurs in copula-less constructions, and sounds highly unnatural when it does. We will take this to be due to the fact that negation by *never* is usually used with verbal predicates. It can, however, occur readily when used with other temporal adverbials such as *before*.

(82) a. *_Tom never doctor before. He doctor now_[23].
      *Tom was never a doctor. He is a doctor now.

  b. ? _Tom never in the park before. He in the park now._
    ?Tom was never in the park. He is in the park now.

  c. _Tom never happy before. He happy now._
    Tom was never happy before. He is happy now.

The adverbial _before_ explicitly marks the experiential, which assumes that the eventuality modified by _before_ is a bounded one that has a natural endpoint. Because the eventuality has an endpoint, it can be repeatedly experienced by the subject. With the addition of _before_, negation by _never_ becomes possible since never _negates_ bounded eventualities, and what is negated is a bounded eventuality. Eventualities negated by _never_ suggest that the subject has never possessed the property denoted by the copula-less predicate. Most importantly for our purposes, the modification and negation by _never_ alter the event structure of the eventuality, enabling it to be located in time either in the past, present, or to have never happened at all. As expected, copula-omission and the absence of tense become permitted, since tense is not needed to locate the eventuality in time.

5.4 CSE Sentence-final Particles (SFPs)

There is perhaps nothing more ubiquitous and characteristic of CSE than its inventory of SFPs. SFPs occur highly frequently in the speech of basilectal and mesolectal speakers, and sometimes even occur in the acrolectal StdE as reported by Deterding and Low (2003). The exact number of discourse particles in the CSE inventory remains highly debated, mostly due to the fact that some particles like

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[23] See again footnote 20.

lah can have different functions and uses, even though each of these distinct uses shares the same phonological form (Richards and Tay 1977; Wee 2004; Deterding 2007 amongst others). Most authors agree that CSE SFPs serve various discourse-pragmatic functions, such as indicating the obviousness of a proposition, the mood and attitude of the speaker, or to soften or strengthen various utterances in order to indicate solidarity or distance (Wee 2004). Syntactically, SFPs occur mainly in sentence-final position (Ibid), with some particles such as *ah* serving to mark off the topic of an utterance and indicate that the comment is to follow (Deterding and Low 2003; Low and Brown 2005). As for the origins of CSE SFPs, Lim provides a detailed, comparative analysis and suggests that Bazaar Malay and Hokkien provided the particles *lah*, *ah* and what while Cantonese later provided *lor*, *hor*, *leh*, *meh* and *ma* (2007: 446).

CSE speakers agree that the most common way of licensing the omission of the copula is through the use of SFPs. Most notably, SFPs license the omission of the copula even with ILPs like nominal and adjectival predicates, which presumably cannot be temporally anchored as shown in the previous chapter. This is illustrated with the SFP *ah*. When *ah* is used with a mid-falling or low pitch, *ah* marks declaratives as questions where responses are required from the addressee (Lim 2007: 449). In addition, *ah* also marks the fact that the speaker is hesitant, and is seeking confirmation from the hearer about a particular proposition that was previously expressed.

(83) a. *John doctor ah?*
      Is John a doctor?

b. *John in the park ah?*
   Is John in the park?

c. *John happy ah?*
   Is John happy?

In contrast, an assertive particle like *lah* (rising intonation) marks the strong conviction of the speaker towards the utterance being made. Copula-omission is likewise natural here.

(84) a. *John doctor lah.*
        John is a doctor for sure.

b. *John in the park lah.*
   John is in the park for sure.

c. *John happy lah.*
   John is happy for sure.

Gupta (2006) and Kim (2011) further note that SFPs always modify the force of the entire sentence or utterance. That is, the scope of the SFP is the entire utterance. This is illustrated with the SFP *lor*, which serves to mark the obviousness of an utterance.

(85) a. [*Ali think (that) Mary should go home*] *lor*.
        It is obvious that Ali thinks Mary should go home.

b. **Ali think* [*(that) Mary should go home lor*].
   Ali thinks that it is obvious that Mary should go home.

(Kim 2011: 36)

As indicated by (85), the SFP *lor* must impart assertive force to the entire sentence and cannot assert only the embedded clause.

At this point, we may begin to address the question of why SFPs allow for copula-omission, even when the predicate lacks an event argument that allows it to be anchored to time. Recall that a crucial component of anchoring to time by

tense is the existential assertion of the eventuality itself. That is, the eventuality expressed by the copula and predicate combination must be asserted to exist in order to make reference to it with respect to utterance time. We suggest that this is precisely what SFPs do as well. By imparting their own assertive force upon the property denoted by a copula-less predicate, SFPs crucially assume the existence of the eventuality of the predicate ascribing a property to the subject. SFPs thus introduce the eventuality denoted by a copula-less predicate into the discourse context, anchoring it to utterance time, before imparting its assertive force to it. This is similar to anchoring by tense, as noted by Louie (2008), whereby anchoring an eventuality with respect to utterance time presupposes its existence through existential closure. Let us examine in detail how this would work.

As is noted in the literature, different SFPs express different types of assertive force in CSE. Gupta (2006) suggests that the wide-ranging pragmatic meanings of SFPs can be united under a single functional system: epistemic modality. Modality, as defined by Givón (1993: 169), encodes the speaker's attitude towards a given proposition. Two types of attitudes can be conveyed: judgements of truth, probability, certainty, belief or evidence, and judgements of desirability, preference, intent, ability, obligation or manipulation (Gupta 2006: 251), commonly labelled as epistemic and deontic modality. In StdE, epistemic modality is encoded by modal verbs such as *may* or *will*, or by adverbs like *probably* and *certainly*. Markers of epistemic modality may not affect the truth values of utterances, but may serve to assert the speaker's commitment to the truth value of the utterance (Ibid: 257).

Gupta suggests that CSE SFPs can be ranked on exactly such a scale of epistemic modality, and differ in terms of the strength to which they assert the truth value of an utterance. The question particle *ah*, as described above, can thus be categorised as [-assertive] while the much studied particle *lah* is [+assertive]. She provides a full categorisation of CSE SFPs as below.

+ assertive -- - assertive

Contradictory	**Assertive**	**Tentative**
what	*lah*	*ah*
mah	*lor*	*hah*
meh		*hor*

Table 3: Major discourse particles of Singlish

(Gupta 2006: 258)

Since CSE SFPs are associated with expressions of epistemic modality, they can only assert a speaker's commitment to the truth value of an utterance, and has no import in the truth value itself. That is, in a copula-less predicative sentence with SFPs, the truth value of the property denoted by the predicate (whether nominal, adjectival or verbal), is already assumed to be (un)true. That is, the eventuality exists (or does not exist) at utterance time i.e. in the present. Indeed, Law (2002) noted that markers of modal and epistemic knowledge require a true proposition as an argument as part of their semantics, which means that the proposition must exist or hold at present time (see also Ernst 2002). In other words, the most important part of the expression of epistemic modality by SFPs is the strong link to a situation that holds at utterance time (Progrovac et al. 2006). We can further demonstrate the fact that CSE SFPs themselves are anchored to present time, and thus assume utterances they modify to also be anchored to

present time even without tense. As (83) and (84) show, the StdE translations all assume the present tense, where the eventuality denoted by the copula-less predicate holds at present time, and the SFP *lah* marks a strong commitment to the truth value of the eventuality. That is, the eventuality is already anchored to time through the introduction of a SFP, and copula-omission does not violate the anchoring condition.

A clearer example would be when tense on the copula is in fact present with SFPs. Crucially, SFP modification assumes the past time interpretation, but the assertive force is still anchored to the present.

(86) a. *John was doctor lah.*
    I am sure John was previously a doctor. / *I was previously sure that John was a doctor.

b. *John was in the park lah.*
    I am sure John was previously in the park. / *I was previously sure that John was in the park.

c. *John was happy lah.*
    I am sure John was previously happy. / *I was previously sure that John was happy.

(87) a. *John was doctor lor.*
    It is obvious John was previously a doctor. / *It was previously obvious John was a doctor.

b. *John was in the park lor.*
    It is obvious John was previously in the park. / *It was previously obvious John was in the park.

c. *John was happy lor.*
    It is obvious John was previously happy. / *It was previously obvious John was happy.

As shown in the interpretations of (86-87), the assertive particles *lor* and *lah* assume the existence of the eventuality that it modifies. In these cases, the

presence of the tensed copula anchors the eventualities to the past, and the SFPs simply assert the past existence as being relevant to present time. The assertive particle itself, however, is still always anchored to the present, as shown by the ungrammaticality of the readings where the assertive force is anchored to the past and thus prior to utterance time. This strongly suggests that CSE assertive SFPs are always anchored to the present at utterance time, and that their presence in a tense-less sentence serves to anchor the utterance to the present.

We now examine non-assertive SFPs, which in CSE are used to form questions of the sort shown in (83). The question particle *meh* can be used in the same way.

(88) a. *John doctor meh?*
    Are you sure John is a doctor now?

    b. *John in the park meh?*
    Are you sure John is in the park now?

    c. *John happy meh?*
    Are you sure that John is happy now?

(89) a. *John was doctor meh?*
    Are you sure John was previously a doctor? / *Were you previously sure John was a doctor?

    b. *John was in the park meh?*
    Are you sure John was previous in the park? / *Were you previously sure John was in the park?

    c. *John was happy meh?*
    Are you sure John was previously happy? / *Were you previously sure John was happy?

(88-89) show that non-assertive SFPs demonstrate the same characteristics as assertive SFPs. Since they are anchored to the present discourse context at utterance time, they likewise anchor the eventualities they modify to the present

in the absence of tense, as in (88), unless otherwise specified as in (89). Even with the overt occurrence of tense, the assertive force associated with SFPs is still anchored to the present. Thus, the presence of an SFP, which is always anchored to the present discourse context, renders the presence of the copula unnecessary when the eventuality to be denoted still holds at the time of utterance. Copula-omission is thus licensed with the occurrence of SFPs, since their presence can anchor the copula-less eventualities they modify to utterance time to receive a present, ongoing interpretation.

5.5 CHAPTER SUMMARY

This chapter examined the various strategies that permit the omission of the copula, even with ILPs that do not usually permit copula-omission. It was argued that all the strategies share the similarity of being able to anchor eventualities to time, thereby rendering the use of the copula unnecessary and optional. The CSE aspectual marker *already* imposes end points when used with non-stative predicates (verbs), and thus marks the eventuality denoted by the verb as occurring prior to utterance time. With statives, it marks a change-in-state or start-of-state reading by imposing a starting point. Degree modification alters the scalar structure of adjectives and leaves the scale open and unbounded, and is thus interpreted as being located in the present. Negation in CSE is sensitive to the boundedness of the predicate. Since they indicate the event structure of an eventuality, the eventuality denoted by the predicate can be anchored to time even without tense. Finally, CSE SFPs are suggested to always be anchored to the present because as epistemic modality markers, they always require a true

proposition or eventuality as their arguments. This suggests that in the absence of

tense in copula-less sentences, the presence of an SFP requires that the eventuality

exists in the present and is thus pragmatically anchored to present time, rendering

the use of the copula as a tense carrier unnecessary and optional.

CHAPTER 6: A NONSENTENTIAL ANALYSIS OF COPULA-LESS SENTENCES

We have in the previous chapters examined copula-less sentences in CSE and accounted for the distribution of copula-omission. We suggested that this is tied to the ILP-SLP distinction. Furthermore, we examined the various strategies that allow for the omission of the copula, even with ILPs in which it is not normally permitted. We will in this chapter discuss some theoretical implications of the presented data, specifically focusing on the nature of IP and the Infl node in CSE, which is assumed to be where tense and the copula are located. We suggest that nonsentential analyses, which assume there are no projections of IP and Infl, cannot account for the empirical data in CSE, and go on to discuss the nature of the Infl node in CSE. Finally, we suggest future lines of inquiry that can go some way towards validating our claims about Infl in CSE.

6.1 COPULA-LESS AND TENSE-LESS SENTENCES IN STDE

We have so far described copula-less and tense-less CSE predicative sentences to be one of the ways CSE deviates from StdE. That is not to say, however, that tense-less sentences do not exist in StdE. Paesani (2006) notes that copula-less and tense-less sentences do occur in certain special registers of adult StdE, such as in diary and note-taking contexts and most prominently headlines. Some examples are as below.

(90) Audience good.

(91) Word order pretty loose.

(92) Car broken down.
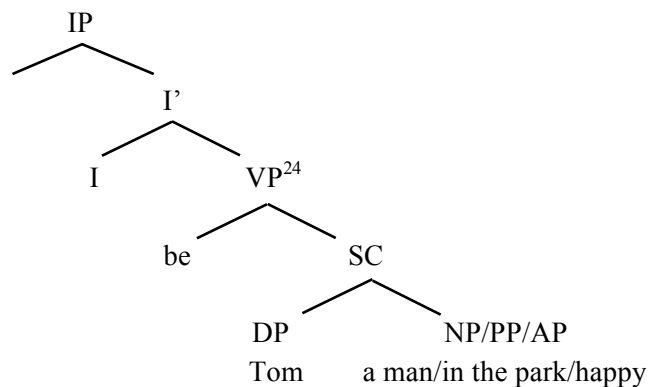
(93) Proof in the pudding.

(Ibid: 150)

As it turns out, tense-less and verb-less sentences do not just appear in matrix contexts in certain special registers. Even in formal StdE, they can occur as embedded clauses with certain verb types.

(94) I consider [Tom a doctor].

(95) I consider [John happy].

The embedded clauses in (94-95) are typically analysed as small clauses (SC) in the literature. According to Basilico (2003), the term SC refers to a string of XP YP constituents that enter into a predication relationship. The predicate, however, is an NP, PP, AP or an uninflected VP. Indeed, this is the analysis that has been standardly assumed for copular clauses. The copula verb *be* is usually assumed to be a verb that selects a SC complement, and the copula raises to Infl to take on tense features, as was the analysis assumed by Stowell (1981). We reproduce the structure of a simple copular sentence again for convenience.

(96) Tom is a man/in the park/happy.

```
              IP
             /  \
                 I'
                /  \
               I    VP²⁴
                   /  \
                  be   SC
                      /  \
                    DP    NP/PP/AP
                    Tom   a man/in the park/happy
```

(Adapted from Heggie 1988: 47)

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[24] Becker (2004) analyses the copula *be* as base generated in Infl. We adopt the raising verb analysis where the copula is generated as a VP, which is the standard analysis in the literature. See again footnote 9.

As shown above, it is assumed that the subject *Tom* originates in an SC constituent with the predicate *a man*. It then moves to the specifier of IP to receive nominative case, as is the standard assumption in the generative literature. The copula also raises to Infl to take on tense features.

Progrovac et al. (2006) suggest that one way of analysing verb-less or tense-less sentences then is to assume they are base-generated as SCs without the projections of a VP or IP. Given that Infl is taken to be the head of all sentences within the generative paradigm, they dub this analysis a nonsentential analysis, making reference to the fact that they assume IP and Infl are not projected for sentences like (90-93). Moscati (2006), who studied the omission of the copula under negative contexts with the same children studied in Becker (2000), arrived at the same analysis. He suggested that child speakers of English may arbitrarily choose any functional projection of any height to project to in their speech (see also Rizzi 1994), and since NegP in English is projected below IP (Laka 1990), the omission of the copula in negative contexts can be explained as child speakers projecting up to NegP, omitting IP. Progrovac et al. (2006) provide the crucial piece of evidence supporting this hypothesis: structural case. Within the generative framework, structural nominative case is taken to be associated with tense on Infl. The specifier of IP is taken to be the canonical position for nominative case assignment. In the absence of structural nominative case, Progrovac et al. suggest that the default case is accusative. They show that in StdE tense-less and copula-less sentences with pronominal subjects (the only category in StdE that shows case distinctions), the pronominal subjects are always in

accusative case. Furthermore, nominative case patterns with tense and the copula. Nominative subject pronouns must occur with tensed copulas or not at all, as shown below.

(97) a. Me first!/Him worry?!

    b. I am first./He worries.

    c. ?*I first./??He worry?!

    d. *Me is/am first./*Him worries.

<div align="right">(Progrovac 2006: 38)</div>

Potts and Roeper (2006) claim that sentences in (97) occur as expressive SCs that express the momentary attitude of a speaker towards a situation, rather than as assertions expressed by declarative sentences. Progrovac (2006) suggests that data in (97) can be accounted for if we assume an SC analysis, where the subject and predicate are merged in an SC structure without the subsequent merging of IP and Infl. She suggests that this is possible under the minimalist framework of generative grammar, where a distinction is made between interpretable and uninterpretable features. Interpretable features are those that have an effect on semantic interpretation, such as the gender distinction in StdE pronouns. Uninterpretable features are those that do not have an effect on semantic interpretation, and serve a purely structural and syntactic function, such as case distinctions (Adger 2003). Structural nominative case is commonly assumed to be an uninterpretable feature and needs to be checked with the Infl node. Since tense-less and copula-less data, such as those in (97), must occur with accusative case, which is assumed to be the default case, no uninterpretable features are left

unchecked and the sentences in (97) are well-formed syntactic objects that can be interpreted by the conceptual-intentional and articulatory-perceptual systems.

A central hypothesis presented in this thesis is that all sentences must be anchored to a salient reference point. Indeed, Progrovac (2006: 43) acknowledges that the core aspect of a sentence's meaning according to formal semantic theories is its truth conditions, and in order to compute truth conditions, it is essential that a predication relationship be situated in time via tense. An SC analysis would presumably be unable to account for how sentences such as those in (97) are anchored to time. Progrovac suggests, however, that time need not always be represented morpho-syntactically and can be provided by the pragmatic context. This explains why tense-less and copula-less sentences only occur in special registers such as newspaper headlines, which always seek to situate situations or events in the present. Interestingly, there is cross-linguistic evidence suggesting that the default anchoring time in the absence of tense is to the present or utterance time. Russian and Hebrew, for example, omit the copula when the utterance describes an eventuality that is to be situated in the present.

(98) *Ivan veren. / Ivan byl veren.*　　　(Russian)
　　Ivan faithful　　Ivan was faithful
　　Ivan (is) faithful. / Ivan was faithful.

(99) *Dani (hu) nehmad / rofe / al ha-gag.*　　(Hebrew)
　　Dani is nice　doctor on the-roof
　　Dani is nice/a doctor/on the roof.

　　　　　　　　　　　　　　　　　　(Progrovac 2006: 44)

A final point to consider would be the co-existence of tense-less and copula-less sentences in StdE. As noted above, it is not that these sentences do not exist in StdE, but that they only occur in special registers or contexts. Roeper

(1999) suggests that the existence of nonsentential SC structures alongside fully developed, tensed structures constitutes a kind of 'universal bilingualism', in which speakers of all languages have access to both fully-developed, tensed structures and tense-less, minimal SC structures. Potts and Roeper (2006) hypothesise that SC structures are the basic structures that child learners of languages start out with, and that language acquisition involves the acquisition of more complex structures comprising various functional projections. This is supported by data in second language acquisition, in which learners frequently produce structures that are tense-less and case-less in the early stages of acquisition (Work 2006), as well as data in pidgin languages, in which sentences are often tense-less (Winford 2006; Edwards 2006). After the acquisition of fully-developed grammatical structures, SC structures remain part of a fully competent speaker's grammar, but become more limited in usage, and restricted to special registers and contexts in which economy of expression is preferred over fully-developed structures (Progrovac et al. 2006). Proponents of a nonsentential approach thus claim that tense-less and copula-less sentences are really SC structures that lack the projection of an IP and Infl node. These are claimed to be the most basic structures that are present in early language acquisition and development, and are always anchored to the present at utterance time. Tensed structures and morpho-syntactic expression of tense and time are later developments, and SC structures may remain fossilised in the grammars of even fully competent speakers of a language, to be used only in certain special registers and contexts.

6.2 ARE CSE COPULA-LESS SENTENCES NONSENTENTIALS?

The previous section presented arguments for a nonsentential analysis of tense-less sand copula-less sentences. The key idea is that these are SC structures lacking an IP and Infl. In the analysis of CSE copula-less sentences thus far, we have suggested that copula-less sentences are anchored to time via aspect and event structure, specifically through the projection of an AspP and the specification of [±bounded] on the Asp head, or pragmatically through the use of SFPs. We have, however, not made any commitment as to whether or not CSE projects an IP and Infl node. One could suggest that we simply adopt a nonsentential approach to CSE copula-less sentences and argue they are all SCs lacking Infl. Three key pieces of morpho-syntactic evidence will be presented in this section suggesting that CSE does in fact project an Infl node, and that we cannot assume a nonsentential approach to CSE tense-less and copula-less sentences.

A first piece of evidence comes from the distribution of copula-omission in CSE as discussed in previous chapters. As with the null copula hypothesis, a nonsentential approach should suggest that all instances of copula-omission, regardless of the nature of the predicate, should be permitted in CSE, since SC structures are well-formed syntactic objects with no unchecked uninterpretable features. This is not the case and copula-omission is dependent on the nature of the predicate, as discussed in Chapter 3. A second piece of evidence comes from the key diagnostic used by proponents of nonsentential approaches to claim that there is no IP and Infl in tense-less structures: structural nominative case.

Progrovac (2006) suggested that the obligatory occurrence of accusative pronominal subjects in tense-less and copula-less sentences constitutes evidence for the lack of Infl, since Infl is assumed to be the locus of nominative case assignment through feature checking within the generative paradigm. CSE pronominal subjects, however, seem to always occur in nominative case, regardless of the following predicate. This pattern is observed even in verbal predication, which displays the nominative/accusative case distinction in subject and object positions (Sato 2011, 2014).

(100) a. *He/she/*him/*her doctor already/lah.*
He/she became a doctor. / He/she is a doctor for sure.

b. *He/she/*him/*her in the park.*
He/she is in the park.

c. *He/she/*him/*her very tall.*
He/she is tall. / He/she is very tall.

(101) a. *{He/*Him} like[25] Cindy a lot.*
He likes Cindy a lot.

b. *Cindy like {*he/him} meh?*
Does Cindy like him?

(Sato 2014: 388)

If we assume nominative case to be associated with the projection of Infl, and that pronominal subjects in CSE must be in nominative form, then it must be concluded that CSE does contain an Infl node even in the absence of overt tense features.

A final piece of evidence for the projection of Infl in CSE comes from an independent source, namely argument ellipsis. It has long been observed that CSE

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[25] As with copula-omission, finiteness features such as tense and person agreement are frequently omitted with main verbs in CSE verbal predication.

allows for the omission of argumental DPs in the subject and object positions

(Bao 2001; Sato 2011; Sato and Kim 2012).

(102) a. *After* e[26] *get some sickness,* e *can't help it.*
       After one falls ill, one can't help it.

   b. *I never try* e *before.*
       I have never tried it before.

   c. e *Head very pain!*
       My head is very painful.

(Sato 2014: 369)

Sato (2011, 2014) suggests that there are interpretive asymmetries when it comes to the interpretation of empty subjects or objects. This asymmetry can be illustrated with the (b) sentences in the following examples.

(103) a. *David say* [*his mother speak Teochew*].
       David said that his mother speaks Teochew.

   b. *Wait lah, John say* [e *speak Hokkien*].   ([OK]strict ; [*]sloppy)
       Wait, John said David's mother/*his mother (John's mother) speaks
       Hokkien.

(104) a. *David like his school.*
       David likes his school.

   b. *John also like* e.   ([OK]strict ; [OK]sloppy)
       John also likes David's school/his own school
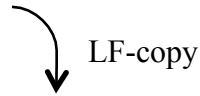   (John's school).

(Sato 2014: 370-371)

As shown from (103b), the interpretation of the null subject can only be *David's mother*, suggesting that it is anaphoric to the previous overt subject in (103a) (strict reading). The sloppy reading, in which the null subject refers to *John's mother*, is disallowed. The null object in (104b), however, can have both the strict and sloppy reading, as compared to null subjects in CSE.

[26] The letter e is used to represent the elided, empty argument.

It is suggested that the interpretation of the empty argument in the (b) sentences of (103-104) can be obtained via an LF-copy process, whereby an overt argument is copied from the full-fledged clause, as in (103a) and (104a), onto the elliptical clause in (b) at LF (Oku 1998; Saito 2007). An illustration with the CSE examples in (103-104) is given below.

(105) a. LF: *David say* [[***his mother***] *speak Teochew*].

LF-copy

    b. LF: *Wait lah, John say* [[**his mother**] *speak Hokkien*].

(106) a. LF: *David like* [***his school***].
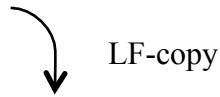
LF-copy

    b. LF: *John also like* [***his school***].

(Adapted from Sato 2014: 374-375)

Sener and Takahashi (S&T) (2010) claim that the strict and sloppy reading in the object position can be derived from the LF-copy process, whereby the copied argument can either have its reference fixed as being bound to the subject in the antecedent clause in the (106a) example, or being bound to the subject in the subsequent elliptical clause in (106b). The availability of the sloppy reading in the subject position is, however, dependent on whether there is phi-feature agreement present on Infl. S&T suggest that the LF-copy process is blocked for the subject position if a language manifests phi-feature agreement on Infl. This is because the uninterpretable phi-features on Infl like case, if any, need to be checked and deleted (Chomsky 2000). In a language that manifests phi-feature agreement, the uninterpretable, matching case features on the argument DP in the antecedent

clause would be checked and erased. When copied onto the elliptical clause, the uninterpretable phi-features of the Infl head in the elliptical clause remain unchecked and unerased, since the copied DP's phi-features have already been erased. The derivation crashes and thus the copied DP in an embedded subject position like (105b) can only refer back to the antecedent DP, not the subject DP in the elliptical clause. S&T present comparative evidence from Japanese and Turkish to support their anti-agreement hypothesis. Japanese, which they claim lacks phi-feature agreement, shows the sloppy reading even in subject positions, while in Turkish, only elided objects exhibit sloppy interpretations.

Japanese

(107) a. *Mary-wa*   [*zibun-no*   *teian-ga*   *saiyo-sare-ru-to*]
       Mary-TOP   self-GEN   proposal-NOM   accept-PV-PRES-COMP

       omotteiru.
       think

     Lit. Mary thinks that self's proposal will be accepted.

   b. *John-mo* [e *saiyo-sare-ru-to*]   *omotteiru.*   ([OK]strict ; [OK]sloppy)
      John-also   accept-PV-PRES-COMP   think

     Lit. John also thinks that e will be accepted.

(108) a. *Taroo-wa*   *san-nin-no*   *sensei-o*   *sonkeisiteiru.*
       Taro-TOP   three-CL-GEN   teacher-ACC   respect

     Taro respects three teachers.

   b. *Hanako-mo*   e   *sonkeisiteiru.*   ([OK] strict; [OK]sloppy)
      Hanako-also   respect

     Lit. Hanako respects e, too.

Turkish

(109) a. *Can* [[*pro ogl-u*]   *Ingilizce   ogren-iyor   diye*]   *bil-iyor.*
     John   his son-3$_{SG}$ English   learn-$_{PRES}$ COMP   know-$_{PRES}$

     John knows that his son learns English.

  b. *Filiz-se*   [e *Fransızca   ogren-iyor   diye*]
     Phylis-however   French   learn-$_{PRES}$ COMP

     bil-iyor.   (^{OK}strict ; *sloppy)
     know-$_{PRES}$

     Lit. Phylis, however, knows that e learns French.

(110) a. *Can* [*pro   anne-si*]-*ni*   *elestir-di.*
     John   his   mother-3$_{SG}$-$_{ACC}$ criticise-$_{PAST}$

     John criticised his mother.

  b. *Mete-yse*   e   *ov-du.*   (^{OK}strict ; ^{OK}sloppy)
     Mete-however   praise-$_{PAST}$

     Lit. Mete, however, praised e.

                             (S&T 2010 quoted in Sato 2014: 374-377)

Returning to the discussion of argument ellipsis in CSE, it is observed in (103-104) that CSE exhibits an interpretive asymmetry between elided subjects and objects. Elided objects permit sloppy readings while elided subjects permit only the strict reading. Sato (2014: 385) thus argues this constitutes evidence that CSE manifests phi-feature agreement under Infl, even in the absence of overt manifestations of Infl such as tense and person agreement morphemes, as demonstrated in (103-104)[27]. Taken together, the evidence from copula-omission, case of pronominal subjects, and argument ellipsis data all refute a nonsentential analysis of CSE tense-less structures as not containing projections of IP and Infl.

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[27] See again footnote 24.

It seems CSE does manifest an IP and Infl node even in the absence of overt manifestations of tense or person-agreement morphemes on main verbs, as well as the copula.
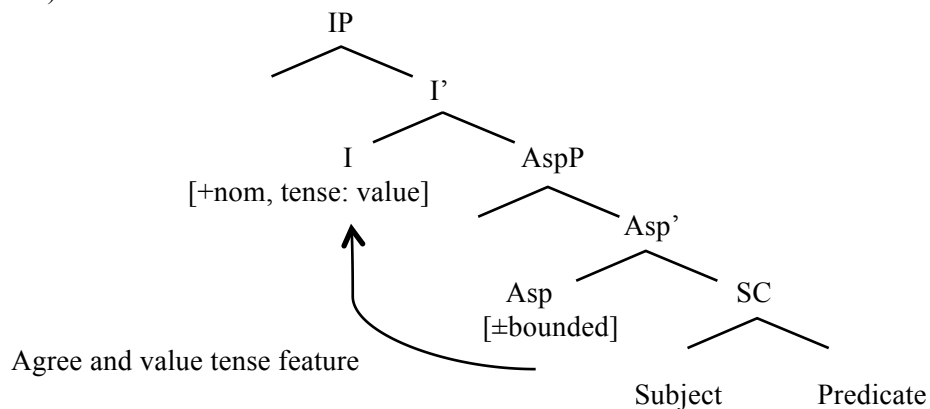
6.3 WHAT EXACTLY IS CSE THEN?

The previous section discussed various pieces of evidence against a nonsentential analysis of CSE copula-less and tense-less data. It was argued that CSE must be analysed as a language that manifests an IP and Infl node in its syntactic representation. This raises the following question: what then is the exact nature of Infl in CSE and how are we to understand its interaction with the anchoring condition and the lack of tense in CSE?

We have shown through pronominal nominative subjects and argument ellipsis data that CSE must manifest an Infl node that serves as the locus of case agreement. On the other hand, we also observed that CSE frequently omits the copula and tense features. More specifically, we observed in previous chapters that CSE exhibits an asymmetry in copula-omission between nominal, prepositional and adjectival predicates. We accounted for this by referring to the anchoring condition, which states that all sentences must be anchored. Nominal and adjectival predicates, behaving like ILPs, denote states that lack event structure and boundaries and thus cannot be anchored via aspect in the absence of tense. Prepositional predicates are SLPs and contain an event argument and can thus be anchored to time through event structure. The various strategies for licensing copula-omission, even in nominal and adjectival predicates, were also shown to be associated with event structure and boundedness of predicates.
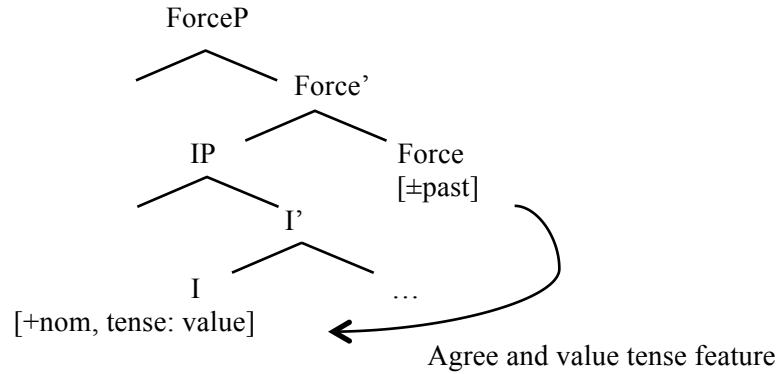
The overall picture that emerges is thus that the Infl node in CSE is specified for uninterpretable nominative case and person-agreement features, as evidenced by the obligatory occurrence of nominative pronominal subjects shown by (100-101), but not for tense. Within a Minimalist framework, we may say that the uninterpretable case feature on the Infl node in CSE is specified as [+nom(inative)], while the tense feature is unvalued and merely specified as [tense]. In CSE, the [tense] feature is valued through the boundedness specification on the Asp head in AspP for prepositional and nominal predicates modified by aspectual markers, the adjectival head containing degree modification. The boundedness feature returns a past or present interpretation on Infl, through an Agree operation (Adger 2003). This thus satisfies the anchoring requirement, and anchors the utterance to time with reference to utterance time. We may assume SFPs, which occur in the articulated CP layer of Rizzi (1997) (specifically ForceP)[28], to work in the same way. A proposed structure of CSE copula-less predication is presented below.

(111)

```
                        IP
                       /  \
                         I'
                        /  \
                      I      AspP
            [+nom, tense: value]  / \
                                     Asp'
                                    /  \
                          Asp          SC
                       [±bounded]      / \
  Agree and value tense feature    Subject   Predicate
```

___

(112)

ForceP

Force'

IP   Force
            [±past]

I'

I   …
[+nom, tense: value]

Agree and value tense feature

This is a view that is consistent with substratist explanations of the development of CSE. As Sato (2014) suggests, argument ellipsis in CSE could be viewed as a grammatical transfer from its main substrate language, Mandarin Chinese. Crucially, Mandarin Chinese also exhibits a subject-object asymmetry in the interpretation of elided arguments.

(113) a. *Zhangsan shuo* [*ziji de haizi mei na qian*].
      Zhangsan say   self $_{MOD}$ child $_{NEG}$ take money

      Zhangsan said that his child did not take money.

   b. *Lisi ye shuo* [e *mei na qian*].   (^{OK}strict ; *sloppy)
      Lisi also say $_{NEG}$ take money

      Lit. Lisi also said that e did not take money.

(114) a. *Zhangsan kanjian-le ta-de mama.*
      Zhangsan see-$_{PERF}$ he-$_{MOD}$ mother

      Zhangsan saw his mother.

   b. *Lisi ye kanjian-le* e.   (^{OK}strict; ^{OK}sloppy)
      Lisi also see-PERF

      Lit. Lisi also saw e.

(Ibid: 381)

The argument ellipsis data and subject-object asymmetry suggests that Mandarin Chinese manifests case agreement under Infl, which in turn crucially

assumes that Mandarin contains an IP and Infl, a view shared by Sybesma (2007).

However, Mandarin Chinese does not manifest overt tense marking, and instead

makes reference to the temporality of events through aspectual modification as

noted by Smith (1997). This is precisely what we have seen with CSE copula-less

data so far, which manifests case agreement with pronominal subjects but lacks an

overt copula and tense features. Furthermore, StdE manifests case agreement,

overt tense features, and also a variety of aspectual morphemes that mark event

structure (such as *–ing* and *–en*). There is thus congruence between StdE and

Mandarin Chinese in terms of the presence of structural case and aspectual

modification. It is thus not surprising that CSE, being a contact language with

StdE as its lexifier, but showing strong influences from its substrate language

Mandarin Chinese, manifests case agreement and recovery of temporal

information through aspectual modification, since these are systems of

congruence between the lexifier and substrate language. In other words, subject

and case agreement on the Infl node that is present in StdE persists in CSE

because this is a system that is present in the grammar of one of its major

substrate languages (Sato 2014: 385). The system of tense marking, on the other

hand, is not present in CSE because its substrate language does not utilise such a

system, and instead, makes use of aspectual modification to make temporal

reference, which again explains why CSE may make use of aspectual markers

derived from StdE and Mandarin Chinese to make reference to time and permits

the absence of overt tense marking[29]. Transfer of grammatical features from the

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[29] A tensed copula is needed even in progressive verbal predication in StdE.

lexifier and substrate languages into CSE is thus a matter of grammatical congruence and similarity, which facilitates the selection of competing grammatical systems that are present in the languages of a contact language's linguistic ecology, into the contact language itself (Mufwene 2001; Sato 2013).

6.4 FURTHER THEORETICAL IMPLICATIONS AND FUTURE RESEARCH

We suggested in the previous section that CSE can be understood as a contact language that manifests an Infl node, which serves as the locus of case agreement, but lacks an overt, specified value for the tense feature associated with Infl. This unspecified value is instead recovered using aspectual information and modification, or through pragmatic means. However, as Chang (2009) noted, copula-omission is not a categorical phenomenon in CSE. That is, the copula may be omitted under certain special contexts, which we have documented and described here, but it is under no circumstances *obligatory*. Furthermore, as noted by Ho and Platt (1993) in their corpus study, the copula does indeed occur overtly more than 80% of the time. This thesis attempted to give a *grammatical account* of why the copula can be omitted in certain grammatical contexts. A *sociolinguistic account* of variation in the realisation of an overt copula in the speech of Singaporean English speakers today is beyond the scope of this thesis. Nevertheless, we offer some speculative thoughts and future direction to the study

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(i) John is/was running.

Chang (2009) shows that the copula is frequently omitted in the presence of a progressive verb.

(ii) *John running*.
    John is running.

This provides further support for the view that CSE employs aspectual anchoring as does its major substrate language Mandarin Chinese, and may make of StdE aspectual markers to temporally anchor eventualities.

of variation in copula-omission, and indeed of all CSE grammatical features, as below.

As described in Chapter 2, scholars such as Pakir (1991) and Alsagoff (2010), who are concerned with variation in Singaporean English, hold that CSE and StdE exist at two ends of a continuum. At one end is the basilect, which we may assume to be CSE, while at the other exists StdE. Speakers who are proficient in StdE can often traverse the continuum based on the sociolinguistic context, such as interlocutors and the level of formality of the interaction, and this is often known as variation on a post-creole continuum in theories of contact linguistics.

Lipski (2011) studied Afro-Bolivian Spanish, a restructured variety of Spanish with standard Spanish as its lexifier, which exists on a post-creole continuum. He suggests that Afro-Bolivian Spanish is decreolising, which refers to the approximation of non-standard varieties towards the standard varieties (see for example Bickerton 1971, 1973 and 1975). He studied the realisation of gender and number concord, which are obligatory features in standard varieties, and observed that the overt realisation of gender and number concord in the Afro-Bolivian variety generally proceeds rightwards, from determiners and other prenominal modifiers to head nouns, postnominal modifiers, and predicate nominatives/adjectives (Ibid: 276). That is, number and gender concord appear most frequently on determiners and prenominal modifiers, followed by head nouns, postnominal modifiers and finally predicate nominatives/adjectives. Lipski accounted for this by suggesting that decreolisation of the Afro-Bolivian

variety proceeds via the successive activation of functional projections along the clausal spine from left to right. In other words, decreolisation occurs in a structured, systematic way that is governed by structural principles and restrictions.

This view of decreolisation fits well with the CSE data. As we have shown in this thesis, copula-omission is governed by the ILP-SLP distinction, which is a distinction rooted in the grammatical properties of predicates. In the absence of any of the strategies that facilitate copula-omission, the copula must occur with nominal and adjectival predicates, while prepositional predicates permit copula-omission. This shows then that copula-omission is governed by certain structural and semantic principles, which we showed to be the event argument and AspP associated with SLPs. Lipski, in addition to arguing that decreolisation occurs in a systematic way governed by structural principles, also suggests that the variation observed on a post-creole continuum can be understood as a series of nested intermediate grammars. In terms of the realisation of gender and number concord in Afro-Bolivian Spanish, this would mean that a post-creole continuum is neither the interaction of two discrete grammars at opposite ends of a continuum, nor variation within a single grammatical system; rather, the variation observed in number and gender concord is the result of a stepwise elaboration of the syntactic structure of the DP through activation of functional heads rightwards, with each successive emergence of more complicated syntactic structures properly containing the previous stage (Lipski 2011: 281).

With regard to the systematic distribution of CSE copula-omission, this could mean that the current grammar of CSE, which permits the omission of the copula based on the nature of the predicate, could be an intermediate stage of development towards the obligatory realisation of the copula in all contexts in StdE. That CSE is approximating towards StdE should not be surprising, given that English-medium education has been in effect in the Singaporean education system since the 1980s, and that large scale language shift has taken place such that English is increasingly becoming the dominant language spoken at home (Lim 2010). In other words, we are suggesting that CSE might have developed successively from a system which liberally omitted the copula before, to the intermediate system spoken today, where copula-omission is conditioned by structural factors like the ILP-SLP distinction. Thus, while we showed in the previous section that a nonsentential analysis cannot be applied to the CSE spoken today, it does not rule out the possibility that the earlier grammar of CSE once comprised only SC structures and has decreolised to the CSE spoken today, where copula-omission is governed by certain structural factors, a phenomenon we showed to have parallels in first language acquisition (Becker 2000). This would provide a new theoretical perspective to understanding the variation observed in copula-omission, and indeed of all grammatical features that vary between the standard and non-standard forms, in the English spoken by Singaporean English speakers today.

Of course, more research is needed to validate this view. One way of doing so would be to conduct large-scale variationist studies comparing CSE

speakers of different cultural and linguistic backgrounds. Much of the data presented in this thesis were either from or verified with speakers who have undergone English-medium education, and are thus proficient in StdE as well as CSE. It would be illuminating to compare their judgements of the copula-less data here with the judgements of speakers who speak CSE as their only form of English. Most of these speakers would thus be of the older generation who did not undergo formal English-medium education, and were instead educated in other mediums, such as Mandarin Chinese, the Chinese dialects, or Malay. If studies were to find that copula-omission occurs at a uniform rate across all predicate types for these older speakers of purely basilectal CSE who have little proficiency over StdE, then there would be stronger evidence for the claim that CSE is decreolising in terms of the overt realisation of the copula. This would mean that the development of the overt realisation of the copula in CSE proceeds as in child English, which is sensitive to the ILP-SLP distinction, and that overt copulas first develop with ILPs which lack an event argument and aspect.

6.5 CHAPTER SUMMARY

This chapter reviewed a particular approach to tense-less and copula-less utterances even in adult StdE, namely a nonsentential approach. Nonsentential approaches maintain nonsentential utterances are made up of SC structures that do not contain an IP and Infl. Evidence for this view comes from case agreement, and it was shown that nonsententials in adult English often realise pronominal subjects with accusative instead of nominative case. We further presented evidence from CSE that argued against a nonsentential anaylsis. These came from

a) copula-omission in CSE is non-uniform, b) pronominal subjects are realised with obligatory nominative case, and c) the subject-object asymmetry in argument ellipsis. All these suggested that CSE must manifest an Infl node. However, we argued that Infl in CSE is underspecified as compared to StdE. Specifically, the uninterpretable case feature in CSE is specified as nominative, while the tense feature remains unvalued and is recovered using aspectual or pragmatic information. This is different from StdE, which always has an overt value for tense specified. Finally, we addressed the fact that copula-omission is non-categorical in CSE, and suggested that we can understand the variation in realisation of the copula in CSE as a process of decreolisation, with directions for further research to validate this claim also pointed out.

CHAPTER 7: CONCLUDING REMARKS

This thesis examined the distribution of copula-omission in CSE, and also gave an account of the strategies that facilitate the omission of the copula even in contexts where it is usually not permitted. Chapter 2 provided a brief overview of the historical development English in Singapore and CSE, and introduced the core set of non-verbal predication data that we were concerned with throughout this thesis. Chapter 3 discussed the general anchoring condition, and reviewed some of the literature suggesting how tense and aspect fulfil this anchoring condition. Chapter 4 examined the distribution of copula-omission. It was observed that copula-omission is not permitted with nominal and adjectival predicates but permitted with prepositional predicates. This is a similar pattern observed in child English, and was accounted for by making reference to the ILP-SLP distinction and the presence of an event argument for SLPs. The event argument was further shown to be associated with an AspP, and it was suggested that it was the boundedness feature on AspP that allowed for recovery of temporal information. Chapter 5 examined the various strategies that facilitate copula-omission even in contexts where it is not permitted, as discussed in Chapter 4. It was shown that all of these strategies either make reference to the event structure of the predicate, coercing ILPs into having stage-level interpretations, or pragmatically anchor copula-less utterances to the present. Finally, Chapter 6 reviewed a nonsentential approach to tense-less and copula-less sentences even in adult grammars, and presented evidence against such an analysis for CSE. It was then argued that CSE is better understood, based on the evidence presented before, as decreolising in

terms of overt realisation of the copula, and possible future studies to further validate this claim were also suggested.

While there will inevitably be many questions raised from the discussion presented in this thesis, we nevertheless believe the data and evidence, as well as the discussion and proposals, to be theoretically sound, empirically grounded, and potentially significant for theories of the syntax-semantics-pragmatics interfaces with respect to temporal anchoring of all sentences and utterances in natural language, as well as for theories of the development of contact languages. Overall, we believe CSE, and indeed all contact languages, have significant contributions to make to current theorising of the structure, development and acquisition of language.

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