Argument ellipsis in Colloquial Singapore English and the Anti-Agreement Hypothesis¹

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This paper provides new data from Colloquial Singapore English (CSE) showing a hitherto unnoticed subject-object asymmetry: empty objects, but not empty subjects, exhibit sloppy/quantificational readings. According to a recent theory of argument ellipsis in Japanese/Korean (Oku 1998; S. Kim 1999; Takahashi 2007, 2008a, b, 2010), these readings obtain as a result of the LF-Copy of an overt argument from a fullfledged clause onto the corresponding empty argument position in an elliptical clause. Sener & Takahashi (2010) and Takahashi (2010) hypothesize that this operation is blocked by φ -agreement. This hypothesis provides a principled explanation for the subject-object asymmetry in CSE, coupled with the new observation that primary substrates of CSE – Mandarin, Cantonese, Hokkien and Malay – exhibit the same asymmetry as CSE. My analysis has significant implications for the comparative syntax of argument ellipsis and for theories of contact genesis. Among others, the analysis supports the claim (Miyagawa 2010) that Chinese possesses φ -agreement despite the lack of morphological manifestations. The results in this paper also provide strong evidence for the general substratist explanation on the emerging grammar of CSE (Bao 2005).

I. INTRODUCTION

This paper investigates a certain interpretive asymmetry between subject and object positions in Colloquial Singapore English (henceforth, CSE), an English-lexified contact variety which has evolved with a constant Sinitic/Malay substratum in the multilingual endogenous contact ecology in

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Singapore. It is widely acknowledged in the literature (see Platt &Weber 1980; Alsagoff & Ho 1998; Bao 2001; Tan 2003, 2007, 2009; Sato 2011; Sato & Kim 2012 and references cited therein) that CSE makes extensive use of *pro*-drop/topic-drop. Here, however, I provide new evidence from this variety showing that null objects differ from null subjects in a minute but systematic way with respect to their possible semantic interpretations. Specifically, the former exhibit sloppy/quantificational interpretations as well as strict/E-type interpretations; see Section 3.1 for a full discussion on E-type and quantificational interpretations.

Recent work on the syntax and semantics of null arguments in East Asian languages such as Japanese and Korean (Oku 1998; Kim 1999; Saito 2007; Takahashi 2007, 2008a, b, 2010) propose that the sloppy/quantificational reading of a null argument is derived by copying an overt antecedent argument in a full-fledged clause, onto the null argument position in an elliptical clause at LF (the LF-Copy THEORY). Following their detailed comparative study on argument ellipsis in Japanese and Turkish, Sener & Takahashi (2010) and Takahashi (2010) further hypothesize that the LF-Copy process is blocked by the presence of φ-agreement (the ANTI-AGREEMENT HYPOTHESIS). I propose that this hypothesis be extended to account for the subject-object asymmetry in CSE, on the basis of the new observation that the principal substrate languages of this variety (i.e. Mandarin, Cantonese, Hokkien and Malay) exhibit the same subject-object asymmetry with CSE, with regard to sloppy/quantificational interpretations. The proposed analysis suggests that the Sinitic languages involve the abstract process of subject agreement in the narrow syntactic computation, an observation which receives independent empirical support from the so-called blocking effect on long-distance anaphora caused by intervening first/second person pronouns (Y.-H. Huang 1984; Tang 1985, 1989; H. Pan 2000; Miyagawa 2010). I maintain that this abstract agreement system in the Chinese languages was transferred into CSE, reinforced by the grammar of standard varieties of English which possess the same architectural system of agreement.

This paper has several implications for the comparative syntax of argument ellipsis and for theories of contact genesis. First, my results in this paper lend new support to the claim made by Miyagawa (2010, 2012, 2013) that apparently morphologically impoverished Chinese languages do possess the same computational process of agreement as English and other 'agreement-based' languages, despite the lack of overt morphological manifestations. Second, the subject-object asymmetry in CSE provides further evidence in favor of the general substratist explanation for the grammatical development of CSE, which has already been amply motivated in the existing literature on this contact variety (Platt & Weber 1980; Platt & Ho 1989; Bao 2001, 2005; Bao & Lye 2005; Lee, Ling & Nomoto 2009; see also many other references cited therein).

2. The historical background of cse and its contact ecology

Colloquial Singapore English, intimately known as Singlish, is the Englishlexified basilect/low-prestige variety spoken in Singapore by native Singaporeans on an everyday basis. It is termed a New English (Kachru 1985, Pakir 1991) in the sense that it is a non-native variety of the English language. and has been indigenized in the community where it is spoken and understood. Today, CSE is acquired by children as their mother tongue (Kwan-Terry 1986, 1989; Gupta 1991, 1994) despite the continued sociolinguistic stigma commonly associated with this variety in the Singapore society as a whole. Colloquial Singapore English is a contact language because its grammatical system has evolved in the dynamic endogenous multilingual contact ecology of Singapore; that is, CSE has arisen and developed in contact communities where the languages of the indigenous population have been used together with it (Platt 1975; Chaudenson 1977; Ansaldo 2004, 2009a, b). Due to its constant presence in this environment, CSE naturally exhibits linguistic influences at all levels of its grammar/lexicon from more than one local language, including (various dialects of) English, Malay, Hokkien, Cantonese, Teochew, Mandarin, and, to a lesser extent, Tamil. However, the language policies in Singapore in the second half of the 20th century have made Mandarin influences on CSE more pronounced, as in the recent contact ecology of Hong Kong (see L. Lim 2009 and Alsagoff 2012 for an extensive discussion on this point).

When it comes to actual linguistic significance of the primary substrate language(s) of CSE, researchers are split into roughly three positions. The first position, held by Gupta (1998), Low & Brown (2005) and Deterding (2007), argues that the vernacular varieties of Malay, in particular, Bazaar Malay and Baba Malay, are the two principal substrates of CSE, with the southern varieties of Chinese being relatively less significant secondary substrates. Bazaar Malay, a Malay-lexified contact variety with a Hokkien substratum, was widely used in the Malay Peninsula and the Indonesian archipelago and played an important role as the de facto lingua franca for the purposes of inter-ethnic communication (Aye 2005, Bao & Aye 2010). Baba Malay is the mother tongue of the Peranakan community in the Straits Settlements, which developed as the result of the unique blend of Hokkien and Malay (Shellabear 1913, Pakir 1986, Thurgood 1998, Ansaldo, Lim & Mufwene 2007). Peranakan Chinese were the first group of migrants in Singapore who switched to English as a home/business language. Thus, their ability to speak English facilitated their socio-economic status in Singapore and allowed them to play a role as intermediaries. Given the history of Bazaar Malay/Baba Malay briefly sketched above, it is reasonable to hypothesize that these varieties have left linguistic influences on CSE during its embryonic stage.

The second position on the origin and development of CSE – which is held by the vast majority of CSE researchers (Bao & Wee 1999; Bao 2001, 2005; Lee et al. 2009; Bao & Aye 2010, and many other works cited therein) - claim that southern Chinese languages - Hokkien and Cantonese - and Singaporean Mandarin have left the strongest influences on the grammatical development of CSE. This Sinitic substratist position is natural in light of the historical fact that early Chinese settlers to Singapore spoke one or the other of these varieties. It is also in conformity with the sheer numerical dominance of ethnic Chinese people vis-à-vis Malay and Indian people documented in Kwok (1998). According to Kwok (1998: 200), in 1840, 50.0% of the entire population of Singapore then was of Chinese descent, compared to Malay (37.3%), and Indian (9.5%). In 1980, the Chinese dominance had accelerated further, with Chinese (76.9%) as opposed to Malay (14.6%) and Indian (6.4%), a distributional trend which holds true in the current Singapore demographics. The Sinitic hypothesis does not claim that influences from Malay are completely absent in CSE. The traits from the vernacular varieties of Malay can be observed at several different areas of grammar, including lexical borrowings (makan 'to eat' and jalan-jalan 'to walk'), reduplication for emphasis (e.g. You go take the small-small one ah 'Retrieve the smaller item'), and the so-called adversative kena-passive construction (e.g. John kena caught by police 'John was adversely affected by being caught by the police'; see Bao & Wee 1999 and C. Kim & Sato 2012). However, given the compelling overall Sinitic influences on CSE, which indeed has much linguistic and socio-historical support, the currently dominant view in the field seems to be that the influence from Malay on CSE is much less significant by comparison and perhaps only made a negligible contribution to the development of CSE grammar.

The Malay and Sinitic substrate hypotheses do not exhaust the analytic possibilities regarding the genesis/development of CSE. Of course, it could have developed under communicative pressures from BOTH LANGUAGE TYPES. Ansaldo (2004, 2009a, b) has recently proposed a more eclectic approach (see also Mufwene 2001, 2008; Schneider 2007) whereby 'contact language formation is the result of typological alignments in the multilingual ecology in which contact takes place' (Ansaldo 2009b: 145). According to this approach, innovative features in a contact variety are more likely to be selected than others as a result of grammatical congruence among adstrate languages which independently possess these features, rather than as a result of exclusive influence from just one language. This congruence-based model seems particularly suited for the analysis of the indigenized varieties of English such as CSE. For example, topic prominence in CSE (Alsagoff & Ho 1998) is commonly assumed to have originated from Sinitic languages (Bao & Lye 2005). However, it is also well known that the vernacular varieties of Malay are topic-prominent languages (Poedjosoedarmo 2000). Bao & Aye (2010) present considerable evidence from bare conditional constructions

that topic structures in Bazaar Malay are identical to those in Mandarin; see also S. Lim (1988) for evidence that topic prominence is a structural characteristic of Baba Malay.

Two remarks are in order here before we proceed to investigate argument ellipsis in CSE in the following section. First, I remain intentionally vague with regard to which theoretical position among the three hypotheses to adopt as an analytic framework for CSE. For this reason, when I attempt a substratist explanation for any aspect of argument ellipsis in CSE below, I will endeavor to produce relevant data on argument ellipsis BOTH from Chinese languages (Mandarin, Hokkien and Cantonese) AND from Malay. As we will see in Section 5, both language types exhibit exactly the same syntactic and semantic properties with regard to this phenomenon (e.g. the subject-object asymmetry with regard to sloppy/quantificational readings and the impossibility of adjunct ellipsis). This result thus indicates that the congruence-based model mentioned above is a descriptively adequate model simulating the development of CSE. However, we will see in the same section that there is some other area of the grammar – the blocking effect on longdistance anaphors - where the Sinitic languages exhibit behavior different from Malay. Second, recall from the exposition above that it is Bazaar Malay and Baba Malay which are hypothesized to have played a role in the emergence of CSE grammar. In this paper, however, I produce data from the standard variety of Malay as used by ethnically Malay native speakers in Singapore to assess substratal influences on CSE from Malay. The reason is that both Bazaar Malay and Baba Malay are almost extinct/out of use, making it almost impossible for me to collect complex data from these varieties to bear on argument ellipsis in CSE.

3. Argument ellipsis in CSE

As stated in Section 1 above, CSE allows liberal omission of arguments, including subjects, direct objects and possessors, as shown in (1a-c). (The symbol *e* stands for an empty argument.)

- (I) (a) After *e* get some sickness, *e* can't help it.
 'After <u>one</u> falls ill, <u>one</u> can't help it.'
 - (b) I never try *e* before. 'I have never tried it before.'
 - (c) *e* Head very pain!<u>'My</u> head is very painful.'

(CSE; Tan 2003: 1 exx (1a, b))

A standard analysis of the topic-drop phenomenon in East Asian languages such as Japanese, Korean and Chinese has been that the empty argument slots are occupied by empty pronominals/pro (Kuroda 1965, Ohso 1976,

J. Huang 1984, Hoji 1985, Saito 1985). Importantly, however, certain interpretive asymmetries between null subjects and null objects in CSE discussed below show that this traditional analysis is far from satisfactory.

3.1 Sloppy/quantificational interpretations under argument ellipsis in CSE

This section provides new data showing that in CSE, null subjects behave differently from null objects with respect to the availability of sloppy/ quantificational interpretations. This subject–object asymmetry cannot be accounted for by the pronominal analysis of null arguments.

Suppose that the null object construction in (2b) is preceded by the sentence in (2a) and that the null object in (2b) is somehow anaphoric to the overt object in (2a).

(2) (a)	David like his school.	(CSE)
(b)	John also like <i>e</i> .	(^{OK} strict; ^{OK} sloppy)
(c)	John also like it.	(^{OK} strict; * sloppy)

The null object in (2b) can refer either to David's school (the STRICT INTERPRETATION) or to John's school (the SLOPPY INTERPRETATION). Given the plausible heuristic that the structure and function of empty pronouns exactly mirrors that of their overt counterparts, the strict reading in (2b) can be easily accommodated by the *pro* in the empty direct object position. This is because the overt pronoun *it* in (2c) yields such a reading. Now, the problem with this analysis is that if the null object in (2b) were unanimously represented by an empty pronoun, then the sloppy reading would be mysterious. This is so because the overt pronoun in (2c) only permits the strict interpretation.

A similar argument against the pronominal analysis can be made on the basis of what Takahashi (2008a, b) calls the E-TYPE vs. QUANTIFICATIONAL INTERPRETATIONS of null arguments. To illustrate, consider examples (3a–c):

(3) (a)	David like three students in the	class.	(CSE)
(b)	John also like <i>e</i> .	(^{ок} E-type; ^{ок}	quantificational)
(c)	John also like them.	(^{OK} E-type; *	quantificational)

Limiting our attention to the context where the null object in (3b) is anaphoric to the overt object in (3a), the sentence in (3b) has two different interpretations. One interpretation is that John likes those three students whom David also likes. Under this interpretation, the set of the three students from the class whom John likes is the same as the set of the three students from the same class whom David likes. Takahashi (2008a, b) calls this reading the E-type reading because the null object here functions semantically as the so-called E-type pronoun (Evans 1980). (As an E-type pronoun, the null object in question behaves as an unbound anaphoric

pronoun which is semantically related to an indefinite nominal expression as its linguistic antecedent, but is not in a syntactically legitimate position to act as a variable bound by the antecedent, as in *If someone breaks in, he will steal the jewelry*.) The other interpretation of (3) is that the set of three students in the class whom John likes can be different from the set of three students in the class whom David likes. For example, the sentence in (3b) under this reading is true in the context where David likes his students, namely, Tom, Jeff and Mary, whereas John likes his students Tom, Jeff and Susan. However, the same context renders the sentence in (3b) false under the E-type reading.

Now, if null objects in CSE were uniformly identified as *pro*, we would erroneously predict that (3b) should only allow the E-type reading because the example in (3c), with the overt pronoun *them* in direct object position, only allows the E-type reading. This observation shows, then, that in addition to the *pro*-drop strategy, we need something else to fully account for the full range of interpretations actually available to null objects in CSE.

Let us now turn to elliptic subjects in CSE and see how they behave with respect to the two diagnostics for argument ellipsis discussed above. Example (4b) illustrates a null subject construction.²

(4) (a) David say [his mother speak Teochew]. (CSE)
(b) Wait lah, John say [e speak Hokkien]. (^{OK} strict; * sloppy)

As can be seen in (4b), in contrast with the null object, the null subject only allows the strict interpretation. That is, (4b) can mean that John says that David's mother speaks Hokkien (the strict reading) but cannot mean that John says that John's mother speaks Hokkien (the sloppy reading). The same interpretive restriction on subjects emerges with respect to the other quantificational interpretation. Example (5b) illustrates a null subject construction in CSE.

- (5) (a) Three students came to see David for consultation.
 - (b) ?*e* came to see John, too! (^{OK} E-type; * quantificational) (CSE)

The null subject in (5b) must refer back to the same set of three students who came to see David (the E-type reading). It does not allow the interpretation where the set of three students who came to see David can be different from the set of three students who came to see John (the quantificational reading).

^[2] Lah is a discourse particle in CSE which serves to soften the utterance and entice solidarity. See Richards & Tay (1977), Wee (2004) and Deterding (2007) for further pragmatic functions of this particle.

3.2 Subject-object asymmetries in CSE and V-stranding VP-ellipsis

One might suspect that the subject-object asymmetry illustrated above in CSE could be analyzed differently without necessarily invoking the process of argument ellipsis. Thus, the cases which appear to involve ellipsis of direct objects in CSE might actually involve what has been called V-STRANDING VP-ELLIPSIS (J. Huang 1991, Otani & Whitman 1991, Goldberg 2005, Rouveret 2012). According to this analysis, the main verb is left as a remnant due to overt V-to-T raising followed by VP-ellipsis. This derivation thus gives the surface appearance of object ellipsis. In languages such as English, VP-ellipsis yields a sloppy interpretation with direct objects, as shown in (6b).

(6)	(a)	John will invite his wife to the party.	(Standard English)
	(b)	Tom will $[v_{P} e]$, too.	(^{OK} strict; ^{OK} sloppy)

Consequently, the subject-object asymmetry in CSE could be explained away by this analysis because direct objects, but not subjects, are included within the ellipsis site.³

Two empirical arguments below show, however, that the V-stranding VPellipsis analysis is not transportable to null argument constructions in CSE. One is concerned with the availability of argument ellipsis in CSE despite the non-identity of the two verbs in the full-fledged and elliptical clauses. The other argument is concerned with the interpretation of manner adverbials within the argument ellipsis site, discovered by Oku (1998: 170–172). To show how these arguments work, consider examples (7a, b) and (8a, b).⁴

- (8) (a) John can [_{VP} solve that syntax problem quickly].
 (b) But Mary cannot solve *e* leh! (CSE)
 'Mary cannot solve that syntax problem.'
 ≠'Mary cannot solve that syntax problem quickly.'

It has been argued at length (Goldberg 2005, Rouveret 2012) that VP-ellipsis occurs in V-stranding languages such as Irish and Hebrew only when the verb in the antecedent full-fledged clause is strictly identical to the verb in the subsequent elliptical clause. As shown in (7a, b), however, in CSE, the verbs in the two otherwise structurally parallel sentences can be different (i.e. *like* vs. *dislike*), but nonetheless the null object construction in (7b) can

^[3] I thank an anonymous JL referee for bringing this alternative possibility to my attention. See Hoji (1998), Oku (1998) and S. Kim (1999) for further empirical arguments against the V-stranding VP-ellipsis analysis of null object constructions in Japanese and Korean.

^[4] *Leh* is a discourse particle in CSE which serves to soften a command, request or complaint that may otherwise be brusque. See Platt & Ho (1989) for further pragmatic functions of this particle.

	Subject	Direct Object
Strict reading?	✓	~
Sloppy reading?	*	✓
E-type reading?	✓	✓
Quantificational reading?	*	✓

Table 1

Interpretive asymmetry in CSE between null subjects and null objects.

yield the sloppy interpretation (i.e. Tom hates Tom's teacher). Turning to the examples in (8a, b), the antecedent clause in (8a) contains the manner adverb *quickly* within the VP. Suppose that the null object construction in (8b) were derived through overt V-to-T raising followed by VP-ellipsis. Then we would predict that this sentence should have the reading where Mary cannot solve that syntax problem quickly. This is because the adverb *quickly* is included within the VP-ellipsis site. Indeed, this reading is possible under VP-ellipsis in English, as shown in (9).

(9) Bill washed the car carefully, but John didn't [$_{VP} e$]. 'John didn't wash the car carefully.'

(Standard English; Oku 1998: 171-172)

The only interpretation available in (8b), however, is that Mary cannot solve that syntax problem. Based on these arguments, I conclude that the topic-drop phenomenon in CSE cannot be analyzed through V-stranding VP-ellipsis but instead must be treated as a genuine instance of argument ellipsis.

3.3 Argument ellipsis in CSE: An interim summary

In this section, I have shown that there is a curious asymmetry between subject and object positions in CSE with regard to the availability of sloppy/ quantificational interpretations of null arguments. Specifically, null objects exhibit these readings whereas null subjects do not. I have further provided empirical evidence showing that this interpretive asymmetry cannot be analyzed in terms of V-stranding VP-ellipsis. Table I summarizes the asymmetry in question.

Table I raises two important questions. One question is what grammatical mechanism gives rise to sloppy/quantificational interpretations. The other question is why this mechanism is blocked from targeting the subject position in CSE. In the following section, I review one theory regarding the origin of these interpretations, originally proposed by Oku (1998) and developed by Saito (2007), Takahashi (2007, 2008a, b, 2010) and Şener & Takahashi (2010).

4. ARGUMENT ELLIPSIS, LF-COPY THEORY AND THE ANTI-AGREEMENT HYPOTHESIS

Adopting Saito's (2007) minimalist re-working of Oku's (1998) LF-Copy Theory, Şener & Takahashi (2010) and Takahashi (2010) propose that the LF-Copy process is blocked by the presence of φ -agreement. In this section, I propose that the subject–object asymmetry in CSE can be best analyzed as a further empirical consequence of this Anti-Agreement Hypothesis.

4.1 Sener & Takahashi's (2010) Anti-Agreement Hypothesis

Oku (1998) proposes that the sloppy interpretation of a null argument in Japanese is the by-product of the LF-Copy process, whereby an overt argument is copied at LF from the full-fledged clause onto the corresponding empty argument slot in the elliptical clause. To illustrate how this theory works, consider a null object construction in Japanese shown in (10b).⁵

(10) (a) Taroo-wa zibun-no tegami-o suteta.	(Japanese)
Taro-NOM self-GEN letter-ACC discarded	
'Lit. Taro discarded self's letter.'	
(b) Hanako-mo <i>e</i> suteta.	(^{OK} strict; ^{OK} sloppy)
Hanako-also discarded	
<i>Lit</i> Hanako also discarded <i>e</i> '	

The missing object in (10b) can be interpreted as either Taro's letter (the strict reading) or Hanako's letter (the sloppy reading). Oku proposes that the sloppy reading here arises due to LF-Copy. The LF representation for the example in (10b) under this reading is shown in (11).



In this representation, the NP *zibun-no tegami-o* 'self's letter-ACC' is copied onto the object position of the elliptical sentence in (10b) from the overt

^[5] The following abbreviations are used in example glosses in this paper: I, 2, 3 = first, second, third person; ACC = accusative; AOR = aorist; AUX = auxiliary; AV = active voice; CL = classifier; COMP = complementizer; COP = copula; DAT = dative; DEM = demonstrative; ERG = ergative; FEM = feminine; FUT = future; GEN = genitive; MASC = masculine; MOD = modification; NEG = negation; NOM = nominative; PAST = past tense; PERF = perfective; PL = plural; POSS = possessor; PRES = present tense; PV = passive voice; sFP = sentence-final particle; sG = singular; TOP = topic.

object position of the antecedent clause in (10a). The sloppy reading obtains, according to Oku, when the first object is copied without its reference being fixed and then being bound to the subject *Hanako* in the subsequent clause after the copying operation.

Takahashi (2008a, b) suggests that Oku's analysis also derives the quantificational interpretation for quantified empty arguments in Japanese. Example (12b) illustrates a case in point.

(12) (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. Hanako-also respect
'*Lit*. Hanako respects e, too.'

(Japanese; Şener & Takahashi 2010: 81-82)

Example (12b) allows both E-type and quantificational readings. Within the LF-Copy theory, (12b) has the LF representation shown in (13) under the quantificational reading.



In this representation, the quantified expression *san-nin-no sensei-o* 'three teachers-ACC' is copied onto the missing object position from the corresponding overt object position in the antecedent clause. As a result, it is not surprising that the understood object quantified in (12b) behaves independently of its antecedent quantifier with respect to quantification.

The same analysis applies to the sloppy and quantificational readings for null subjects in Japanese. Oku (1998: 164–165) was the first to point out that the null subject exhibits the sloppy reading in this language. Example (14b) illustrates this observation.

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

(Japanese; Oku 1998: 165)

Şener & Takahashi (2010) show that the null subject in Japanese also allows the quantificational interpretation. This observation is illustrated in (15b).

(15) (a) San-nin-no onnanoko-ga Taroo-ni ai-ni kita. three-CL-GEN girl-NOM Taro-DAT see-to came
'Three girls came to see Taro.'
(b) e Ken-ni-mo ai-ni kita. (^{OK} E-type; ^{OK} quantificational) Ken-DAT-also see-to came
'*Lit. e* came to see Ken, too.'
(Japanese; Sener & Takahashi 2010: 84)

With this review of the LF-Copy Theory of the sloppy/quantificational readings in place, Sener & Takahashi (2010) conduct a comparison of the syntax of Japanese and Turkish with respect to argument ellipsis. Their central observation is that in Turkish, both subjects and objects can be elided, as in Japanese, but only null objects exhibit sloppy/quantificational readings; null subjects only allow strict/E-type readings. Examples (16)–(19) illustrate this observation.

- (16) (a) Can [pro anne-si]-ni elestir-di. John his mother-3SG-ACC criticize-PAST 'John criticized his mother.' (^{OK} strict; ^{OK} sloppy) (b) Mete-yse e öv-dü. Mete-however praise-PAST 'Lit. Mete. however. praised e.' (Turkish; Sener & Takahashi 2010: 87) (17) (a) Can üc hırsız vakala-dı. John three burglar catch-PAST 'John caught three burglars.' (^{OK}E-type: ^{OK} quantificational) (b) Filiz-se е sorgula-dı. Phylis-however interrogate-PAST 'Lit. Phylis, however, interrogated e.' (Turkish; Sener & Takahashi 2010: 88)
- (18) (a) Can [[pro oğl-u] İngilizce öğren-iyor diye] bil-iyor.
 John his son-3sG English learn-pres COMP know-pres
 'John knows that his son learns English.'
 - (b) Filiz-se [e Fransızca öğren-iyor diye] Phylis-however French learn-PRES COMP bil-iyor. (^{OK} strict; * sloppy) know-PRES '*Lit*. Phylis, however, knows that *e* learns French.'

(Turkish; Şener & Takahashi 2010: 91)

- (19) (a) Üç öğretmen Can-1 eleştir-di. three teacher John-ACC criticize-PAST 'Three teachers criticized John.'
 - (b) *e* Filiz-i-yse öv-dü. (^{OK} E-type; * quantificational) Phylis-ACC-however praise-PAST '*Lit. e* praised Phylis, however.'

(Turkish; Şener & Takahashi 2010: 91)

Sener & Takahashi (2010) and Takahashi (2010) propose that the typological difference between Japanese and Turkish illustrated above is derived from the presence vs. absence of φ -agreement. Chomsky (2000) maintains that the uninterpretable φ -features of a functional head (either T or ν) enter into an Agree relation with the matching interpretable φ -features of the closest DP with an uninterpretable Case feature. This step is shown in (200), where F₁ enters into an Agree relation with DP₁. Suppose now that after this operation, DP₁ in (200) is copied onto the elliptic subject position in (200). The derivation crashes at this point because the Case feature of DP₁ has already been checked and erased in the antecedent clause, before the LF-Copy operation takes place. Consequently, the uninterpretable φ -features of F₂ remain unchecked. This step is shown in (200).

In this way, the LF-Copy process is blocked in Turkish for null subjects. Examples (21a, b) show that this language exhibits φ -agreement in subject positions, but not in object positions.

(21) (a) (Ben) bu makale-yi yavaşyavaş oku-yacağ-ım. I this article-ACC slowly read-FUT-ISG 'I will read this article slowly.'
(b) (Biz) her hafta sinema-ya gid-er-iz. we every week movies-DAT go-AOR-IPL 'We go to the movies every week.' (Turkish; Sener & Takahashi 2010: 86)

On the other hand, it is traditionally assumed in the literature on Japanese syntax (Fukui 1986, Kuroda 1988) that Japanese lacks φ -agreement altogether.⁶ As a result, a null subject can be recovered through LF-Copy

^[6] As an anonymous *JL* referee points out, Miyagawa (2010, 2012, 2013) goes against this traditional assumption and claims that there is φ -agreement in Japanese. According to Miyagawa, the occurrence of the agreement feature in this language is different from the typical agreement manifested under T in languages such as English. Instead, it appears

without causing the derivation to crash. The present analysis also explains why direct objects can be LF-Copied both in Japanese and Turkish. These languages lack φ -agreement in such a position. Sener & Takahashi provide further supporting evidence for this Anti-Agreement Hypothesis of argument ellipsis from certain adjunct clauses and exceptional case-marking constructions in Turkish. Specifically, they observe that the null subject does not require φ -agreement in these constructions and it is precisely in these contexts that the null subject allows sloppy/quantificational interpretations: see Section 6.1 below for actual data and more detailed discussions. This observation clearly shows that φ -agreement is indeed the controlling factor for LF-Copy in Turkish vis-à-vis Japanese.⁷

- (i) (a) Bill-wa kuruma-o teineini aratta. Bill-TOP car-ACC carefully washed
 'Bill washed a car carefully.'
 - (b) John-wa *e* arawanakatta. John-TOP washed.not *`Lit.* John didn't wash *e.*'
 = 'John did not wash a car.'
 ≠ 'John did not wash a car carefully.'

(Takahashi 2010: 11)

Because adjuncts do not participate into any agreement with functional heads, the Anti-Agreement Hypothesis predicts that they should be able to undergo ellipsis, yielding the impossible interpretation shown in (ib). Takahashi (2010: 43) tentatively suggests that elliptic sites must be licensed by appropriate heads. Specifically, he observes that argument ellipsis can be licensed by selection through lexical categories such as verbs whereas adjunct ellipsis is impossible because they do not have any direct association with verbs. The referee indicates that this analysis is falsified by examples such as (iib).

(ii) (a) The solution to Johni's problem depends [PP on hisi son].

(b) *The solution to Peterj's problem also depends [pp on his] son].

In (iib), the prepositional complement *on his son* is selected by the main verb and there is arguably no agreement relation at play between the PP and the *v* head. Then, (iib) should be grammatical with PP-ellipsis as shown. I suspect that the impossibility of adjunct ellipsis follows from something like Saito's (2003) Derivational Configurationality Parameter independently of the Anti-Agreement Hypothesis. Saito suggests that English does not allow argument ellipsis because selectional requirements must be met by Merge, in contrast to Japanese where selection does not imply Merge but can be satisfied instead by other means such as head movement/incorporation and LF-Copy. Since the PP complement is selected by the verb in (iib), this parametric specification independently excludes the possibility of PP ellipsis. See Oku (1998) for a slightly different analysis of the same fact in terms of the feature strength of θ -features.

under C. Miyagawa claims that the politeness markers *-des/-mas* are overt morphological manifestations of such agreement. As such, it does not block the LF-Copy process to the empty subject position. Therefore, the Anti-Agreement Hypothesis is compatible with the assumption that Japanese actually has φ -agreement as long as it is manifested in functional categories other than T. See Sections 5 and 6 below for further discussion of Miyagawa's theory and its relevance to argument ellipsis in CSE and beyond.

^[7] An anonymous JL referee points out a potential problem with the Anti-Agreement Hypothesis with regard to adjuncts. In the Japanese example in (ib), the adjunct *teineini* 'carefully' is not included in the interpretation of the ellipsis.

	Japanese		Turkish	
	Subj	Obj	Subj	Obj
Sloppy reading?	~	~	*	~
Quantificational reading?	~	~	*	~
φ-agreement?	*	*	~	*

Table 2

Difference between Japanese and Turkish in the interpretation of null arguments.

Table 2 summarizes the typological difference between Japanese and Turkish with respect to sloppy/quantificational interpretations, with special attention to subject φ -agreement.

4.2 Argument ellipsis in CSE and the Anti-Agreement Hypothesis

In the previous section, I reviewed the LF-Copy analysis of sloppy/ quantificational readings developed by Oku (1998) and further elaborated by Şener & Takahashi (2010). Here, I propose that this hypothesis can be extended to derive the subject-object asymmetry in CSE.

It is a matter of considerable controversy in the literature whether CSE exhibits syntactic agreement as its lexifier – English – does. Consider a typical exchange in CSE shown in (22). In this exchange, Speakers A and B are discussing Charles Dickens' novel *Great Expectations*.

- (22) B: And how the benefactor appear in the first and last part ...
 - A: He was confused already. He was like part of the upper class but ...
 - B: Mmm ...
 - A: At the brink of it.
 - A: Ya.
 - B: Just, it's very sad.

(CSE; Wee & Ansaldo 2004: 65)

In (22), Speaker B's first utterance does not manifest third person present singular subject agreement (i.e. *appear* instead of *appears*). The later utterances by the same speaker, however, do show correct copula agreement. Given this inconsistency in surface morphological manifestations of agreement, it seems safe to conclude at the current point of the development of CSE grammar that the apparent free variation of agreement marking is a natural outcome of ongoing grammatical competition between various substrate languages (Hokkien, Cantonese, Mandarin and/or Malay, with no morphologically manifested agreement) and the superstrate/ lexifier language (English, with morphologically forced agreement).

Thus, Wee & Ansaldo (2004: 66) observe that the morphological realization of verb–subject agreement in CSE remains essentially sporadic rather than rule-governed; as such, it has not yet stabilized to the extent that one can tell with any certainty whether its manifestation is diagnosed as due to strictly grammatical factors, as in standard varieties of English, or sociolinguistic variables.

The important point to note here, however, is that the subject-object interpretive asymmetry discussed in Section 2 above remains irrespective of whether or not a verb exhibits morphological agreement with its local subject. To prove this point, consider examples (23a, b). Note that (23a) is minimally different from (4b), repeated here as (23b), in that the verb in the former registers overt agreement morphology.⁸

(23) (a) Wait lah, John say [e speaks Hokkien]. (^{OK} strict; * sloppy)
(b) Wait lah, John say [e speak Hokkien]. (^{OK} strict; * sloppy) (=4b)

This observation suggests that surface morphological manifestations of agreement are an irrelevant factor in controlling the availability of sloppy/ quantificational interpretations in CSE.

5. A substratist explanation of the subject-object asymmetry in CSE

In this section, I provide a formal substratist explanation for the subject-object asymmetry in CSE. I first provide new evidence that all the major local languages in the contact ecology of Singapore also independently exhibit such an asymmetry. I argue that this typologically congruent system has undergone a systemic transfer into the developing grammar of CSE. I formalize this transfer in terms of the abstract agreement at T. The proposed analysis lends support to the recent claim by Miyagawa (2010, 2012, 2013) that Chinese languages possess the computational process of agreement just like overt agreement languages such as English, despite the lack of overt morphological realizations.

5.1 Substratal effects on argument ellipsis in CSE from Sinitic and Malay

Given the Sinitic substrate hypothesis reviewed in Section 2 above, which has received compelling linguistic and socio-historical support, it is natural to expect that the Chinese languages in the Singaporean contact environment

^[8] Note that testing the quantificational reading for the null subject requires it to be plural. Hence, we cannot assess the (ir)relevance of syntactic agreement in this particular context. However, I believe that the persistence of the robust interpretive asymmetry observed in (23a, b) suffices to prove my point.

(Hokkien, Cantonese and Mandarin) should have served as primary substrates for CSE with respect to argument ellipsis. As is well-known (J. Huang 1984, Yip & Matthew 2007), these languages allow liberal omission of arguments, just like CSE. More importantly, they exhibit the same subject–object asymmetry with respect to the sloppy/quantificational readings that we observed in CSE. This point is illustrated below in (24)–(27) from Mandarin, in (28)–(31) from Cantonese and in (32)–(35) from Hokkien.

(24) (a)	Zhangsan kanjian-le ta-de mama. (Mandarin) Zhangsan see-PERF he-MOD mother 'Zhangsan saw his mother.'
(b)	Lisi ye kanjian-le e. (^{OK} strict; ^{OK} sloppy) Lisi also see-PERF ' <i>Lit</i> . Lisi also saw e.'
(25) (a) (b)	Zhangsan xihuan san wei laoshi. (Mandarin) Zhangsan like three CL teacher 'Zhangsan likes three teachers.' Lisi ye xihuan <i>e</i> . (^{OK} E-type; ^{OK} quantificational) Lisi also like ' <i>Lit</i> . Lisi also likes <i>e</i> .'
(26) (a) (b)	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.' Lisi ye shuo [e mei na qian]. (^{OK} strict; * sloppy) Lisi also say NEG take money ' <i>Lit</i> . Lisi also said that e did not take money.' (Mandarin; Takahashi 2008b: 415)
(27) (a) (b)	San wei nü sheng lai jian Zhangsan. (Mandarin) three CL girl come see Zhangsan 'Three girls came to see Zhangsan.' <i>e</i> ye lai jian Lisi. (^{OK} E-type; * quantificational) also come see Lisi ' <i>Lit. e</i> also came to see Lisi.'
(28) (a) (b)	Zoengsaam tai dou heoi aamaa. (Cantonese) Zhangsan see PERF his mother 'Zhangsan saw his mother.' Leisei dou tai dou <i>e</i> laa. (^{OK} strict; ^{OK} sloppy)
(29) (a)	<i>List</i> also see PERF SFP <i>'Lit</i> . Lisi also saw <i>e</i> .' Zoengsaam zungji saam go lou si. (Cantonese) Zhangsan like three cL teacher <i>'Zhangsan likes three teachers.'</i>

- (b) Leisei dou zungji e.
 Lisi also like
 'Lit. Lisi also likes e.'
- (30) (a) Zoengsaam waa [zigei ge zaijyu mou lo cin]. (Cantonese) Zhangsan say self MOD child NEG take money 'Zhangsan said that his child did not take money.'
 - (b) Lisi dou waa [e mou lo cin]. (^{OK} strict; * sloppy) Lisi also said NEG take money '*Lit*. Lisi also said that e did not take money.'
- (31) (a) Saam go jyuzai lai gin Zoengsaam. (Cantonese) three cL girl come see Zhangsan 'Three girls came to see Zhangsan.'
 - (b) e dou lai gin leisei.
 also come see Lisi *Lit.* e also came to see Lisi.'
- (32) (a) Zhangsan kua-dio yi-eh mama. (Hokkien) Zhangsan see-PERF his mother 'Zhangsan saw his mother.'
 (b) Lisi ah-si kua-dio e. (^{OK} strict; ^{OK} sloppy)
 - (b) Lisi ah-si kua-dio *e*.
 (^{OK} strict; ^{OK} sloppy)
 Lisi also see-PERF *'Lit*. Lisi also saw *e*.'
- (33) (a) Zhangsan suka sah eh sen-sih. (Hokkien) Zhangsan like three CL teacher 'Zhangsan likes three teachers.'
 - (b) Lisi ah-si suka *e*.
 Lisi also like *'Lit*. Lisi also likes *e*.'
- (34) (a) Zhangsan gong [ga-ki eh kia bo gia lui]. (Hokkien) Zhangsan say self MOD child NEG take money 'Zhangsan said that his child did not take money.'
 - (b) Lisi ah-si gong [e bo gia lui]. (^{OK} strict; * sloppy) Lisi also said NEG take money *'Lit*. Lisi also said that e did not take money.'
- (35) (a) Sah eh za-bor lai kua Zhangsan. (Hokkien) three CL girl come see Zhangsan 'Three girls came to see Zhangsan.'
 - (b) *e* ah-si lai kua Lisi. also come see Lisi *Lit. e* also came to see Lisi.'

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The examples in (24)–(35) suggest that the asymmetry in CSE arises as a robust substratal effect from the Chinese varieties. Now, recall from Section 2 that there is another possibility suggested in the literature regarding the emergence of innovative grammatical features of CSE – the Malay substrate hypothesis. Examples (36)–(39) below from Singapore Malay (see Section 2) show that this variety also shows the subject–object asymmetry just like CSE and the Sinitic substrates.

(36) (a) Siti suka Baba-nya. Siti like father-3sG	(Singapore Malay)
(b	 'Siti likes her father.' Tapi Salima benci <i>e</i>. but Salim hate '<i>Lit</i>. Salima hates <i>e</i>.' 	(^{OK} strict; ^{OK} sloppy)
(37) (a) Siti suka tiga guru. Siti like three teacher 'Siti likes three teachers.'	(Singapore Malay)
(b) Salima suka <i>e</i> juga. (^{ОК} Salima like also ' <i>Lit</i> . Salima also likes <i>e</i> .'	E-type; ^{OK} quantificational)
(38) (a) Siti berkata [anak-nya boleh menari] Siti say child-3sg can dance 'Siti said that her child can dance.'	. (Singapore Malay)
(b)	Salima berkata [e boleh menyanyi]. Salima say can sing ' <i>Lit</i> . Salima said that e can sing.'	(^{OK} strict; * sloppy)
(39) (a) Tiga pelajar datang berjumpa saya. three student come see ISG	(Singapore Malay)
(b) ?e datang berjumpa saya juga! (^{OF} come see ISG also ' <i>Lit. e</i> also came to see me!'	^K E-type; * quantificational)

Our investigation thus far in this section shows that there is a perfect grammatical congruence between two principal substrates of CSE – Sinitic and Malay. Table 3 summarizes this congruence. Results in this table strongly support the eclectic model of contact language formation proposed by Mufwene (2001, 2008), Ansaldo (2004, 2009a, b) and Schneider (2007).

The question now is: What is the underlying grammatical system that has been transferred from Chinese/Malay into CSE grammar? More specifically, assuming the LF-Copy theory of sloppy/quantificational interpretations for null arguments, what blocks this process from targeting the subject position (the shaded cells in Table 3)? I answer these questions in the next section.

	CSE		Sinitic		Malay	
	Subj	Obj	Subj	Obj	Subj	Obj
Strict reading?	~	~	~	~	~	~
Sloppy reading?	*	~	*	~	*	~
E-type reading?	~	~	✓	~	~	~
Quantificational reading?	*	~	*	~	*	~

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Table 3

Subject-object asymmetry in null arguments in CSE, Sinitic and Malay.

5.2 Strong Uniformity and the role of abstract agreement in contact genesis

I propose that the subject-object asymmetry arises in CSE as the result of underlying syntactic congruence between two ostensibly different typological languages (English vs. Chinese) in terms of abstract syntactic agreement. I further suggest that the resultant asymmetry has been further reinforced and stabilized as the robust pattern in CSE grammar thanks to Malay grammar, which imposes a similar restriction on the semantics of null arguments. Suppose that CSE has inherited the underlying agreement system from its lexifier language – English – such that subjects must always enter into an Agree relation, whereas objects do not, whether or not this process is morphologically transparent.⁹ Although this superstratist position seems sufficient to account for the asymmetry under investigation, it goes against the Sinitic substrate hypothesis, which maintains that CSE has essentially instantiated the grammar of Sinitic substrate languages filtered through English morphosyntax (Bao 2005). After all, there are only a few alleged areas (overt wh-fronting; see Bao 2001 and Sato 2013) where the syntax of CSE has received non-trivial influences from the grammar of standard varieties of English. Indeed, the vast majority of contact-induced changes in CSE can be easily traced back to Sinitic substratal influences. Hence, it is hard to see why Standard English would have influenced just a few grammatical patterns, much less the abstract syntactic agreement system, when many other areas of CSE grammar (for example, copula deletion, topic prominence, bare conditionals, radical pro-drop, wh-in-situ/particle wh-fronting, discourse particles, *got*-existential constructions, the Chinese-like tense/aspect system, the semantics of bare nominals, to name a few; see the references cited in

^[9] Thanks to an anonymous JL referee for suggesting this possibility, integrated now into the present analysis.

Section 2) clearly exhibit substratal effects from indigenous Chinese varieties, as shown in an ever-growing body of work on its grammar.

Let us thus hypothesize that the transfer of the abstract T-subject agreement system from English survives the grammatical competition/ selection process into CSE, because the Sinitic substrate languages in fact have the same computational process of agreement that English has. According to this hypothesis, the Chinese languages possess the agreement system for subject positions at Ts. Accordingly, the LF-Copy process is blocked from targeting the subject position in CSE because of the T-subject agreement in the manner shown earlier in (20a-c). More specifically, the functional category T seeks a matching DP with an uninterpretable Case feature in its search domain to have its uninterpretable φ-features checked and erased. The DP then moves to [Spec, T] to check the EPP-feature of the same T. When this DP is later copied at LF onto the empty subject position of the subsequent elliptical clause with another T, it can no longer participate into any Agree relation with the T because the Case feature of the DP, which would activate it for Agree, has already been checked in the antecedent clause before LF-Copy takes place. This hypothetical derivation then crashes because the uninterpretable φ -features of the T in the elliptical clause remain unchecked. This derivational failure will not occur with the LF-Copy of the direct object from a full-fledged clause onto the empty object position. This is because CSE does not have any agreement relation between the verb and its direct object.

The idea that φ -features are active in Sinitic languages, even though there is no morphological evidence of such an activity, has been actively pursued by recent work of Miyagawa (Miyagawa 2010, 2012, 2013). It is often casually assumed that some languages, like English, have agreement, whereas other languages, like Japanese, do not. Miyagawa (2010) suggests that this superficial observation is misguided and argues instead that all languages have agreement in some form, with their manifestations being subject to cross-linguistic variation. This position is well-articulated in what he calls STRONG UNIFORMITY (see also Chomsky 2001: 2). This principle is defined in (40).

(40) Strong Uniformity

All languages share the same set of grammatical features, and every language overtly manifests these features.

(Miyagawa 2012: 12)

As a part of his endeavor to explore the explanatory potentials of the Strong Uniformity thesis, Miyagawa (2010: 49–50) argues that Mandarin possesses person agreement under T. His empirical evidence for this position is concerned with the so-called blocking effect on the long-distance construal of reflexives caused by the presence of an intervening

subject with person features different in value from those of the higher subject (Y.-H. Huang 1984; Tang 1985, 1989; H. Pan 2000). Consider Mandarin examples (41a, b), which serve to illustrate this effect:

- (41) (a) Zhangsan_i zhidao Lisi_j dui ziji_{i/j} mei xinxin.
 Zhangsan know Lisi to self NEG confidence 'Lit. Zhangsanknows Lisi has no confidence in self.'
 - (b) Zhangsan, juede {woj/nij} dui ziji*i/j mei xinxin.
 Zhangsan think 1SG/2SG to self NEG confidence
 'Lit. Zhangsan thinks {I/you} have no confidence in self.'
 (Mandarin: H. Pan 2000; 280)

In (41a), the long-distance reflexive ziji 'self' can be bound to either the local embedded subject Lisi or the non-local matrix subject Zhangsan. The example in (41b) shows, however, that the long-distance construal becomes impossible when the local, embedded subject is switched to the first/second person pronouns (i.e. wo 'I' and ni 'you'); that is to say, only the local binding of the reflexive is possible in this example. Miyagawa (2010: 50) interprets this contrast as evidence that Chinese has person agreement at T once we adopt the analysis (see Battistella 1989 and Cole, Hermon & Sung 1990, inter alia) whereby the binding of a reflexive in Chinese involves successive-cyclic LF-movement of the reflexive to a T position to receive the value of its person feature. According to this analysis, the long-distance construal in (41a) is obtained as follows. The reflexive ziji 'self' first moves to the embedded T in order to receive the [third person] value. The reflexive further moves to the matrix T to receive the same person feature value. Both local and longdistance construals of *ziji* are grammatical in (41a) because the person features it picked up through LF movement do not clash in value. In (41b), on the other hand, for the long-distance construal to obtain, ziji 'self' must first undergo LF-movement to the embedded T to receive the [first/second person] values and then move further to the matrix T to receive the [third person] value. The resulting representation crashes because of the conflicting person values the reflexive picked up on its way up to the matrix T position. This is why the long-distance construal is blocked in (41b). The contrast between (41a) and (41b), therefore, indicates that T in Chinese does possess the abstract person agreement at T, despite the lack of overt morphological manifestations of the agreement. Note that Japanese does not exhibit the blocking effect, as shown in (42), where zibun 'self' may be bound to the embedded first/second person subjects (i.e. watasi 'I'/anata 'you') as well as to the matrix third person subject Taro. This pattern therefore suggests that Japanese does not possses person agreement at T (however, see footnote 6 above for an important qualification of this point).

(42) Taroo-wa {**watasi-ga/anata-ga**} zibun-no syasin-o totta-to itta. Taro-NOM ISG-NOM/IPL-NOM self-GEN picture-ACC took-COMP said '*Lit*. Taro said that {I/you} took self's picture.'

(Japanese; Miyagawa 2010: 50, with a minor modification)

Now, it is important to see whether the other major substrate language in the contact community for CSE - Malay - also exhibits person agreement in the form of the blocking effect. Cole & Hermon (2005: 630) observe that Singapore Malay behaves differently from Chinese in this regard. That is, the reflexive-like expression *diri-nya* 'self-3SG' fails to manifest the relevant effect in Malay. This observation is illustrated in (43).

(43) Aminah_i tahu {saya/anda} memberi Siti_j buku tentang diri-nya_{i/j}. Aminah know ISG/2SG buy Siti book about self-3SG '*Lit*. Aminah knew {I/you} gave Siti a book about self.'

(Singapore Malay; Cole & Hermon 2005: 630, with a minor modification)

In this example, *diri-nya* 'self-3sG' can refer to the matrix subject *Aminah* (as well as to the closest DP *Siti*) despite the fact that the first/second person subjects, *saya* 'I'/*anda* 'you', intervene between the reflexive and the matrix subject. Cole and Hermon suggest that *diri-nya* is underspecified in the lexicon with respect to the features [α anaphor] and [α pronominal] and hence that it can occur in the syntactic environments accessible for both reflexives and pronouns. They further suggest that the apparent long-distance binding shown in (43) is not due to the LF head movement of *diri-nya* because its multi-morphemic status prevents it from undergoing such movement as mono-morphemic reflexives such as *ziji* 'self' in Chinese.

Although it goes beyond the limited scope of this paper to develop a full theory of the subject-object asymmetry in Malay, I suggest a brief outline of such a theory informed by my ongoing study of Javanese argument ellipsis (Sato, to appear), which also exhibits the same asymmetry. Sato (to appear) essentially proposes that the LF-Copy for an empty subject position in Javanese is blocked by the active voice nasal prefix under the v head (Cole, Jonczyk & Lilly 1999; Sato 2010, 2012), which he hypothesizes to serve the same computational function as φ -agreement in Turkish and Chinese in blocking LF-Copy. Some examples of the nasal prefix are shown in (44a, b).

- (44) (a) Mary {maca/*waca} buku kuwi. (Javanese) Mary Av.read/read book DEM 'Mary read this book.'
 - (b) Kowe {**nukokke**/***tuku**} ibu-mu kembang. ²SG AV.buy/buy mother-₂SG flower 'You bought your mother a flower.'

This theory can be straightforwardly extended to the subject-object asymmetry in Malay, given that, like Javanese, this language also exhibits a similar distribution of the active voice prefix. Cole & Hermon (1998) thus observe that most transitive verbs in Malay occur with the optional active voice prefix *meng*-, as illustrated in (45a, b).

- (45) (a) Guru itu akan (**men**)-denda Fatimah. teacher DEM FUT Av-punish Fatimah 'The teacher will punish Fatimah.'
 - (b) Ali (**mem**)-beri Fatimah hadiah untuk hari lahir-nya. Ali Av-give Fatimah present for day birth-3sG 'Ali gave Fatimah a present for her birthday.' (Singapore Malay; Cole & Hermon 1998: 231)

Note that this analysis, in turn, provides indirect support for Miyagawa's Strong Uniformity thesis that all languages manifest agreement in some fashion: Malay, upon closer scrutiny, shows agreement in the form of VOICE morphology at *v*. See Sato (to appear) for further consequences of this conclusion.

Given the present Sinitic hypothesis regarding the transfer of the φ -agreement at T from the Chinese languages into CSE, we expect to see syntactic phenomena where this agreement system is active in the contact variety.¹⁰ Indeed, pronominal Case inflections and VP-ellipsis in CSE provide independent evidence in favor of the agreement system. First, recall that, within Chomsky's (2000) recent assumption, the Case feature of a DP (Goal) is checked/valued through Agree with a higher functional head (probe) – either T or v – which carries uninterpretable φ -features. Restricting our attention to English, the Case feature is realized as nominative if the probe is a finite T and accusative if the probe is a transitive v head. Given this assumption, our present transfer model predicts that CSE should also manifest this Case inflection just like its lexifier. Examples (46a, b) show that this prediction is indeed borne out.¹¹

- (46) (a) $\{He/*Him\}$ like Cindy a lot.
 - (b) Cindy like {***he/him**} meh?

(CSE; Sato 2011: 359)

Second, Lobeck (1990) and Saito & Murasugi (1990) propose that functional heads such as [+tensed] T can license ellipsis of their complement only when they enter into a Spec–Head agreement with its specifier; see Fukui & Speas

^[10] I thank an anonymous JL referee for suggesting this possibility.

^[11] Meh is a discourse particle in CSE which forms questions expressing surprise or skepticism. See Ler (2005) for a comprehensive description of the pragmatic functions of this particle.

(1986) for a complete taxonomy of agreeing and non-agreeing functional categories. This proposal is illustrated by the contrast in (47a, b):

- (47) (a) Sam [$_{VP}$ likes soccer] and Mary [$_{T}$ does] [$_{VP}$ e], too. (Standard English)
 - (b) *I consider Sam to $[v_P \text{ like soccer}]$, and you believe Mary to $[v_P e]$ as well.

The construction in (47a) allows VP-ellipsis because the finite T there permits the deletion of its VP-complement due to its agreement with the subject DP whereas (47b) does not because the non-finite T does not agree with the subject DP. Given this generalization, our present analysis predicts that VP-ellipsis should be available with a finite T in CSE as well because of the abstract Spec–T agreement, whether it is manifested in visible verbal inflections or not. This prediction is indeed confirmed by CSE examples such as (48a, b).

(48) (a) Sunadi [vp play soccer] and Peter also [$_{T}$ {can, does, may}] [vp e]. (CSE)

'Sunadi plays soccer and Peter {can, does, may} too.'

(b) Sunadi [vp play soccer] and Peter also [T {have, got}] [vp e].
 'Sunadi plays soccer and Peter has also played soccer, too.'

In (48a), VP-ellipsis is licensed by finite auxiliaries such as *can*, *does* and *may*, as in Standard English. The example in (48b) with VP-ellipsis shows that the same deletion operation is possible in CSE even though there is no overt agreement inflection on T heads. Under Lobeck/Saito & Murasugi's generalization, the availability of VP-ellipsis here argues for the existence of the abstract Spec–T agreement in CSE.

To summarize, a feasible reconstruction – which is consistent with all the empirical facts observed thus far, and with the compelling evidence in the literature for the general substratist position on CSE grammar – is the following: on one hand, the CSE grammar has developed the abstract subject–T agreement driven out of grammatical pressures from Sinitic and English which possess the same system. On the other hand, the CSE grammar has developed argument ellipsis as substratal effects from Chinese and Malay because the superstrate/lexifier language – English – does not possess this grammatical characteristic. This phenomenon, however, exhibits the subject–object asymmetry with respect to sloppy/quantificational interpretations in CSE. Even though the grammatical reasons for this asymmetry differ between Chinese and Malay (subject–T agreement in Chinese vs. voice agreement in Malay), the epiphenomenal surface congruence has already sufficed for this asymmetry to be stabilized in CSE.

5.3 The ellipsis of non-nominal arguments in CSE

I conclude this section by pointing out one important prediction made by the proposed analysis of the subject–object asymmetry in CSE. Recall that our analysis suggests that subjects do not exhibit sloppy/quantificational interpretations because of syntactically active φ -agreement in this position, unlike direct objects which do not participate in such agreement. We are thus led to predict that the ellipsis of indirect objects/PP arguments required by ditransitive verbs, for example, should also be able to permit these interpretations.¹² Examples (49)–(50) show that this prediction is indeed confirmed in CSE.¹³

(49) (a)	John fax the report to his boss already.	(CSE)
(b)	But Bill email the report <i>e</i> hor.	(^{OK} strict; ^{OK} sloppy)

(50) (a) John fax the report to three secretaries already. (CSE) (b) But Bill email the report *e* hor. (OK E-type; OK quantificational)

The example in (49b) involves the omission of the indirect PP argument selected by the ditransitive verb *email*. This elliptic object allows both strict and sloppy readings. Similarly, the elided quantified PP object in (50b) allows both E-type and quantificational readings.

6. Implications of the analysis and residual issues on argument ellipsis

In this paper, I have proposed a new analysis of the hitherto unnoticed subject-object asymmetry in argument ellipsis in CSE following the general spirit of the substratist explanation for this variety. The CSE data discussed above contrast clearly with the Turkish data in that they show that the surface presence or absence of agreement makes no difference. In other words, abstract syntactic agreement is independent from overt morphological agreement. This theoretical position also has an important implication for theories of genesis/development of contact language grammars.¹⁴ It is widely observed in descriptions of many contact languages that overt agreement inflection, if any, is in flux, unstable or marginal and is subject to considerable speaker variation; see Labov (1998) and Patrick (2004) for evidence from African-American Vernacular English and Jamaican Creole English, respectively. To the extent that my analysis of the asymmetric argument

^[12] I thank an anonymous *JL* referee for asking whether non-nominal arguments such as PPs can be elided in CSE.

^[13] Hor is a discourse particle in CSE which is used to ask for the listener's consent/support/ agreement. See Low & Brown (2005) for discussions on hor.

^[14] I thank an anonymous *JL* referee for suggesting this implication, paraphrased below in my own words.

ellipsis pattern in CSE holds, it suggests that such instability is simply a superficial phenomenon only linked to the PF manifestation of the underlying agreement process in the narrow syntactic computation.

In this section, I briefly discuss two residual issues with our Anti-Agreement analysis of argument ellipsis in CSE and explore some possible ways to solve them.¹⁵

6.1 The relation between agreement and Agree: Hindi, Bangla and Basque

Under our current analysis, the contrast between Turkish and CSE indicates that overt agreement does not always establish a one-to-one relation with syntactic agreement, or Agree in Chomsky's (2000) terminology. More concretely, Turkish represents a case where the correlation between overt agreement and Agree is transparent. Thus, as noted in Section 4.1, Sener & Takahashi (2010) observe that in Turkish, empty subjects can exhibit sloppy readings precisely in syntactic contexts where subjects do not show φ -agreement. They mention two such contexts – adjunct clauses and Exceptional Case-Marking constructions – and observe that the null subject does allow this reading, as shown in (51b) and (52b).

- (51) (a) Can [[*pro* oğl-u] İngilizce **öğren**-ince] John his son-3sg.poss English learn-because sevin-di be.pleased-pres.perf 'John is pleased because his son has learned English.' Fransızca öğren-ince] (b) Filiz-se [e sevin-di. (^{OK} strict: ^{OK} sloppy) Phylis-however French learn-because be.pleased-pres.perf 'Lit. Phylis, however, is pleased because e has learned French.' (Turkish; Şener & Takahashi 2010: 95) (52) (a) Pelin [[pro yeğen-i]-ni lise-ye **başla**-yacak] san-ıyor. Pelin her niece-3SG-ACC high school-DAT start-FUT think-pres 'Pelin thinks that her niece will start high school.'
 - (b) Suzan-se [e ilkokul-a başla-yacak] san-ıyor. Suzan-however grade school-DAT start-FUT think-PRES 'Lit. Suzan, however, thinks that e will start grade school.' (Turkish: Sener & Takahashi 2010: 96)

^[15] I am grateful to an anonymous JL referee for the challenging questions. Although a full resolution of these questions requires another study and goes beyond the limited scope of this paper, I would like to come back to them in my future research.

The examples in (51)–(52) confirm the correlation between the surface presence/absence of φ -agreement and the possibility of argument ellipsis in Turkish. On the other hand, CSE represents a rather opaque case where the presence or absence of overt agreement does not correlate with Agree. Of course, both scenarios are compatible with the Anti-Agreement Hypothesis originally proposed by Sener & Takahashi (2010) and developed here for CSE, in the sense that both languages employ the computational mechanism of Agree for subject positions; it just so happens that Turkish has overt person and number morphology to manifest this underlying operation. An anonymous JL referee points out that the type of languages which would be incompatible with this hypothesis, then, would be one where argument ellipsis is freely permitted with the presence of overt agreement. Simpson, Choudhury & Menon (2013) observe that two South Asian languages – Bangla and Hindi – pose a problem for this hypothesis because they show that argument ellipsis is available under contexts of overt agreement. I illustrate Simpson et al.'s point with examples in (53)-(56) from Hindi.16

- (53) (a) Ram apini gaRi bechega. Ram self's car sell.FUT.MASC 'Ram will sell his car.'
 - (b) Raj-bhi *e* bechega. Raj-also sell.FUT.MASC '*Lit*. Raj will also sell *e*.'

(^{OK} strict; ^{OK} sloppy)

(Hindi; Simpson et al. 2013: 16)

- (54) (a) Ram-ne apni gaRi bechi. Ram-ERG self's car sell.PAST.FEM 'Ram sold his car.'
 - (b) Raj-ne-bhi *e* bechi.
 (^{OK} strict; ^{OK} sloppy)
 Raj-ERG-also sell.PAST.FEM
 'Lit. Raj also sold *e*.'

(Hindi; Simpson et al. 2013: 16)

(55) (a) Ram sochta hai uski beti-ne Italian Ram think.pres COP.pres his daughter-ERG Italian paRha hai. studied.MASC COP.PRES.3SG 'Ram thinks his daughter studied Italian.

^[16] Two notes are in order here. First, the direct object 'car' in (53a, b) and (54a, b) is feminine. Thus, (54b), but not (53b), exhibits verb-object agreement. Second, Simpson et al. (2013: 17) note that in Hindi, verbs agree with subjects in tenses other than simple past tense. Thus, (56b), but not (55b), exhibits verb-subject agreement. See Simpson et al. (2013: 15–18) for a full discussion of agreement patterns in Hindi.

(b) Raj-bhi sochta hai e Italian paRha Raj-also think.pres COP.pres Italian studied hai. (^{OK} strict; * sloppy) COP.pres.3SG
'*Lit*. Raj also thinks e studied Italian.'

(Hindi; Simpson et al. 2013: 17)

(56) (a) Ram sochta uski beti Italian hai Ram think.pres cop.pres his daughter Italian paRh-rahi hai studied-pres. FEM COP.PRES. 3SG 'Ram thinks his daughter is studying Italian.' hai e Italian paRh-rahi (b) Raj-bhi sochta Raj-also think.pres COP.pres Italian studied-pres.FEM (^{OK} strict: * sloppy) hai. COP. PRES. 3SG 'Lit. Raj also thinks e is studying Italian.' (Hindi: Simpson et al. 2013: 16–17)

The examples in (53b) and (54b) illustrate that the null object allows sloppy interpretations, whether or not a verb exhibits overt morphological agreement with the direct object. The examples in (55b) and (56b), on the other hand, illustrate that the null subject does not allow sloppy interpretations, whether or not a verb exhibits overt morphological agreement with the subject. The availability of sloppy interpretations in (54b), then, presents a case against the Anti-Agreement Hypothesis.

Takahashi (2007, 2010) also considers Basque as another language which would go against the predictions of the Anti-Agreement Hypothesis (see also Duguine 2008 for similar examples). Basque has both subject and object agreement (Ortiz de Urbina 1989), but Takahashi observes that in this language, a null object exhibits sloppy interpretations despite the fact that it manifests verb-object agreement. This point is shown in (57b) below. The example in (58b), on the other hand, shows that a null subject does not exhibit sloppy interpretations, a pattern consistent with the Anti-Agreement Hypothesis.

- (57) (a) Jon-ek bere ama ikusi zuen. Jon-ERG his mother see AUX 'John saw his mother.'
 - (b) Peru-k aldiz ez zuen e ikusi. (^{OK} strict; ^{OK} sloppy) Peru-ERG however NEG AUX see '*Lit*. However, Peru did not see e.' (Basque; Takahashi 2007: 6)
- (58) (a) Jon-ek esan du [bere ama-k Miren ikusi duela]. Jon-ERG say AUX his mother-ERG Miren see AUX 'John says his mother has seen Miren.

 (b) Peru-k esan du [e Arantza ikusi duela]. (^{OK} strict; * sloppy) Peru-ERG say AUX Arantza see AUX '*Lit*. Peru says e has seen Arantza.'

(Basque; Takahashi 2007: 6)

Takahashi (2010: 42) speculates that this subject-object asymmetry may be accommodated if Basque relies on the V-stranding VP-ellipsis for the apparent instances of argument ellipsis (see Section 3.2 above). Since direct objects, but not subjects, will be included within the VP-ellipsis site, the asymmetry exhibited in (57)-(58) falls out naturally from this analysis. However, Simpson et al. (2013) argue against this alternative analysis in Hindi and Bangla, with compelling evidence based on non-identity of elliptic and antecedent verbs and the inability of VP-level adjuncts to be included in interpretations of argument ellipsis (see examples (7)-(8) above).

Notice crucially that this argument from Hindi/Bangla and Basque against the Anti-Agreement Hypothesis holds only if we adopt Chomsky's (2000) technical assumption about Agree. As we saw in Section 4.1, this hypothesis maintains that LF-Copy is blocked for a null subject position in Turkish because the uninterpretable φ -features of the T in the elliptical clause remain unchecked. This is, in turn, attributed to the fact that the uninterpretable Case feature of the copied DP has already been checked and erased in the derivation of the antecedent full-fledged clause. The underlying assumption in this analysis is the ACTIVATION CONDITION from Chomsky (2000), which states for our current purposes that the uninterpretable Case feature of the DP subject makes it possible for it to enter into an Agree relation with T. However, it is not clear whether this process must always be tied with an uninterpretable Case feature of a probe. Thus, in his modified version of Chomsky's (2000) theory of Agree, Bhatt (2005) proposes that Case is to be dissociated from Agree based on agreement facts in Hindi. According to Bhatt's version, the Agree operation can permit a goal DP to delete the uninterpretable φ -feature of functional heads different from the one from which it has its structural Case assigned. Under this view, the mere presence of agreement under Ts in Hindi does not block the derivation for a null subject construction in this language because Case is not the result of the computational reflex of Agree.

Chomsky's assumption that Case checking is invariably tied to φ agreement has been disputed for some time also by several linguists in Japanese linguistics, who attempt to dissociate the link between the two phenomena. Thus, Fukui (1986) and Kuroda (1988) argue that Japanese lacks φ -agreement (see Miyagawa (2010, 2012, 2013), though, for the opposing view; see also footnote 6 above), but this language does have overt case morphology. Indeed, Fukui & Takano (1998) propose that accusative case is an inherent case linked to the argument structure of verbs involved, whereas Saito (1985) claims that nominative case is assigned to any element

Subject ellipsis? • *	✓ *	*

Table 4

Subject-object asymmetry as cross-linguistic implicational generalization.

immediately dominated by TPs. This line of research, therefore, further indicates that the Case system may have nothing to do with the agreement system, contrary to Chomsky's (2000) theory of Agree.

Needless to say, it remains to be seen what the proper approach is for Case assignment/checking within vP domains. I leave this important issue for future research.

6.2 Subject-object asymmetry in argument ellipsis and Agree

There is by now a growing literature on argument ellipsis across languages. Empirical studies on this phenomenon in typologically different languages, including Japanese (Oku 1998; Takahashi 2008a, b, 2010), Korean (Takahashi 2007), Chinese (J. Huang 1991, Cheng 2012), Turkish (Şener & Takahashi 2010), Hindi/Bangla/Malayalam (Simpson et al. 2013), Javanese (Sato, to appear) and Basque (Takahashi 2007, 2010; Duguine 2008), have revealed a cross-linguistically stable generalization which has the form of an implication, as shown in (59):

(59) If a language L has subject ellipsis, then L also has object ellipsis.

Japanese and Korean have subject and object ellipsis. The other languages mentioned above all have object ellipsis, but lack subject ellipsis. Languages such as English have neither subject nor object ellipsis. As far as I know, however, there is no language which has subject ellipsis but lacks object ellipsis. Table 4 will make this implication clearer.

Assuming that every language has this property predicated by the implication mentioned above, as our current understanding of argument ellipsis permits, the issue remains whether such a robust cross-linguistic asymmetry does not falsify the Anti-Agreement Hypothesis. Recall from Section 4.1 that this hypothesis crucially relies on the technical mechanism of Agree as outlined by Chomsky (2000), whereby two functional heads T and v are uniformly probes for Case assignment and agreement for subjects and direct objects, respectively. Given this uniformity assumption, the Anti-Agreement Hypothesis would predict a total symmetry between subjects and objects with respect to argument ellipsis. One could, of course, simply stipulate that

languages with this asymmetry lack abstract agreement for object positions, but there does not seem to be any principled reason why a language cannot show this ellipsis in subject position but not in direct object position. I believe that an ultimate answer to this question is related to my speculation in the previous subsection. If we follow our conjecture in Section 6.1 above and Miyagawa's Strong Uniformity principle shown in (40) above, it is actually the subject-object asymmetry (as exhibited in CSE) that is predicted to be the norm in languages with argument ellipsis under the Anti-Agreement Hypothesis. To see why, let us hypothesize that subject DPs must enter into an Agree relation with an appropriate functional head in all languages, unlike non-subject elements within VPs whose Case property does not necessarily depend on this relation, as we speculated in Section 6.1. It follows, then, that an empty subject can never yield sloppy/quantificational interpretations for the by now familiar reason: the Case feature of the overt subject DP has been checked and erased by Agree, and hence cannot act as a new probe for a functional head in the subsequent elliptical clause. This hypothesis thus accounts for two notable facts in Table 4: (i) why there is no Type III language, and (ii) why many languages with argument ellipsis allow elliptic objects but not elliptic subjects. Now, the question is why there are Type I languages such as Japanese and Korean which do allow elliptic arguments in BOTH SUBJECT AND OBJECT POSITIONS. Miyagawa (2012, 2013) argues that Japanese has φ -agreement but it appears under C heads. I suspect that this agreement does not block the LF-Copy process from targeting the subject position in the specifier of T precisely because of this 'high' locus of such agreement; see footnote 6 above. It is possible that the same analysis might hold for Korean, but this is an important issue to be left for future investigations.

7. CONCLUSION

I began this paper with a hitherto unnoticed asymmetry between subjects and direct objects in CSE with respect to the availability of sloppy/quantificational interpretations of empty arguments; that is, empty direct objects, but not empty subjects, can exhibit these interpretations. I have then developed a new analysis of this asymmetry drawing on recent works on argument ellipsis in languages like Japanese and on the general substratist explanation for innovative features of CSE grammar. More specifically, the asymmetry arises because of the abstract T-subject agreement in CSE, a grammatical system transferred into CSE based on mutual congruence between the lexifier language – Standard English – and the Sinitic substrates of CSE – Mandarin, Cantonese and Hokkien. This pattern was further strengthened in CSE under communicative pressures from Malay, which exhibits exactly the same interpretive asymmetry thanks to the dyadic voice agreement system. I have presented independent evidence, based on Case

inflections and VP-ellipsis in CSE, in favor of the view that this variety has subject agreement whether it is morpho-phonetically manifested or not.

There are several important implications of our proposed analysis of CSE for proper theories of contact linguistics and of argument ellipsis across languages. As a minor point, the results in this paper add further empirical support for the general feasibility of the substratist approach to contact phenomena in CSE, which has been amply motivated in the literature on this variety. The implications, however, go beyond this single variety. My analysis suggests that the frequently cited apparent instability of agreement inflections in pidgin/creole varieties is indeed illusory and only linked to the surface manifestation of the underlying subject agreement process in syntactic computation, which is arguably universal across languages including contact languages. Furthermore, our analysis has two non-trivial consequences for the relation between Case and agreement. One is that, to the extent that our analysis holds, there is no inherent link between the agreement process and Case within the VP region, such as accusative Case. The other is that the position where agreement manifests itself is also subject to parametric variation (e.g. it appears under T in languages such as CSE and Chinese whereas it appears under C in languages such as Japanese and, arguably, Korean). These results, then, support a version of Miyagawa's (2010, 2012, 2013) Strong Uniformity thesis that all languages have the same set of grammatical features in some fashion.

All in all, it is clear from the above that the phenomenon of argument ellipsis presents a never-ending series of important questions for current syntactic theory. I hope to have demonstrated in this paper that a seemingly straightforward analysis of the subject–object asymmetry in CSE, upon a closer cross-linguistic examination, has quite profound implications for the outline of a possibly universal theory of argument ellipsis when applied to many other languages with this grammatical characteristic, as well as many challenging questions worthy of further cross-linguistic investigation, including those briefly touched on in Section 6.

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