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Valency and Transitivity in a Contact Variety: The Evidence from Cameroon Pidgin English

Melanie Green
University of Sussex
m.j.green@sussex.ac.uk

Gabriel Ozón
University of Sheffield
g.ozon@sheffield.ac.uk

Abstract

We explore valency and transitivity patterns in Cameroon Pidgin English (CPE) from a language contact perspective, with particular focus on (a) lexical and (b) constructional phenomena. With respect to (a), many verbs of English origin surface in CPE with additional senses and valency properties to those they display in the lexifier, illustrating the drive towards polysemy in a language with a relatively small lexicon. We also describe category change, whereby English non-verbal expressions (typically adjectives) emerge as verbs in CPE. In terms of (b), verbs undergo valency changes as a consequence of participation in productive serial verb constructions. These constructions are built around a small set of high-frequency verbs, some of which also occur in the light verb construction, which represents another strategy for the creation of complex predicates. We review the evidence for constructional substrate influence. The data under discussion are drawn from two small corpora of spoken CPE.

Keywords

valency – transitivity – serial verb – light verb – Cameroon Pidgin English – corpus linguistics

1 Introduction

Cameroon Pidgin English (CPE) is an Atlantic expanded pidgin/creole spoken in some form by an estimated 50% of Cameroon's 22,000,000 population, primarily in the Anglophone west regions, but also in urban centres throughout the country (Lewis et al., 2014). This paper addresses the following specific research questions within the context of Thomason and Kaufman's (1988) language contact model of pidgin/creole genesis:

1. Do CPE verbs show simplification or complexification in valency and transitivity patterns compared to the corresponding patterns in the lexifier language?
2. What lexical and constructional strategies exist in CPE for valency increase, valency decrease and verbalisation (the creation of verbal predicates)?

The data in this paper are drawn from two small corpora of spoken CPE amounting to a total of 360,000 words (Ayafor and Green, 2014; Ayafor *et al.*, 2016; Ozón *et al.*, 2017), as well as existing published sources, including Todd's (1979) collection of orally narrated folk tales, and Ayisi and Longinotto's (2005) documentary film. These sources are complemented by some elicited data.

The paper is organised as follows. We begin by providing an overview of the research context (§2), summarising Thomason and Kaufman's (1988) language contact model of pidgin/creole genesis, the likely substrate influences on CPE, concepts relating to valency and transitivity, and definitions of the constructional phenomena we explore in this paper (SVC and LVC). We then explore valency and transitivity in CPE in relation to lexical phenomena (§3), including the polysemy and multivalency of lexical verbs and 'category change' as a means of verbalisation. We demonstrate that many verbs of English origin surface in CPE with different valency properties than those they display in the lexifier language, as well as with different (related) senses. In terms of constructional phenomena (§4), verbs undergo valency changes as a consequence of their participation in certain types of serial verb construction. Serial verb constructions are built around a small set of frequently occurring verbs, some of which also occur in the light verb construction, which in turn represents another verbalisation strategy. We argue that Thomason and Kaufman's (1988) model allows an explanatory account of the presence of these valency and transitivity features in CPE. The paper ends with conclusions and prospectus (§5).

2 Research Context

The research context for this paper is provided by Thomason and Kaufman's (1988) language contact model of pidgin/creole genesis. In this section, we summarise the predictions of this model for pidgin/creole (P/C) languages (§2.1), set out our assumptions relating to how we conceptualise valency and transitivity (§2.2), and provide definitions of the serial verb construction (SVC) and the light verb construction (LVC), the constructional phenomena we explore in this paper (§2.3).

2.1 *Language Contact and Pidgin/Creole Genesis*

According to Thomason and Kaufman's (1988) model, the primary determinant of the outcome of language contact is the sociolinguistic setting, which allows a continuum of types of contact-induced change: borrowing (which takes place in bilingual settings between two languages that are both maintained); language shift with 'normal transmission' (speakers gradually abandon one language in favour of another, but that target language is transmitted through the generations in the usual way); language shift without normal transmission (which takes place when a group of speakers abandon their native language(s) in favour of another language, but fail to acquire that language in a native-like way), and finally, pidginisation. According to Thomason and Kaufman, creoles that emerge abruptly represent an extreme form of language shift without normal transmission, wherein only the lexicon of the target language is acquired, along with little or none of its grammar. Pidgin languages, including those that have 'crystallised' into stable expanded pidgin linguistic systems, or have subsequently creolised, differ from creoles that emerged abruptly in that they do not represent instances of language shift: the lexifier language does not represent a 'target language' in the sense that the speakers aim to acquire the language of another social group. Rather, the pidgin emerges as a consequence of the need for a shared communicative system. What unites pidgin/gradually creolised and abruptly creolised languages, according to Thomason and Kaufman, is the speaker strategy by which they emerge, which involves linguistic accommodation: 'members of the new contact community make guesses about what their interlocutors will understand, and "right" guesses are incorporated into the grammar of the developing contact language.' (Thomason and Kaufman, 1988: 174). In this context, markedness (in the sense of how 'common' or widely attested a linguistic feature is in the world's languages) plays a role in determining the features that will emerge in a P/C language: universally unmarked features are most likely to emerge in the new contact

variety, particularly in the event that typological distance exists between the languages in contact. Equally, given that speakers' 'guesses' are based on their native languages, a marked feature can surface in the contact language if it is typologically common in the native languages of the speakers (substrate languages).

As Migge (1998: 219) asserts, a rigorous methodology for establishing substrate influence requires the identification of '(1) all the languages in the contact setting at the time of the creole's formation, (2) the relative impact of their speakers in this contact setting, and (3) the exact organization of their grammar.' However, it is difficult to achieve this ideal in the West African context, for a number of reasons. First, there remains some controversy about the historical origins of the linguistic features of West African Pidgin Englishes (WAPEs). There are striking lexical and syntactic similarities between the Sierra Leonean creole Krio and the WAPEs, to the extent that Holm (1988: 415) describes them as 'varieties of the same language'. However, the origins of Krio also remain controversial, as Finney (2004) summarises:

> One school of thought [...] maintains that present day Krio emerged from varieties of creoles imported to Sierra Leone from the Americas. Another group [...] contends that present day Krio is an offshoot of a West African creole that pre-dates the Atlantic Slave Trade.
>
> FINNEY, 2004: 63

On the basis of historical and linguistic evidence, Huber (1999) argues convincingly that there was some form of restructured English in place along the West African coast as early as the start of the 18th century, and that the influence of Krio on Nigerian Pidgin English (NPE) and CPE probably began as late as the mid 19th century. This entails that the substrates of modern NPE and CPE are likely to include not only those established for Krio (particularly the Kwa subgroup of Niger-Congo; see e.g. Finney 2004 and sources cited there), but also languages spoken along the Nigerian and Cameroonian coast belonging to the Benue-Congo subgroup of Niger-Congo.

Secondly, as Singler (1988) points out, the extended pidgins of West Africa remain in contact with their substrates:

> [This] difference between creoles and extended pidgins – i.e. that creoles developed after speakers were displaced from their homelands, while [extended] pidgins developed without this displacement – has a direct consequence for the difference between creoles and pidgins in

> their relationship to substrate languages. In the case of creoles, the ties to the substrate, present in the period of genesis, no longer obtain; in the case of [extended] pidgins, however, ties to the substrate remain very strong.
>
> SINGLER, 1988: 31

Finally, the linguistic complexity of the region also renders it next to impossible to make any precise statements about the adstrate languages that have been spoken by CPE speakers since its inception. There are an estimated 280 living languages in Cameroon, which is one of the most linguistically complex regions in Africa, at the intersection of three of the major language families of Africa: the Afroasiatic family (predominantly Chadic, plus Shuwa Arabic, the Chadian variety), the Nilo-Saharan family (e.g. Kanuri) and the Niger-Congo family, predominantly Bantoid (Benue-Congo). In addition, historical contact with Portuguese and German, and with English and French as official languages, further adds to the complexity of the contact setting. Nevertheless, in the context of Thomason and Kaufman's model, plausible hypotheses concerning substrate influence can be identified based on typological features of the relevant language groups (Kouwenberg, 2008; Michaelis, 2008).

2.2 *Valency and Transitivity*

There is much discussion, particularly in the typological literature, about how to view the relation between valency (the number and type of core arguments a semantic predicate takes) and transitivity (the grammatical realisation of those arguments as subjects and objects). For example, Haspelmath (2010a, b) distinguishes between descriptive categories (such as 'subject') and comparative concepts (such as 'agent of a simple transitive clause'), arguing that descriptive categories are not appropriate for crosslinguistic research because languages differ formally. In contrast, he argues that comparative concepts are cross-linguistically applicable, an assumption also inherent in early typological research (e.g. Greenberg, 1963).

In much recent typological research, then, valency and transitivity are not explored primarily in terms of grammatical functions but in terms of core arguments (Dixon and Aikhenvald, 2000; Lazard, 2002; Haspelmath, 2011; Malchukov, 2013). According to this approach, the subject of a transitive clause is A (agent), and is distinguished from the subject of an intransitive clause, which is labelled S (sole/single argument). The object of a monotransitive clause is P (patient), and the two objects of a ditransitive clause are distinguished

as T (theme) and R (recipient). Describing the core arguments of a verb in terms of these semantic categories allows typologists to compare, among other things, alignment systems in languages in which the corresponding grammatical functions may be marked in a range of distinct ways (e.g. by case, adpositions or word order). Describing core arguments in this way also allows typologists to arrive at a stricter definition of transitivity: a transitive clause has both A and P, and the concept of transitivity can exclude bivalent verbs, where the arguments are not A and P (for example, those for which the non-agentive argument lacks the characteristics of P in the relevant language, for example by taking dative rather than accusative case).

In a somewhat different approach, Hopper and Thompson (1980) (who also rely on core arguments as comparative concepts) argue that transitivity is best viewed as a continuum, with high-transitivity clauses having two or more participants, a verb expressing an action, a highly volitional subject/agent, and a highly individuated (animate, definite) and highly affected object/patient. High transitivity also correlates with telicity, punctuality and the realis mode. In contrast, low transitivity clauses have the opposing features, and in principle a single participant clause can be higher in transitivity than a two-participant clause if its subject argument is higher in agency. Valency-changing processes interact with transitivity in predictable ways; causativity raises transitivity, since the causer argument is typically very high in transitivity (Hopper and Thompson 1980: 264). In contrast, passivisation lowers transitivity, since the agent is suppressed (Hopper and Thompson, 1980: 293).

While the approach advocated by (e.g.) Lazard (2002) and Haspelmath (2011) allows a very fine-grained characterisation of transitivity in languages with rich morphology, it is less applicable a pidgin/creole language like CPE, where the only formal features distinguishing core arguments are word order and the presence/absence of prepositions in verbal complements (§3.1). We therefore follow Winford (1993) in relying on Hopper and Thompson's (1980) concept of higher/lower transitivity in the present description, but nothing of theoretical significance hinges on this decision.

In terms of the literature on valency and transitivity in P/C languages, Winford's (1993) study of Caribbean English creoles represents a model for the investigation of predication in Atlantic P/C languages, and a number of parallels can be drawn between CPE and the Caribbean creoles, including the reanalysis of English adjectives as verbs, the extension of the valency patterns of certain lexical verbs, and the existence of serial verb constructions. More recently, Michaelis (2008) argues that valency patterns in Seychelles Creole

can be shown to reflect Eastern Bantu patterns, advocating a comparative typological approach to establishing substrate influence.

2.3 *The Serial Verb Construction and the Light Verb Construction*

In this section, we present broad definitions of each of these construction types, and identify both the similarities and the differences between them. Serial verb constructions and light verb constructions, which sometimes draw upon overlapping sets of high-frequency verbs in a language, both participate in forming complex predicates. However, they are distinguished by (a) the category of the expression with which they form complex predicates, and by (b) the fact that serial verbs tend to grammaticalise, while light verbs do not.

Beginning with the serial verb construction, there is no single definition of the SVC that can be applied to all languages that have the construction type. However, the following are generally agreed upon as the main defining characteristics of the SVC (Foley and Olson, 1985; Lord, 1993; Muysken and Veenstra, 1995; Essegbey, 2004; Hopper, 2008; Foley, 2010; Hagemeijer and Ogie, 2011; Haspelmath, 2016):

- Two (or more) verbs form a complex predicate within a monoclausal structure.
- Each verb can function as an independent lexical verb.
- The verbs share a single overt subject.
- Objects may or may not be shared.
- There is one value for TMA/negation, which may be marked on one or both verbs.
- The construction contains no subordinating or coordinating conjunctions, and no discursive pauses indicative of covert coordination.
- The SVC encodes various semantic features including motion/direction (e.g. towards or away from some reference point), aspect (e.g. inceptive, completive), modality (e.g. capacity, deontic), degree (e.g. comparative), valency-increase (e.g. benefactive, causative, comitative).
- Serial verbs have a tendency to grammaticalise (e.g. into markers of tense, modality or aspect, complementisers or prepositions)

SVCs have received considerable attention in creole linguistics, as a feature that is typically absent from, or at least only marginally present in the European superstrate (e.g. *Come see me.*). For example, Lefebvre argues that SVCs present a clear case of substrate influence:

> Serial verb constructions [...] exist in creoles whose substrate has the construction (e.g., creoles with a West African or Sinitic substrate). They are not available in creoles whose substrate does not have the construction (e.g., creoles with an Australian substrate.)
>
> LEFEBVRE, 2011: 20

An important distinction to make in the description of SVCs is between what Aikhenvald (2006: 21–22) labels 'symmetrical' and 'asymmetrical' SVCs (see also Sebba, 1987; Durie, 1997; Crowley, 2002). The asymmetrical SVC has a major (unrestricted/open class) verb that denotes the event, and a minor (restricted/closed class) verb that modifies the event in some way, for example by adding direction, aspect, modality, valency-change or comparison. The order of verbs is not necessarily iconic in the asymmetrical SVC, and the minor verbs in this type of SVC tend to undergo grammaticalisation into markers of tense, mood, modality or aspect (TMA), directional particles, valency-changing particles, adpositions, comparative particles, conjunctions or complementisers (Lord, 1993; Aikhenvald, 2006: 30–32). Example (1) illustrates an asymmetrical SVC in CPE, belonging to the directional category, where the directional verb *goe* modifies the main event verb *ron*, adding direction ('away').[1]

(1) *a* *wan* *jos* *ron* ***goe*** (Be-DPr-03-A)
1S want just run go
'I just want to run away.'

In contrast, the symmetrical SVC has two verbs from the unrestricted/open class, both of which contribute equally to denoting the event structure, and these SVCs express semantics such as sequence of events (e.g. 'cook (and) eat'), cause-effect (e.g. 'hit (and) kill'), or motion and manner (e.g. 'crawl (and) enter'). The order of verbs is typically iconic in this type of SVC, which tends to become lexicalised as a complex expression with idiomatic meanings. For

1 **Abbreviations**: A = agent; ANT = anterior tense; CL = noun class; COMP = complementiser; COP = copula/focus particle; DEF = definite determiner; DET.DEM = demonstrative determiner; ICV = inherent complement-taking verb; IMPF = imperfective aspect; INF = infinitive; IRR = irrealis; MOD = modal; NEG = negation; P = patient; PF = perfective aspect; PL = plural; POSS = possessive determiner; PREP = preposition; PRO.DEM = demonstrative pronoun; R = recipient; REL = relativiser; S = singular; S = sole argument; T = theme. **CPE data sources**: E = elicited example. Examples from our corpora are indicated by corpus text code (Ayafor and Green, 2014; Ayafor *et al.*, 2016). Examples from other published sources are referenced.

example, the Igbo expression *cè-fù* (lit. 'think-be.lost') 'forget' (Lord, 1975: 41–2, in Aikenvald, 2006: 34). Example (2) illustrates a symmetrical SVC in CPE, expressing the sequence of events 'cook (and) sell':

(2) *na de ting dem dat wei a di* ***kuk-am sel*** (Be-MU-04)
COP DEF thing PL PRO.DEM REL 1S IMPF cook-3S sell
'Those are the things that I cook (and) sell.'

Turning to the light verb construction, the following characteristics define this construction type (Butt 2010), which is illustrated by English examples like *have a look, give a kiss, take a walk*:

- The LVC is a complex monoclausal predication formed of a high frequency light verb and a (typically non-verbal) complement, which contributes the event semantics.
- The light verb can function as an independent lexical verb.
- The light verb resists grammaticalisation.
- The light verb remains stable in terms of frequency of use.
- The LVC represents a productive verbal borrowing strategy

As Butt observes, light verbs are distinct from main verbs because they do not form an independent predicate. Butt also argues that light verbs are clearly distinct from auxiliaries in their distribution, in their function (they do not express tense, aspect, mood or voice), and that unlike auxiliaries, they do not grammaticalise:

> [L]ight verbs always remain form identical to a main verb in the language. This is very much unlike what is found with auxiliaries (and modals to some extent), which start out as a version of a main verb [...] but then quickly develop away from the main verb in form, function and meaning.
>
> BUTT, 2010: 65

While there has been considerable grammatical change in the English auxiliaries since the Middle English period, Traugott (1999) demonstrates that the use of LVCs in English has remained relatively stable from the Middle English period to the present day: *make* and *have* have shared first place as the most frequently used light verbs since the Middle English period, and *give* has consistently ranked third since the Early Modern English period.

To the best of our knowledge, there is comparatively little research on the use of the light verb strategy in P/C languages (but see Lefebvre, 2004: 80–81). In the context of bilingual language contact, Wichmann and Wohlgemuth (2008) and Wohlgemuth (2009) argue that the ways in which verbs can be borrowed depends on the degree of bilingualism between donor language and recipient language. Most relevant for our purposes is the light verb strategy, which correlates with the lowest degree of bilingualism between donor and recipient language. This strategy involves the use of a high-frequency verb from the recipient language such as 'make', 'have' or 'give', which takes a non-verbal complement from the donor language and creates a verbal meaning. While the bilingual contact scenario is not directly relevant to P/C genesis, it is worth observing that CPE makes productive use of the light verb construction as a verbalisation strategy, as illustrated by example (3), where the light verb *meik* 'make' combines with an indigenous language expression (origin uncertain) *nyanga* 'beauty, vanity' to form a complex predicate:

(3)	*wi*	*wan*	[***meik***	*nyanga*],	*wi*	*wan*	*bi*	*laik*	*yu,*	*fain*	*gel!*
	1PL	wan	make	beauty	1PL	wan	COP	like	2S	fine	girl

'We want to get dressed up, we want to be like you, fine girl!' (Ku-DPU-04-A)

As Seiss (2009) observes, while it is relatively straightforward to identify cross-linguistic criteria for distinguishing light verbs from auxiliary verbs, it is less obvious what cross-linguistic criteria distinguish light verbs from serial verbs. Auxiliary verbs add temporal/aspectual/voice information to the event semantics of the main verb and occupy the opposite pole of the grammaticalisation continuum to lexical verbs. In contrast, light verbs and serial verbs are less clearly distinct, since both can function as independent lexical verbs, and both participate in forming complex predicates within monoclausal structures. However, light verbs remain form identical to full verbs (that is, they do not undergo formal reduction), typically form complex predicates with non-verbal expressions, and resist grammaticalisation. In contrast, serial verbs form complex predicates with verbal expressions and have a tendency to grammaticalise.

In distinguishing these various functions associated with verbal expressions, we therefore consider that while serial verbs can be placed further along from lexical verbs on the grammaticalisation continuum (Hopper and Traugott, 2003), light verbs cannot. Indeed, according to Butt (2010: 16), lexical verbs and their corresponding light verbs share a lexical entry. While light verbs resist

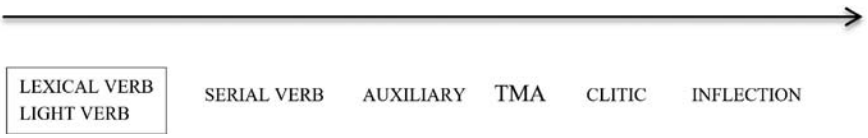

FIGURE 1 *Grammaticalisation continuum*

grammaticalisation, serial verbs may grammaticalise into auxiliary verbs or markers of tense, mood/modality or aspect (TMA), as well as into other categories. These distinctions are schematised in Fig.1, according to which the light verb, like the full lexical verb, occupies the full lexical end of the continuum, while the serial verb occupies a position to the right, indicating its tendency towards grammaticalisation. Given the distinction described above between symmetrical and asymmetrical serial verbs, this tendency towards grammaticalisation is limited to the asymmetrical serial verb.

3 Lexical Phenomena

In this section, we begin by setting out the coding properties of transitivity in CPE (§3.1), and explore valency and transitivity in CPE at the lexical level of description. We begin by addressing our first research question, which focuses on whether CPE verbs show simplification or complexification in valency and transitivity patterns compared to the corresponding patterns in the lexifier language (§3.2). We demonstrate that CPE shows complexification in valency and transitivity patterns compared to the superstrate, since CPE verbs are highly polysemous and thus multivalent. This section also addresses an aspect of our second research question: the existence of a lexical strategy for valency increase and valency decrease, which is provided by the polysemous nature of CPE verbs. Finally, we address the aspect of our second research question relating to lexical strategies for verbalisation (the creation of verbal predicates), demonstrating that what we describe as 'category change' fulfills this function (3.3).

As mentioned above, CPE has a high degree of lexical multifunctionality, due to its relatively small lexicon. To illustrate, a crude measure of lexical richness is type-token ratio (TTR), which measures the proportion of distinct words in a text relative to the total number of words in the text (e.g. Lieven, 1978; Bates *et al.,* 1988). Written texts tend to have higher TTRs than spoken texts, because the latter tend to involve more repetition. In

addition, the larger the text, the lower the TTR is likely to be, again because of the increased likelihood of repetition. The TTR for our pilot corpus (Ayafor *et al.,* 2016; Ozón *et al.,* 2017) is 0.03, a very low ratio even for spoken language, especially considering the small size of the corpus and the lectal diversity of the speakers. This indicates that our corpus does not show a high degree of lexical richness, which is indicative of the multifunctionality of the CPE lexicon. Put simply, a single form is often called upon to express a range of meanings or functions. For lexical verbs, this low TTR results in a high degree of polysemy, which in turn results in an increased degree of multivalency compared to the corresponding expressions in the lexifier language.

In the absence of substantial historical data on the CPE lexicon, we compare modern CPE with a modern standard (British English), acknowledging that this is likely to obscure a number of historical facts: the superstrate now is different from the superstrate at the time of initial contact, and neither is it likely that a 'standard' variety was the (only) form of the superstrate present in the contact setting. We attempt to mitigate the limitations of this methodology by comparing CPE verbs where possible with those in Krio (Fyle and Jones, 1980), the English-lexified Sierra Leonean variety that exerted a considerable historical influence on West African Pidgin Englishes, including CPE (e.g. Huber, 1999).

3.1 *Coding Transitivity in CPE*

CPE is an SVO language in which the verb is uninflected and may be preceded by particles indicating tense, mood, modality, aspect (TMA) and/or negation. However, there is no coding of subject agreement on the verb complex. The personal pronoun paradigm codes person, number and the (non-)human/animate distinction (in the third person singular), but no grammatical or biological gender. The personal pronoun system partially codes nominative-accusative distinctions, which are visible in the first person singular and in the third person (singular and plural). Common and proper nouns are not coded for case.

Recall that transitivity in the intransitive and monotransitive clause is characterised in terms of the coding of core arguments S (sole argument), A (agent) and P (patient) (§2.2). CPE relies predominantly on linear order in the coding of core arguments: while S and A occupy preverbal position, P is postverbal. This is illustrated by examples (4)–(6). The examples in (4) illustrate the monotransitive clause, which contains the two core arguments A and P. These examples also illustrate some of the formal distinctions between nominative case (coding A) and accusative case (coding P) in the personal pronoun system.

(4) a. $[a]_A$ *si* $[yi]_P$ (Do-DPr-01-B)
1S see 3S
'I saw him.'
b. $[i]_A$ *helep* $[mi]_P$ (Do-MU-04)
3S help 1S
'He helped me.'

Example (5) illustrates the intransitive clause, which contains the sole argument (S) in preverbal position, also coded by nominative case.

(5) $[a]_S$ *don taya* (Be-DPr-04-A)
1S PF be.tired
'I'm tired.'

Obliques (non-core arguments) are coded by prepositions in CPE, as illustrated by example (6), in which the oblique argument *foe faya* 'on (the) fire' is distinguished from the P argument *oyie* 'oil' by the presence of the (polysemous) preposition *foe*.

(6) *yu put oyie* [*foe faya*]... (Ku-MS-03)
2S put oil PREP fire
'You heat up some oil...'

CPE allows both the double object construction (7a) and the indirect object construction (7b). In the former, both recipient (R) and theme (T) objects follow the verb and do not carry any special marking, hence they are both coded like the monotransitive object P. In the latter, the direct object T is coded like the monotransitive object P (in other words, no coding), but the indirect object R is coded differently (as a preposition phrase):

(7) a. *a goe tel* $[wuna]_R$ $[somting]_T$ (PP-Ya-DPr-01)
1S IRR tell 2PL something
'I'm going to tell you something.'
b. *i goe gif*-$[am]_T$ [*foe yi oun pikin dem*]$_R$ (Ba-MU-04)
3S IRR give-3S PREP 3S.POSS own child PL
'She went and gave it to her own children.'

Both De Féral (1989: 67) and Schröder (2013) claim that CPE speakers favour the indirect-object construction over the double-object construction, However, a quantitative analysis of all the tokens of 'give' in our pre-pilot corpus (Ayafor and Green, 2014) suggests that the double-object construction is favoured (77%) over the indirect-object construction (23%).

3.2 *Multivalency and Polysemy*

Examples (8)–(15) illustrate some verbs of English origin that surface in CPE with some senses that involve increased valency. The English intransitives that lend themselves to this kind of transfer are typically higher in transitivity—in the sense of Hopper and Thompson (1980)—(i.e. unergatives) than the ones that do not (i.e. unaccusatives). This is predictable on the basis that only verbs with 'energy transfer' semantics might be expected to lend themselves to valency increase/raised transitivity, and this is also consistent with the fact that most of these verbs allow prepositional complements in English, even though they might strictly be classified as intransitives. We present these examples in pairs to emphasise the multivalent and polysemous nature of CPE verbs; the (b) examples illustrate senses with increased valency/transitivity compared to the sense of the expression in the lexifier language. The relevant verbs are in bold.

Example (8) illustrates the verb *waka* 'walk, travel, visit', which occurs in both intransitive and transitive constructions. The intransitive construction (8a) has a prepositional adverbial following the verb, while the transitive construction has a nominal object *mi* 'me' following the verb. The same range of senses exists for this verb in Krio (Fyle and Jones, 1980: 384).

(8) a. *dem* *di* ***waka*** *foe* *fut* *dat* *taim* (< *walk*)
3PL IMPF travel PREP foot DET.DEM time
'They used to travel by foot in those days.' (PP-Ba-MU-01)

b. *dey* *di* *kam* ***waka*** *mi* (Ba-MU-04)
3PL IMPF come visit 1S
'They used to visit me.'

Example (9) illustrates the verb *swim* 'swim', which also occurs in both intransitive and transitive constructions:

(9) a. *wi* *bi* *di* *goe* ***swim*** (Ku-MU-02) (< *swim*)
1PL ANT IMPF go swim
'We used to go swimming.'
b. *a* *noe* *fit* ***swim*** *wata* (E)
1S NEG MOD swim water
'I can't swim.'

Example (10) illustrates the verb *ron* 'run, flee' in both intransitive and transitive constructions:

(10) a. *as* *i* *enta* *bush,* *i* *di* ***ron*** (Be-MS-02) (< *run*)
as 3S enter bush 3S IMPF run
'As he entered the bush, he was running.'
b. *na* *sheim* *meik-am* *i* *di* ***ron*** *haus* (Ayisi and Longinotto 2005)
COP shame make-3S 3S IMPF run house
'It's shame that makes her run away from home.'

Example (11) illustrates the verb *tok* 'talk, speak' in both intransitive and transitive constructions:

(11) a. *a* *di* *fie* *foe* ***tok*** (Ba-MU-01) (< *talk*)
1S IMPF fear INF talk
'I was afraid to speak.'
b. *dem* *di* ***tok*** *big* *big* *grama* (Ba-MS-02)
3PL IMPF talk big big grammar
'They speak standard English.'

Example (12) illustrates the verb *luk* in both intransitive and transitive constructions. This verb has the range of related senses 'look (at), seek, find'. The first two senses are also associated with the Krio verb *luk* (Fyle and Jones, 1980: 231). However, the sense 'find' does not occur in our corpora, where there is a preference for *fain* 'find'.

(12) a. *a* *di* ***luk*** *foe* *anoda* *sikul* (Ya-DPr-03-B) (< *look*)
1S IMPF look PREP another school
'I'm looking for another school.'
b. *dem* *noe* ***luk*** *notin* *foe* *chop* (Todd, 1979: 44)
3PL NEG find nothing INF eat
'They didn't find anything to eat.'

Example (13) illustrates the verb *weit* 'wait, await' in both intransitive and transitive constructions.

(13) a. *wi goe jos* ***weit*** *foe di kops* (Ba-DPr-03-A) (< *wait*)
1PL IRR just wait PREP DEF police
'We'll just wait for the police.'

b. *i don komot foe Jaafun* ***weit*** *yi folowa dem*
3S PF come.outPREP Jaafun await 3S.POSS follower PL
'He left Jaafun (and) awaited his followers…' (PP-Ba-MU-01)

Similarly, example (14) illustrates the verb *lauf* 'laugh (at)', which occurs in both intransitive and transitive constructions.

(14) a. *wen a tink-am, a di* ***lauf!*** (PP-Bu-DPu-01) (< *laugh*)
whenever 1S think-3S 1S IMPF laugh
'Whenever I think about it, I laugh!'

b. *dat pipoe dem bi di* ***lauf*** *dat kloes* (Ba-MU-01)
DET.DEM people PL ANT IMPF laugh DET.DEM clothes
'Those people used to laught at those clothes.'

Finally, example (15) illustrates the verb *slip* 'sleep, lie' in both intransitive and transitive constructions. Like its English counterpart, this verb also has the sense 'have sex with', which occurs in the transitive construction (15b).

(15) a. *wi bi di* ***slip*** *foe bambu bed* (PP-Ba-MU-02) (< *sleep*)
1PL ANT IMPF sleep PREP bamboo bed
'We used to sleep on a bamboo mat.'

b. *i put mi ontop bed foe* ***slip*** *mi*
3S put 1S PREP bed INF have.sex.with 1S
'He put me on the bed to have sex with me.' (Ayisi and Longinotto 2005)

From the perspective of the lexifier language, it is consistent with the observations above that all these verbs require human/animate subjects, and while most are relatively high in agency and volitionality, some are lower (e.g. *slip, weit*). These verbs do not express actions, unlike the majority in these examples. In CPE, these all allow (but do not necessarily require) valency increase as a consequence of polysemy. For example, the verb *slip* allows the meaning 'to have sex with', and as a consequence expresses an action involving a high degree of agency, as well as acquiring an object/patient

argument. Objects vary from low (e.g. *weit*) to high (e.g. *slip*) in terms of affectedness.

Examples (16)–(22) illustrate verbs of English origin, transitive and intransitive, that surface in CPE with the same valency as in the lexifier language, although the senses are often different. Some of the senses result from broadening. For example, *memba* (< *remember*), in addition to 'remember', also has the senses 'think/dream of' (16). The corresponding Krio verb has the same range of senses (Fyle and Jones, 1980: 244). Similarly, *hie* (< hear), addition to 'hear' also has the senses 'smell, feel, understand' (17). The corresponding verb in Krio, *yεri*, shares the senses 'hear' and 'smell', according to Fyle and Jones (1980: 402).

(16) *tank yu foe* ***memba*** *mi* (Ku-DPr-05-C) (< *remember*)
thank you INF think.of 1S
'Thank you for thinking of me.'

(17) a. *wi* ***hie*** *simel* (PP-Ba-MU-05) (< *hear*)
1.PL smell smell
'We smelt (the) smell.'
b. *if yu jos stat* ***hie*** *pein dem...* (Ya-MS-03-B)
if 2S just start feel pain PL
'If you just start feeling (labour) pains...'
c. *yu di* ***hie*** *French?* (Ya-DPr-04-B)
2S IMPF understand French
'Do you understand French?'

(18) *a di* ***muf*** *oyie, a di* ***muf*** *bins...* (Ku-MU-04) (< *move*)
1S IMPF take oil 1S IMPF take beans
'I take (some) oil, I take (some) beans...'

Some of the senses result from narrowing, including *muf* (< *move*), which in addition to 'move' has the senses 'remove' and 'take' (18).

(19) *dey bigin* ***fain*** *dat massa yi ring* (Todd 1979:108) (< *find*)
they begin look.for DET.DEM master 3S.POSS ring
'They began to look for that ring of their master's.'

Similarly, *fain* (< *find*) has both the senses 'find' and 'seek' (19), as does its Krio counterpart *fɛn* (Fyle and Jones, 1980: 103).

(20) *a* *fit* ***kot*** *yu?* (PP-Ba-MU-01) (< *cut*)
1S MOD interrupt 2S
'May I interrupt you?'

Others involve shift or metaphorical extension, including *kot* (< *cut*), which can be used to mean 'interrupt' (20):

Compared to their English counterparts, some of these CPE verbs involve increased transitivity in the sense of increased agency/volitionality, such as *fain* 'look for' (19), *we* (< *wear*) 'put on' (21) and *win* (< *win*) 'beat' (22), although there are some exceptions, including *memba* 'dream/think of' (16) and *hie* 'hear/smell/sense' (17). In examples (16)–(22), objects/patients vary in terms of degree of affectedness.

(21) *as* *i* *di* ***we*** *yi* *shet,* *i* *di* *strogul* (< *wear*)
as 3S IMPF put.on 3S.POSS shirt 3S IMPF struggle
'As he's putting his shirt on, he struggles.' (PP-Bu-DPu-02)

(22) *dey* *kam* ***win*** *dem* *foe* *wo* (Be-MS-03) (< *win*)
3PL come beat 3PL PREP war
'They came (and) beat them in battle.'

Examples (23)–(29) illustrate verbs of English origin, monotransitive and ditransitive, that surface in CPE with some senses involving lowered valency/transitivity compared to the senses of the English counterparts. These English verbs range from those with subjects high in agency/volitionality (e.g. *drive, cut*) to those with subjects low in agency/volitionality (e.g. *lose, hear*), and their objects range from highly affected (e.g. *cut, break*) to unaffected (e.g. *lose, hear*). Once again, we present these examples in pairs to emphasise the multivalent and polysemous nature of CPE verbs; in this section, the (b) examples illustrate lowered valency compared to the corresponding expressions in the lexifier language. Example (23) illustrates the verb *hie* (< *hear*), which in (23b) occurs in an intransitive construction with the sense 'listen'

(23) a. *a noe di **hie** weiti wei yu di tok* (Be-DPu-01-A) (< *hear*)
1S NEG IMPF hear what REL 2S IMPF say
'I can't hear what you're saying.'
b. *a mos **hie*** (Todd 1979: 148)
1S MOD listen
'I must listen.'

Similarly, example (24) illustrates the verb *rish* (< *reach*), which in (24b) occurs in an intransitive construction with the sense 'arrive'.

(24) a. *a **rish** klas seven* (PP-Ba-MU-04) (< *reach*)
1S reach class seven
'I reached class seven.'
b. *a aks yi sei wi nova **rish*** (PP-Ya- MU-03)
1S ask 3S COMP 1PL NEG.PF arrive
'I asked him if we hadn't arrived.'

In (25b), it is the oblique argument that is absent rather than the P argument, compared with the superstrate.

(25) a. *i **draif** mi foe haus* (Ku-MU-02) (< *drive*)
3S drive 1S PREP house
'She drove me from the house.'
b. *i **draif** dat man* (Ku-MU-01)
3S drive.away DET.DEM man
'He drove that man away.'

Examples (26)–(29) are particularly interesting. In these cases, a bivalent English verb allows (among others) a monovalent sense in CPE, and takes a non-agentive subject. This provides a lexical strategy for the creation of unaccusatives in a language with no passive construction. Once again, the relevant examples are the (b) examples, where the subject position of the relevant verb is occupied by a P argument. The (a) examples are provided for comparison.

(26) a. *wi goe ron goe fam goe **kot** fayawud* (PP-Ya-MU-04) (< *cut*)
1PL IRR run go farm go cut firewood
'We'd run to the farm to cut firewood.'

b. *dem di weit meik* [*rein*]$_{P}$ ***kot*** (PP-Ba-DPu-01)
3PL IMPF wait make rain stop
'They are waiting for the rain to stop.'

(27) a. *yu goe* ***los*** *de bisnes* (Be-DPr-03-A)
2S IRR lose DEF business
'You're going to lose the business.'

b. *wen yu muf ya fut* [*de maches*]P *noe* ***los,***
when 2S move 2S.POSS foot DEF matches NEG lose
den [*ya moni*]$_{P}$ *don* ***los*** (PP-Ya-MU-02)
then 2S.POSS money PF lose
'If you move your foot and the matches haven't disappeared, then you've lost your money.'

(28) a. *a beg wuna,* ***brok*** *dat do, teik dat pikin*
1S beg 2PL break DET.DEM do take DET.DEM child
kam gif mi (PP-Bu-MS-01) (< *break*)
come give 1S
'Please, break (down) that door, take that child and bring her to me.'

b. *yu don taya,* [*yu*]$_{P}$ *don* ***brok*** *olredi* (PP-Ba-MU-03)
2S PF be.tired you PF break already
'You're tired, you're worn out already.'

(29) a. *ma bak bi di ova* ***hot*** *mi* (Ba-MU-01) (< *hurt*)
1S.POSS back ANT IMPF over hurt 1S
'My back was really hurting.'

b. [*de wuman*]$_{P}$ *don* ***hot*** (Ayisi and Longinotto 2005)
DEF woman PF hurt
'The woman has been hurt.'

Winford (1993: 118) describes similar patterns in Caribbean creoles as 'passive', which we hesitate to do in the absence of any overt marking that distinguishes the verb in this unaccusative construction from its 'active' counterpart. However, these might reasonably be described as 'middles' based on the parallels with English verbs that are similarly labile, such as *break* and *cook* (30)–(31), which allows the possibility that this aspect of CPE multivalency represents the exploitation or extension of a superstrate feature.

(30) a. $[He]_A$ *broke* $[the\ glass]_P$
b. $[The\ glass]_P$ *broke*

(31) a. $[He]_A$ *cooked* $[the\ spaghetti]_P$ *slowly*
b. $[The\ spaghetti]_P$ *cooked slowly*

3.3 *Category Change*

The final lexical process we discuss in this section is category change, a process whereby non-verbal expressions of English origin (nouns and adjectives) surface in CPE as verbs. The categorial status of these expressions is indicated by their ability to take preverbal particles of tense, aspect, modality and negation (Ayafor and Green, 2017). CPE has a relatively limited set of true adjectives, in the sense of expressions that are limited to attributive function in the noun phrase and/or predicative function in the copular clause. Category change from (superstrate) noun/adjective to (P/C) verb thus represents a lexical strategy for verbalisation (the creation of verbs), transitive and intransitive. Given the polysemous/multifunctional nature of many CPE expressions, it is unsurprising that the same form can correspond to more than one category. For example, the expression *tori* (< *story*) can be either a noun 'story' or a verb 'discuss, converse, talk', both of which are illustrated in example (32).

(32) ***tori*** *wei dey di* ***tori-am*** (Ba-MU-01) (< *story*)
story REL 3PL IMPF discuss-3S
'a story that they were discussing'

Example (33) illustrates the expression *frod* (< *fraud*), which occurs as a verb with the sense 'fake'.

(33) *yu bi* ***frod*** *dokumen, yu mos goe kot* (PP-Ba-DPu-01) (< *fraud*)
2S ANT fake documents 2S MOD go court
'If you have faked documents, you must go to court.'

Example (34) illustrates the expression *sik* (< *sick*) occurring as a verb with the sense 'be sick'.

(34) *wen mami* ***sik,*** *famili di* ***sik*** (PP-Bu-DPu-02) (< *sick*)
when mother be.sick family IMPF be.sick
'When the mother is sick, the family is sick.'

Example (35) illustrates the expression *jelos* (< *jealous*) occurring as a verb with the sense 'envy'.

(35) *i* *di* ***jelos*** *ya* *bisnes* (PP-Bu-MS-02) (< *jealous*)
3S IMPF envy 2S.POSS business
'He envies your business.'

Example (36) illustrates the expression *hevi* (< *heavy*) occurring as a verb with the sense 'weigh'.

(36) *ma* *lod,* *i* *bi* *stat* *foe* ***hevi*** *foe* *ma* *nek* (< *heavy*)
1S.POSS load 3S ANT start INF weigh PREP 1S.POSS neck
'My load started to weigh on my neck.' (PP-Ba-MU-05)

Example (37) illustrates the expression *trong* (< *strong*) occurring as a verb with the sense 'be difficult, overwhelm'.

(37) *if* *maret* *don* ***trong*** *pas* *yu...* (PP-Ba-DPu-01) (< *strong*)
if marriage PF be.difficult pass 2S
'If marriage has overwhelmed you...'

Example (38) illustrates the expression *big* (< *big*) occurring as a verb with the sense 'grow, swell'.

(38) *yi* *mob* *don* ***big*** (PP-Ya-DPr-01) (< *big*)
3S.POSS mouth PF grow
'His mouth had swollen.'

Finally, example (30) illustrates the expression *dak* (< *dark*) occurring as a verb meaning 'become dark'.

(39) *pleis* *dem* *don* ***dak*** *ol* (PP-Ya-MU-04) (< *dark*)
place PL PF become.dark all
'Everywhere was dark.'

With respect to the CPE tendency towards realising these English non-verbal expressions as verbs, it is well known that languages vary in terms of whether they have an open class of adjectives, a closed class, or no class at all (e.g.

Dixon and Aikhenvald, 2004). Velupillai (2012: 127-128) conducted a pilot study based on a 153-language sample from the *World Atlas of Language Structures* (Dryer and Haspelmath, 2013) to investigate the cross-linguistic distribution of adjectives. She found that West African languages predominantly have closed adjective classes, which may be suggestive of substrate influence on this feature of CPE. Yoruba is one such language (e.g. Madugu 1976), as is Kenyang, a Southern Bantoid language of Cameroon (Ramirez, 1988; Green and Tabe-Oben, in prep.), as illustrated by example (40).

(40) *èkèt* *è* *pɔ̀ɔ́*
CL7.house CL7.IMPF be.ugly
'The house is ugly.'

4 Constructional Phenomena

In this section we turn to the constructional aspects of our second research question, focusing on the contribution of constructional phenomena to valency increase, which is provided by the serial verb construction (§4.1), and on the constructional means of verbalisation: the light verb construction (§4.2).

4.1 *Verb Serialisation*

CPE asymmetrical serial verb constructions have various semantic functions, which can be broadly categorised in terms of motion (towards or away from a deictic centre), aspect (inceptive, completive), modality (deontic), degree (more, same and less) and valency increase (causative, benefactive, instrumental, comitative) (Ayafor, 2016; Ayafor and Green, 2017). We focus here on the valency increasing SVCs, but for descriptive completeness the other types are illustrated in examples (41)–(46). The position of the serialising verb (in bold) relative to the main event verb varies from one SVC type to another, as the following examples show. Examples (41) and (42) illustrate the motion SVC, where the serialising verbs *goe* and *kam* indicate motion away and towards the deictic centre (speaker), respectively:

(41) *Motion* (*direction away*) *'go' SVC*
Sabga i ***goe*** *shedon foe* *Babungo foe* *1923* (PP-Ba-MU-01)
Sabga 3S go sit.down PREP Babungo PREP 1923
'Sabga went and settled in Babungo in 1923.'

(42) *Motion* (*direction towards*) *'come' SVC*
anoda kola don ***kam*** *draif yu* (PP-Ba-DPu-01)
another caller PF come drive 2S
'Another caller has taken your place.'

Examples (43) and (44) illustrate the aspectual SVC, where the serialising verbs *finis* and *stat* add completive and inceptive aspect to the clause, respectively:

(43) *Aspectual* (*completive*) *'finish' SVC*
wen dem don ***finis*** *tok ashia...* (PP-Ba-DPu-01)
when 3PL PF finish say sorry
'When they have finished saying sorry...'

(44) *Aspectual* (*inceptive*) *'start' SVC*
i ***stat*** *flai foe insait klas* (PP-Ya-MU-02)
3S start fly PREP inside class
'It started flying about in the classroom.'

Example (45) illustrates the modal SVC, where the serialising verb *meik* contributes deontic modality to the clause. It is worth making explicit here that this construction is a grammaticalising version of the 'make' causative illustrated in (47). It is also worth making explicit that CPE has other modal TMA particles (e.g. *mos* 'must'), but these do not function as independent lexical verbs, and thus do not meet the criteria for serial verbs (Ayafor and Green, 2017).

(45) *Modal* (*deontic*) *'make' SVC*
meik *yu noe kam set konfushon* (PP-Ba-DPu-01)
make 2S NEG come set confusion
'Don't come and cause confusion.'

Example (46) and (47) illustrate the degree SVC, specifically the constructions expressing 'more than', which is contributed by the serialising verb *pas*, and 'less than', which is contributed by the combination of the negation particle *noe* and the serialising verb *rish*:

(46) *Degree* (*more than*) *'pass' SVC*
Nunu chop ***pas*** *mi* (Do-DPr-01-A)
Nunu eat pass 1S
'Nunu eats more than me.'

(47) *Degree* (*less than*) *'not... reach' SVC*
orenj noe swit ***rish*** *banana* (Bellama *et al.* 2006: 71)
orange NEG be.sweet reach banana
'Oranges are less sweet than bananas.'

While CPE has no valency-reducing construction such as the passive (relying instead on the impersonal pseudopassive, which is not syntactically distinct from an active clause), examples (48)–(51) illustrate productive valency-increasing constructions, which are realised by means of serial verb constructions. These are the 'make' causative, the 'give' benefactive, the 'take' instrumental, and the 'take' comitative, each of which adds an extra argument to the clause (bracketed). The 'make' causative is illustrated by example (48). As Ayafor and Green (2017) observe, the CPE 'make' causative is a peripheral example of the SVC; it lacks subject sharing in the strict sense (in fact, the object of the serial verb is simultaneously the subject of the lexical verb), and *meik* may take preverbal particles of tense/modality/aspect/negation independently of the lexical verb.

(48) *Valency-increasing* (*causative*) *'make' SVC*
a. *i goe* ***meik*** [*tings dem*] *wos* (Ba-DPu-01)
3S IRR make things PL be.worse
'He's going to make things worse.'
b. *na de kain ting wei i* ***meik*** [*mi*] *veks*
COP DEF kind thing REL 3S make 1S be.angry
'That's the kind of thing that makes me angry.' (Ayisi and Longinotto 2005)

As example (49) shows, (contra Schröder, 2013), the 'give' benefactive is attested in CPE. Although this construction is low in frequency, it is present in a range of text types in our corpora (interviews, personal narratives, dialogues) involving a number of different speakers.

(49) *Valency-increasing* (*benefactive*) *'give' SVC*
a. *ma papa tok yi wuman kuk chop* ***gif*** [*yi*]
1S.POSS father tell 3S.POSS wife cook food give 3S
'My father told his wife to cook some food for him.' (PP-Ba-MU-02)
b. *dem don kam lait lam* ***gif*** [*wi*] (PP-Ya-MU-04)
3PL PF come light lamp give 1PL
'They came and lit lamps for us.'

Example (50) illustrates the 'take' instrumental SVC, which adds an instrument argument (bracketed) to the clause:

(50) *Valency-increasing* (*instrumental*) *'take' SVC*

a. *de pikin* ***teik*** [*de machis*] *goe bon faya deiy* (Ba-DPr-01-B)
DEF child take DEF matches go burn fire there
'The child set fire (to the place) with matches.'

b. *A* ***teik*** [*ma ais*] *a si* (Ba-MU-01)
1S take 1S.POSS eyes 1S see
'I saw with my (own) eyes.'

Finally, example (51) illustrates the 'take' comitative SVC, which also adds an additional argument to the clause:

(51) *Valency-increasing* (*comitative*) *'take' SVC*

a. *I kam* ***teik*** [*mi*]*goe foe dia kompan* (PP-Ya-MU-03)
3S come take 1S go PREP 3PL.POSS compound
'Finally he came and took me (with him) to their compound.'

b. *wuman don* ***teik*** [*pikin dem*]*goe maret difren man* (PP-Ba-DPu-01)
wife PF take child PL go marry different man
'The wife had taken the children (with her) and gone and married a different man.'

With respect to the substrate origins of the SVC in CPE, in West Africa verb serialisation is best known as a feature of the Kwa branch of Benue-Congo. Interest in West African serial verbs began with Christaller's (1881) grammar of Twi (Kwa), followed by Westermann's (1930) study of Ewe (Kwa). Influential historical and typological studies include Lord (1973, 1993), Givón (1974), Oyelaran (1982) and Agheyisi (1986). Givón (1974) lists some non-Kwa serialising languages, including Bamileke (Narrow Grassfields), spoken in the West Region of Cameroon, and Efik (Cross-River), spoken on the borders of eastern Nigeria and South West Cameroon.

By way of illustration, the following examples show the motion SVC in Twi, the 'give' benefactive in Twi and Yoruba (Yoruboid), the 'take' instrumental in Dagbani (Kwa), and the 'surpass' comparative in Twi (our glosses). The motion SVC in Twi (52) is dissimilar to the motion SVC in CPE (41)–(42), in that in CPE the serialising verb precedes the main event verb.

(52) *Twi 'go' motion SVC*
Kofi de Amma ***kɔɔe*** (Boadi 1968 in Lord 1993: 98)
Kofi take Amma went
'Kofi took Amma away.'

In contrast, the 'give' benefactive in Twi (52) and in Yoruba (53) is very similar to the 'give' benefactive SVC in CPE (49), where the serialising verb follows the main event verb:

(53) *Twi 'give' benefactive SVC*
o-yi *me* *bogyese* ***ma**-m* (Riis 1854 in Lord 1993: 31)
3S-remove 1S.POSS beard give-1S
'He shaves my beard for me.'

(54) *Yoruba 'give' benefactive SVC*
ó *tà-á* ***fún*** *mi* (Lord 1993: 35)
3S sell-3S give 1S
'He sold it to/for me.'

Similarly, the Dagbani 'take' instrumental (55) also shows the same word order as the CPE 'take' instrumental SVC (50):

(55) *Dagbani 'take' instrumental SVC*
m ***zang*** *m* *suu* *nmaai nindi* (Wilson 1970 in Lord 1993: 128)
1S took 1S.POSS knife cut.PF meat
'I cut the meat with my knife.'

Example (56) illustrates the 'surpass' comparative SVC in Twi, which also shows the same word order as the 'pass' SVC in CPE (46):

(56) *Twi 'surpass' comparative SVC*
me-wɔ *sika* *me-**seŋ*** *no* (Christaller 1881 in Lord 1993: 143)
1S-have money 1S-surpass 3S
'I have more money than he has.'

More local to CPE, the following examples illustrate the 'give' benefactive SVC (57), the 'take' instrumental SVC (58) and the 'surpass' comparative SVC (59) in Kenyang, a Southern Bantoid language of Cameroon, and a CPE adstrate. In this language, a preverbal marker that carries subject agreement and aspect follows the shared subject *Ako*, and also marks the same agreement on the serialising verb (bold) (Green and Tabe-Oben, in prep.). As the reader can verify, these constructions also show the same word order as the corresponding constructions in CPE.

(57) *Kenyang 'give' benefactive SVC*
*Ako à nà nènyè à **chɛ̀** Victor*
Ako CL1.PF cook CL5.food CL1.PF give Victor
'Ako cooked food for Victor.'

(58) *Kenyang 'take' instrumental SVC*
*Ako à sɔ̀t ŋ̀gàk à **kpɔ́t** ǹsì*
Ako CL1.PF take CL9a.knife CL1.PF cut CL9b.fish
'Ako cut the fish with a knife.'

(59) *Kenyang 'surpass' comparative SVC*
*Ako à nyɛ̀ ǹsì à **chá** Victor*
Ako CL1.PF eat CL9b.fish CL1.PF surpass Victor
'Ako ate more fish than Victor.'

Given that verb serialisation is a relatively marked phenomenon that is limited to certain linguistic areas, the presence of this construction type in CPE is likely to represent a case of substrate influence. From the perspective of Thomason and Kaufman's (1988) model, the prevalence of this construction type in the substrate explains its presence in the P/C variety, where it serves to express various features that in less isolating language types might be marked by inflectional morphology or by a richer set of prepositions.

4.2 *Light Verb Strategy*

In this section, we return to the final aspect of our second research question, focusing on the light verb strategy, the constructional counterpart to what we describe above as 'category change' (§3.3) in the sense that both phenomena contribute to the creation of predicates (verbalisation) in CPE. Due to the high degree of multifunctionality in this contact language, a subset of high frequency verbs participate both in light verb constructions and in serial verb constructions: *meik* 'make', *gif* 'give' and *teik* 'take', together with the high-frequency verbs *du* 'do' and *get* 'get'.

Examples (60)–(64) illustrate the light verb construction in CPE (bracketed), where the high frequency verb (in bold) forms a complex predicate with a nominal complement, one of the features that distinguishes the LVC from the SVC.

(60) *wi wan* [***meik*** *nyanga*] (Ku-DPU-04-A)
1PL want make beauty
'We want to get dressed up.'

(61) *dey* [***gif*** *komplein*] *foe* *moto* (Ba-MU-02)
3PL give complaint PREP car
'They complain about the car.'

(62) [***teik*** *ke*] *foe* *ya* *pikin* *dem* (PP-Ba-DPu-01)
take care PREP 2S.POSS child PL
'Take care of your children.'

(63) *a* *get* *sumo* *kau* *an* *a* [***du*** *fam*] (PP-Ba-MU-01)
1S have small cow and 1S do farm
'I have a few cows and I do (some) farming.'

(64) *wi* *bi* [***get*** *sofa*] (PP-Ba-MU-02)
1PL ANT get suffering
'We suffered.'

In many cases, the LVC has a full verb counterpart. For example, the expressions *komplein* (61), *ke* (62) and *sofa* (64) can function either as nouns or as verbs. More research is required to establish the factors that distinguish the use of the LVC from its full verb counterpart. In many respects, the CPE LVC is similar to the English LVC. In particular, in both languages this construction represents a vehicle for the incorporation of expressions from other languages into complex predicates, as illustrated for CPE by example (60). Similar cases, where indigenous language expressions occur as the complement of the light verb, include *meik kongosa* 'gossip' and *meik njumba* 'sleep around'. Similarly, English allows expressions such as *have a shufti* 'have a (quick) look', allowing the incorporation of an Arabic expression into a complex predicate (*Oxford English Dictionary Online*).

In the context of Thomason and Kaufman's (1988) model, the presence of this unmarked (cross-linguistically common) construction is predicted, particularly in a P/C language with no productive morphology for the derivation of verbs, and particularly in the event that it maps onto a corresponding L1 structure. According to Thomason and Kaufman (1988: 63), '[t]he proposed source-language structures need not be, and frequently are not, identical to the innovated structures in the recipient language.' One candidate for a corresponding L1 (substrate) structure is the 'inherent complement verb' (ICV) that has been described in a number of West African languages, including the Kwa languages Ga, Ewe and Akan, as well as Igbo (Essegbey, 1999, 2002; Korsah, 2014). According to Korsah, the ICV together with its complement is best conceptualised as a type of light verb construction. The sense of the ICV is highly

bleached, to the extent that it may be 'meaningless' in isolation (Korsah, 2014: 398), while the complement determines the semantic content of the expression. This construction type is illustrated in examples (65)–(68).

(65) *Ga*
a. *wo* *hɔ́* (Korsah, 2014: 397)
ICV pregnancy
'to impregnate'
b. *wo* *ŋaa*
ICV advice
'to advise'

(66) *Igbo*
a. *tụ* *ụjo* (Nwachukwu, 1985, in Korsah, 2014: 398)
ICV fear
'to be afraid'
b. *tụ* *ntụ*
ICV lie
'to tell a lie'

(67) *Ewe*
a. *fú* *tsi* (Essegbey, 1999, in Korsah, 2014: 398)
ICV water
'to swim'
b. *fú* *du*
ICV race
'to run'

(68) *Akan*
a. *hyɛ* *ebufúw* (Korsah, 2014: 398)
ICV anger
'to make angry'
b. *hyɛ* *nkɔ́m*
ICV prophecy
'to prophesy'

While this construction type provides a plausible candidate for a substrate feature onto which the superstrate LVC is mapped, more research is needed to establish whether similar constructions exist in other (non-Kwa) West African languages.

5 Conclusions and Prospectus

With respect to lexical phenomena, an exploration of our first research question indicates that CPE verbs do not show a restriction or simplification in their valency patterns compared to the superstrate (§3.2). On the contrary, CPE verbs are highly complex both in terms of their polysemy and in terms of their multivalency, which also in part addresses our second research question: valency alternations are widely available at the lexical level in CPE, which has many labile verbs as a result of the high degree of lexical polysemy in the language. CPE also realises as verbs many/most property concept expressions originating as English adjectives (or in some cases, nouns), which represents one verbalisation strategy (§3.3). A brief comparison with Krio demonstrates that many of these verbal senses are shared between the two languages, consistent with a shared source (§2.1). It is likely that some of the senses acquired by these verbs, and their consequent valency, result from substrate/adstrate influence, along the lines suggested by (e.g.) Essegbey (2008). Equally, the preference in CPE for verbal property concepts may also be in response to this typological tendency in the substrate/adstrate languages. The language contact model developed by Thomason and Kaufman (1988) offers an explanatory account of how substrate senses and valency patterns can be mapped onto superstrate forms. However, while a considerable amount of progress has been made in understanding the influences of West African languages on the lexica of certain Atlantic P/C languages (e.g. Muysken and Smith, 2015), a detailed analysis of the historical influences on the CPE lexicon remains to be carried out, and the descriptive remarks in the present paper should be seen as indicative.

With respect to constructional phenomena, the SVC provides a productive means of valency increase, and the LVC a means of verbalisation (the creation of verbal predicates). The typological prevalence of the SVC, a marked construction type, in the languages of West Africa makes it a good candidate for substrate/adstrate influence, as pointed out by many researchers (e.g. Lefebvre, 2011). We suggest that the LVC, a relatively unmarked construction type and a feature of the superstrate, also finds a good match in the 'inherent complement verb' construction attested in certain West African languages (e.g. Essegbey, 1999, 2002; Korsah, 2014). Once more, the language contact model developed by Thomason and Kaufman (1988) offers an explanatory account of how substrate constructions, marked and unmarked, can be mapped onto superstrate forms. However, more research is needed into the light verb construction (or its counterparts) in West African languages, in order to establish whether this construction type is likely to have been widely present in the substrates of CPE, among other P/C languages.

Finally, we have not attempted to address the grammaticalisation of CPE serial verbs in the present paper, but this is identified as a fruitful area for future research, particularly in view of Bruyn's (2009) observation that grammaticalisation in P/C languages may only be 'apparent', resulting from the mapping of superstrate forms onto the parts of a grammaticalisation chain in the substrate(s), but not actually representing a genuine case of language-internal change.

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