Chapter 3

'The nut opens' and 'Hunger ends': verb constructions at the syntax-semantics interface

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It is necessary to determine for each alternation whether it involves a change in semantics or not and how best to characterise the change in semantics. (Levin and Rappaport-Hovav 2005: 120)

1. Introduction

It appears that the majority of verbs, if not all, in every language have the potential to occur in more than one syntactic frame. In these contexts, they occur with various arguments and these arguments may be realised differently. Consider the English examples in (1) taken from Levin & Rappaport Hovav (2005: 188) where the verb *run* occurs in multiple syntactic contexts.

- (1) a. Pat ran.
 - b. Pat ran to the beach.
 - c. Pat ran herself ragged.
 - d. Pat ran her shoes to shreds.
 - e. Pat ran clear of the falling rocks.
 - f. The coach ran the athletes around the track.

The verb *run* occurs in a different verb argument frame in each of the sentences in (1). Some of the questions raised by this distribution which have been actively researched over the past half a century include what is the relationship, if any, among these various realisations? What is the semantics of the verb *run* in each of these instances and how can one account for them? Is there a basic sense that determines the use of the verb in all these contexts, such that the arguments in each instance are projected from this basic meaning? If that is not the case, is it justified to think that the verb is polysemous such that each occurrence (or pairs of occurrences, e.g., (1c) and (1d) is a different but related meaning? These and similar questions have been at the heart

of investigations at the syntax-semantics interface, or the relation between lexicon and syntax (see Levin 2015 and Rappaport Hovav 2018 for summaries of the issues and approaches).

In this paper, I explore some of these issues taking as a starting point the lexicographic treatment of the verb ke 'open, wide, forgive, stop, etc.' (Westermann 1928, 1954) in Ewe (Gbe) a Kwa language of West Africa. The glosses suggest that the verb has multiple interpretations and the question is whether the different interpretations are senses that are related in which case the verb would be polysemous or whether they are unrelated senses, in which case we are dealing with homonyms. In fact, Westermann provides three separate entries for the verb, suggesting that there may be three homonyms. A recent Ewe-French dictionary, Rongier (2015), presents the verb ke as having as many as eight (8) senses in one entry. I would argue that the multiple interpretations presented as meanings in the dictionaries are contextual readings of the verb. The verb **ke** I would argue is a monosemic (Ruhl 1989) verb with the contextual interpretations. My claim is that there should be only one entry in the dictionary for the verb (cf. Ameka 2017). However specific collocations, i.e. encoding idioms (cf. Makkai 1967), e.g. for 'forgive' (see below) should be listed in the dictionary as the lexicographers have done. The challenge is to demonstrate how to get from the semantic invariant to the contextual readings. I will demonstrate that the translations and on-line interpretations are generated by an interaction of: (i) the sense of the verb, that is, the shared idea that speakers have and use in understanding each other; (ii) the form and the meaning of the grammatical constructions in which the verb participates; (iii) the semantics and the type of arguments; (iv) in some cases, cultural frames and practices, norms and values. For instance, we will see that the verb ke 'open' has the interpretation of 'give holiday to school children' which is linked to the cultural practice of schooling and its attendant frame. Various principles of interpretation are involved: compositionality, presumptive meanings or (neo-Gricean generalised conversational implicatures (GCIs)) (Levinson 2000), and cultural scripts for inference (cf. e.g. Goddard & Wierzbicka 2004). In some contexts, the interpretation of the verb derives from the coercion of the verb to occur in certain structures or collocations. (cf. Michaelis 2004).

The chapter is structured as follows: in the next section (Section 2), I present the empirical considerations, I report on the treatment of the verb **ke** 'open' in Ewe dictionaries. Based on the examples provided I point out issues of argument structure, argument realisation and alternations, and their semantic consequences. In Section 3, I outline my views and assumptions about meaning construction and the principles of semantic analysis that are employed. Section 4 introduces **vu** 'open' which is a synonym of the verb **ke** 'open' and points to the differences between the two verbs which are used to talk about "opening" events in Ewe. Section 5 is devoted to accounting for the multiple readings of the verb **ke** through an analysis of its stable semantics across contexts and of the semantics of the argument structure constructions and other relevant

constructions in which the verb **ke** 'open' participates. I propose semantic representations for the verb **ke** 'open' applying a reductive paraphrase method inspired by the Natural Semantic Metalanguage (NSM) approach to the analysis of meaning. I conclude the chapter in Section 6 with a reflection on meaning construction and the implications of the study for cross-linguistic semantics of verbs.

First, some background information on typological features of Ewe: Ewe is a Gbe language belonging to the Kwa subgroup of the Niger-Congo family. It is an SVX/AVOX language with two classes of adpositions: prepositions and postpositions. Phrases headed by postpositions can function in different clausal argument positions like NPs. We shall see that some of the arguments in clauses in which ke occurs are realised as Postpositional Phrases whether they function as Subject, Object or complements in Oblique argument phrases. Ewe has a closed verb class of about 600 members (Clements 1972). Many of these are obligatory complement taking verbs (Essegbey 1999). It is also a verb serialising language and an aspect-prominent language with most modal and aspectual categories expressed by pre-verb markers. It has only one verbal affixthe habitual suffix. Other imperfective aspectual meanings are coded periphrastically. Negation is marked by a bipartite form, the first part mé occurs immediately after the subject while the final part o occurs at the end of clauses but before any utterance final particles that typically indicate the illocutionary force of the clause. Ewe is a tone language with five level tones, panlectally, and different combinations being realised as contuor tones. Ewe orthography sparingly marks tones, but in this paper all high tones are marked with an acute accent. Orthographic low tones are also marked with a grave accent, and, where necessary, rising tones arre marked with a hacek. Most orthographic symbols have their IPA values, but orthographic f and v are IPA ϕ and β respectivey. Also orthographic ny and y are η and j in the IPA.

2. The treatment of OPEN predicates in Ewe dictionaries

As indicated above, the lexicographers of Ewe either treat the multiple interpretations of **ke** 'open' as instances of homonymy (Westermann 1954, 1928) or as a polysemous item with as many as eight (8) senses (Rongier 2015). In this section, I present these perspectives commenting on the implications for understanding the conceptual semantics of the verb. In the discussion, I indicate the features of the examples presented to illustrate the senses. In a later section (Section 4) we will compare the verb **ke** with its synonym **vu** 'open'.

2.1 Westermann's entries for ke 'open'

The first entry by Westermann is when the expression in which the verb occurs is interpreted as 'forgive' or 'give as a present'. In the presentation, the examples and free translations are taken

from Westermann (1954) while the interlinear morphemic glosses are mine. I have used Westermann's (1954) Ewe-German dictionary as this was his last work before he passed away and it superceded his earlier Ewe-English dictionary of 1928.

(2) ke schenken, erlassen;

é-tsó-è ke-m3SG-take-3SG V-1SG

er hat es mir geschenkt, erlassen, verziehen

'S/he has forgiven me (it)',

'S/he has given it to me as a present.'

It must be stressed that the verb can only get these interpretations when it occurs in a 'take' Serial Verb Construction (SVC) as a second verb. I argue below that in this context the verb does not have a distinct and unrelated meaning from the other uses.

The second entry of Westermann is one where the formatting suggests two related senses distinguished by the number of arguments the verb occurs with, i.e., transitivity.

- (3) ke weit, breit, offen sein, sich ausbreiten; offnen, ausbreiten; 'wide, broad, (be) open; open(tr), widen'
 - a. **mó-á ke**¹ road-DEF V

der Weg ist breit, passierbar, frei;

'The road is broad, passable, free'

b. **detí ke**

cotton V

die Baumwollkapsel hat sich geöffent

'The cotton has opened itself', i.e., the cotton opened up

c. **é-ke dé é-ŋú** 3SG-V ALL 3SG-side

er breitete sich über ihn, traf mit ihm zusammen

'S/he came across him/her.'

Examples (3a) and (3b) illustrate the intransitive use of the verb. Westermann rightly considers example (3c) as involving the same sense as (3a) and (3b). As the interpretation of (3c) seems further from the others, Westermann implies that the structure in which the verb occurs must have a role. I argue below that the interpretation is generated by an interaction of the sense of

¹ Today, in many dialects, the intensive form of the verb would be used: **mɔ́-á ke-ke** [road-DEF RED-V] 'The road is wide'

the verb and the construction which could be thought of as an extended intransitive involving an oblique allative preposition complement. As Clements (1972: 205) suggests, the prepositional phrase is a complement as opposed to an adjunct because if it is removed, a different reading arises. It is instructive to consider the French equivalents that Rongier (2015) offers for the expression in (3c):

(3) d. **ke dé ŋú(tí)**V ALL side

trouver (par hasard), rencontrer, decouvrir, tomber sur, arriver sur, decoucher sur, ouvrir sur

'come across, meet, discover, to fall upon, to arrive onto, to leave on, to open onto'

It is clear that these are contextual interpretations which come from an interaction of the verb and constructional semantics, as well as the semantics of the operational elements in the construction such as the allative preposition.

Westermann further provides several verb plus noun collocations to illustrate the transitive use of the verb. I should point out that later dictionaries such as Rongier (2015) also list some of the same collocations. Here are the illustrative verb plus noun collocations following Westermann:

(4) a. ke nu den Mund öffnen

'open the mouth'

b. **ke** ŋkú **die Augen weit öffnen**

'open the eyes wide'

c. ke xexí Schirm aufspannen

'open an umbrella'

d. ke asabu me Netz ausbreiten

V fishing.net containing.region

'open up/spread out a fishing net'

In examples (4a-c) the direct internal argument is expressed as a NP. In (4d), however, the direct internal argument is a postpositional phrase (cf Ameka 2003). In this example, the semantics of the type of object interacts with the semantics of the verb to yield an interpretation which is rendered in translation as 'spread out'. Also, these examples show that their interpretation depends on the semantics of the two-place construction in which they occur. In other words the construction adds the causal meaning to the sentence, thereby giving rise to the event of an entity/effector causing an undergoer to open.

Westermann further exemplifies his second entry with expressions which involve the same object but different interpretations. Consider the examples in (5).

- (5) a. **ke mó den Weg freigeben, Erlaubnis geben**; 'free the road/open up the road; to give holidays'
 - ke mó (ná) deví-wó den Kindern Ferien, Urlaub geben
 V road DAT child-PL
 'free the children, give the children holidays'
 - c. **mɔ́-á** ke der Weg ist breit, passierbar, frei road-DEF V

'The road is broad, passable, free.'

In (5a) we have a transitive use of the verb with the internal argument m3 'road, path, way'. (5b) shows that the verb has the potential to occur in two double complement constructions: one where the GOAL argument directly follows the THEME argument in a double object construction and the other where the GOAL argument is marked by a dative preposition (Ameka 2013, Essegbey 1999). When we compare these expressions with example (5c) repeated from (1a), we see that we have situations where the same argument of the verb surfaces as the sole argument (5c) and is realised as subject. In (5a) and (5b) the argument is the internal argument and occurs in different configurations, in one case as one of two arguments and in the other as one of three arguments. One of the challenges from the point of view of the semantics of the verb is to uncover what the relationship is between the argument alternations: is the verb meaning across the alternations similar, or do the alternations lead to a different meaning that involves event composition (cf. Levin and Rappaport Hovav 2005, Levin 2015)? I would argue that in these cases, the same sense of the verb is at play, although I will also claim that the expression in (5b) is a conventionalised collocation based on interactions of the sense of the verb and semantic frames as well as cultural practices involving schooling.

As a bridge to his third entry, which involves an intransitive use of the verb, but a specific argument type, Westermann lists another common collocation given in (6).

'there is day light, day break'

This collocation involves a lexicalisation of the construal of day break as involving the opening up of the eyes after sleep in the night. During sleep in the night one's eyes are closed and around the time of day break one's eyes open up without someone doing something to them. The interesting thing is that it is the word for the 'psychologised eye' ηu as opposed to the 'physical

eye' **ŋkú** that is involved.² This signals that the situation is viewed as a sensation as opposed to a physical action (cf. Ameka 2002 on the distinction between psychologised and physical body parts).

Westermann's third entry also involves the intransitive use of the verb **ke** 'open' where the single argument denotes an event that has temporal parts as well as negative connotations. The entry is given in (7).

(7) ke aufhören, aufgehört haben, zu Ende sein;

'come to an end, stop'

a. dzo ke das Feuer ist erloschen

'the fire has been put out'

b. tsi ke der Regen hat aufgehört;

'the rain has stopped.'

Thus Westermann (1954) provides three distinct entries for the verb **ke** 'open' as summarised in (8).

- (8) a. Forgive; give as a present
 - b. Wide, broad, be open; open (tr), widen; come across; day break
 - c. come to an end, stop

The third interpretation (8c) seems to be unrelated to the other readings. I argue below that the interpretation can be derived from an interaction between the semantics of the verb and the semantic type of the nouns that co-occur with the verb. The semantics of the intransitive or one-place construction also plays a role. I demonstrate that all the readings are instantiations of the core meaning of the verb. There is an invariant meaning that cuts across all the readings. I, therefore, reject Westermann's treatment of the hyperlexeme as consisting of three homonyms and argue for a monosemic word with contextual readings depending on argument type, some of which might appear to be opposites.

2.2 Rongier's (2015) treatment of ke

While I assume that the verb has multiple readings but one sense, Rongier (2015), by contrast, provides as many as eight senses for the verb, which are listed following his numbering in (9). I cross reference the applicable examples from the Westermann entries above. The illustrative examples for the readings that were not encountered so far are provided in (10).

² Partial support for this view comes from the expressions for being awake and keeping wake which both involve the psychologised eye: **le/nɔ ŋu** 'be.at EYE' i.e. 'to be awake'; **dɔ́ ŋu** 'spend.time EYE', i.e., 'to keep wake'.

- (9) i. s'epanouir, eclore, s'ouvrir, ouvrir, déployer, etre ouvert, etre déployé (cf. (3b))
 - 'bloom, be hatched, to be oppen, open, spread, to be open, to be spread'
 - ii. **elargir, agrandir (route ...) etre large, s'etendre** (cf. (3a)) 'widen, be broad, to be wide, extend'
 - iii. **poindre (jour), arriver (jour), faire jour** (cf. (6)) 'day break'
 - iv. **achever, etre achevé, terminer, etre fini, arreter** (cf. (7)) 'finish, to be fished, to end, to be fished, to sop'
 - v. **se fendre, se fisurer, s'ouvrir** (see (10a) for an example) 'split, crack, cleave, open'
 - vi. **doner un cadeau** (cf. (2)) 'give a gift, present'
 - vii. **pardoner** (cf. (2)) 'to pardon, forgive'
 - viii. **disputer, lutter, soutenir, discuter** (see (10b) for exemplification) 'dispute, fight, defend, discuss'
- (10) a. **gli lá ke**wall DEF V
 'The wall split open'
 - b. **ke di** V ??

disputer, rivvaliser, discuter, debatre

'to dispute, rival, discuss, debate'

In comparison to the entries of Westermann, Rongier treats various readings that Westermann groups together in entry 2 as distinct senses. I believe that Westermann would have treated Rongier's sense (viii) illustrated in (10b) as an instance of his second entry. I am going to argue below that the usage in (10b) may have been the bridge between the first reading of 'open up' and the second reading of 'come to an end'; Rongier's sense (iv) which is the same as Westermann's third entry. We should also note that Rongier's senses (vi) and (vii) are equal to Westermann's first entry. It is clear that Rongier is guided not so much by semantics but by translations of collocations.

To reiterate, I will argue for one sense of the verb. How can one justify such a position? In the next section I present my assumptions about semantic analysis. In subsequent sections I present the analysis of the syntax and semantics of the verb **ke**.

3. Tenets of semantic analysis

I espouse a three-levels of meaning approach for the interpretation of linguistic signs (Wilkins and Hill 1995; Levinson 2000). The first level, Semantics1, concerns the intersubjectively shared structured ideas about signs (lexical items, constructions, gestures, prosodic patterns etc) which are stored in the mind. These are the stable, context independent meaning values of signs. At this level also compositional rules and their interpretation operate yielding an output, the literal meaning of the utterance. This feeds into level 2 which is a kind of fill-in box or a filter box. At this level the literal meaning of an utterance interacts with neo-Gricean Generalised Conversational Implicatures of Quantity, Informativeness and Manner (Levinson 2000); Cultural Scripts (e.g. Goddard & Wierzbicka 2004; Goddard (ed.) 2006), semantic frames (e.g Atkins and Fillmore 1992) and all kinds of world and encyclopedic knowledge. These processes of enrichment and filtering lead to the online interpretation of utterances, (for both speaker and hearer) (Wilkins and Hill 1995). As observed in Ameka (2017: 230) "these contextual interpretations are not stored senses of signs; they are an output of interpretation processes. They are contextual modulations on the stored meaning values of linguistic signs. These contextual interpretations may be cycled back into Semantics 1 level where they become more stable meaning values of signs. This is the dynamic way in which semantic change takes place."

This approach to meaning construction is different from some of the dominant views in some recent research especially in Cognitive Linguistics where "[M]eaning construction is not an unpacking of stored information [...]. Rather it is a constructive process in which integration of lexical units involves differential access to the conceptual knowledge which lexical entities potentially afford access." (Evans 2006: 496). In such a view there are no stored stable meanings of lexical units as I have suggested to be the case and to belong to Semantics1. Rather meanings are fluid, flexible and on the spot phenomena. The perspective that I adopt is in the spirit of people like Kecskes (2008:391) who argues for the "need to make a difference between the meaning values of lexical units, on the one hand, and situational meaning on the other." (emphasis in original). He adds "the process of situational meaning construction includes both 'unpacking' stored private contexts expressed in meaning values of lexical units and 'constructing' (interplay of private contexts of interlocutors with the actual situational context)". The only thing I will add is that for interpretation, we rely on the shared and inter-subjectively available meaning values of lexical units.

4. 'Open' predicates in Ewe

From a lexical typological point of view, Ewe has two lexical forms that prototypically code separation actions that do not lead to the disintegration of objects. These items are **ke** 'open', which we have illustrated up to now, and **vu** 'open'. To contrast these two words, I summarise

the dictionary entries provided for \mathbf{vu} 'open' by Westermann (1928) and Rongier (2015) in (11) and (12) respectively. As with the treatment of \mathbf{ke} 'open' the two lexicographers differ in how they view the readings of the verb \mathbf{vu} 'open'. Westermann provides four separate entries for the verb suggesting that there are four homonymous lexical units while Rongier treats it as a polysemous item with five senses. A detailed semantic analysis of the verb \mathbf{vu} 'open' is beyond the scope of this paper (see Ameka & Hill (2019) for a detailed semantic description of this verb). However, it is instructive to informally compare the two verbs in order to reveal the specificities of the verb \mathbf{ke} 'open'.

(11) Westermann's entries for vu

a. open, be open

vu vətrú

'open the door'

vətrú lá vu [door DEF V]

'the door opened'

vu nya me

[V word containing.region] explain, admit, confess

- b. to move, leave a place, migrate, emigrate
- c. to reach as far as³

mó tsó vu dé du-a me [road come.from V ALL town-DEF containing region]

'The road went as far as to the town.'

d. to rise whirling

fúfu le vu- vu-m[dust be.at:PRES RED-V-PROG]
'dust is rising'

The illustrative phrases and sentences provided by Westermann give clues to the various argument realisation patterns as well as argument structures of the verb. Thus in the first entry in (11a) the examples show that the verb can occur in two-place constructions as well as in one-place construction. The examples also indicate that the verb participates in the

è-ŋlə nú vu qé tə-nye me 2SG-weed thing open ALL POSSPRO-1SG containing_region

³ This reading provided by Westermann seems to be very specific to his illustrative example. The reading might be better characterised as 'open onto/into'. A common contextual use is where two neighbouring farmers might say one of them cleared the land and crossed into their plot:

^{&#}x27;You cleared the land and crossed into mine (reaching as far as into mine).'

causative/inchoative alternation: open the door vs. the door opened. Furthermore, the examples also show that the arguments can be realised as NPs or as Postpositional Phrases as in the expression for 'confess'. The example illustrating entry (11c) shows that the verb participates in SVCs and also that it can occur in a one-place plus allative construction. I believe that there is one semantic invariant that can capture all the interpretations provided by Westermann. The readings can be arrived at through an interaction of constructional semantics as well as the semantics of object types. For instance, the entry in (11d) about the rising of dust only arises in a context where the argument is realised as something that can exude some gaseous particles and flavours.

While Rongier (2015) does not provide separate entries like Westermann, he provides five senses for the verb. From my comments on Westermann's entry it should be clear that I do not believe that there are so many senses (see Ameka & Hill 2019).

(12) Rongier's entry for vu 'open'

a. **ouvrir**, **s'ouvrir**

'open'

- b. **quitter un lieu, se deplacer, emigrer** 'leave a place, move, emigrate'
- c. **atteindre aller jusqu'a** 'reach go up to/into, open on/in to'
- d. tuorbillonner en s'elevant

'swirl up'

e. **briller**

'shine'

Although Rongier presents senses (12d) and (12e) as separate but related, Westermann treats them as belonging to one sense. I share Westermann's perspective. I think it is translation differences that might lead one to separate these. Compare example (13) which was used by Westermann to illustrate (11d) and by Rongier to illustrate his sense (12e) with the other example in (11d) above used by Westermann to illustrate that entry.

(13) Ŋdɔ le vu-wu-ḿ

sun be.at:PRES RED-open-PROG

'The sun is shining.'

When one compares the dictionary entries for **ke** and **vu** one can see similarities among some of the interpretations. They can be seen as partial synonyms. This implies that there are differences between them despite their possible translation into English as 'open, to be open' or French as **ouvrir**, **s'ouvrir**. First, they differ in their primary valency: **vu** is primarily a bivalent verb while **ke** is primarily monovalent. Nevertheless they participate in argument alternations

and multiple argument realisations. Some of the arguments are supplied by the constructions in which they occur. We have seen in (11a) that the verb \mathbf{vu} can occur in two-place as well as one-place constructions. Similarly, we have seen in (5a, b, c) that the verb \mathbf{ke} can occur in one-place, two-place and three-place constructions. Second, they differ in force dynamics which follows from their primary valency. The verb \mathbf{vu} entails an effector doing something to something else to bring about a separation of its parts. The verb \mathbf{ke} , on the other hand, entails that the separation into parts of its participant is internally caused. As we shall see in the next section, these differences have an impact on the interpretation of utterances the verbs are used in when they occur with different theme objects.

5. Towards understanding the semantics of ke

5.1 The verb ke in one-place constructions

Prototypically, the verb **ke** as a primary monovalent verb occurs in one-place argument structure constructions. The semantics of a one-place construction in Ewe entails that the eventuality came about without an external cause. This is succinctly summed up as "lack of cause" by Essegbey (1999, 2008), see also Ameka (2002, 2008). This meaning can be represented in an explanatory paraphrase inspired by the Natural Semantic Methodology (NSM) (see e.g. Goddard & Wierzbicka 2014, 2016) as follows:

One-place construction NP (=X) V something happened not because X wanted it to happen⁴

Apart from constructional meaning, the interpretation of utterances involving verbs also depends on the semantics of the arguments or object type that participate in the construction. For the verb **ke** the entities that it is predicated of in its prototypical use are construed as unitary objects which have parts which can come apart along predetermined lines. Entities that it is predicated of include **séfofo** 'flower' as when in full bloom the petals spread out; **detí** 'cotton' where the boll splits open and exposes the fiber inside; **atsyá** 'akee nut' when it splits open one can see the nut inside (see Figure 1). The examples in (14a, b) illustrate the use of the verb with some of these objects.

⁴ The component is phrased this way to allow for one-place constructions in which the subject is an Actor and yet the constructional meaning reinforces the lack of cause.

Figure 1: Akee nuts showing some open ones



(14) a. **Atsyā ke** akee.nut V

'The akee nut has opened.'

b. (repeated in part from (3b)

detí ke cotton V

'The cotton has opened itself', i.e., the cotton boll opened up.

The use of the verb in a one-place construction with the sole argument being an entity which is unitary but which can be separable along predetermined lines without destroying the unity of the object is its prototypical pattern. The meaning of the verb in this structure can be discovered and represented in simple or rather Minimal English terms (Wierzbicka 2014, Goddard 2018). In the explication of the meaning I adopt the semantic template for verbs proposed by Goddard & Wierzbicka (2016). The explication of the meaning of a verb may be structured as follows:

Lexico-syntactic frame largely accounts for the "macro" morpho-syntactic properties of a given verb. The components included here characterise the participant structure, the internal causal and temporal relations as well as the aktions of a verb.

(Prototypical) Scenario represents the typical situation for the event such as the prototypical motivation of the actor (if any) or the qualities of the object involved. This is very relevant for **ke** as we shall see below.

Process or Manner characterises the way in which the situation unfolds.

Effect, in some cases part of the process, relates to the consequence of the process on the participants

Outcome or Potential Outcome indicates the result or final result if the action goes on for some time.

Evaluation which is applicable to some verbs, e.g. speech act verbs, relates to attitudes.

Drawing on the discussions so far and the examples of use of the verb, the prototypical semantics of the verb **ke** can be paraphrased as follows:

something X ke (X = flower, nut, cotton etc.)

something happened to X (at this time)

LEXICOSYNTACTIC FRAME

because of this something happened in X in one moment

not because someone did something to it (X)

Often when things of this kind happen, it happens like this: PROTOTYPICAL SCENARIO

Before it happened

this thing was like one thing

this thing has parts (inside it)

After it happened

the parts move apart at places

they do not become (two) different things

because of this, after this, one part is on one side

EFFECT

the other part is on the other side

because of this, after this,

(POTENTIAL) OUTCOME

one can see the things inside this thing

[one can do something with the things inside this thing, if one wants]

To show that this explication is applicable to many of the uses, let us apply it to one of the examples which Rongier (2015) uses to illustrate his fifth sense repeated below from (10a). The relevant sense is rendered as **se fendre** 'split', **se fissurer** 'crack' and **s'ouvrir** 'open'. I maintain that these are translation equivalents or readings generated in context by the interaction of the type of object that is the argument of the verb and the meaning of the verb.

(15) **gli lá ke** wall DEF V

Le mur s'est fissuré

'The wall cracked'.

In the example **gli** 'wall' is a unitary object with parts such as flat surfaces, sides, and inside parts. When the verb' is predicated of it, the resulting utterance can be interpreted as: "something happened to the wall at a time. It happened in one moment. The effect of the thing that happened is that there was a separation in the wall along a vertical line. As a result one part of the wall is on one side, the other part of the wall is on the other side. Because of this one can see the inside of the wall at where the separation occurred."

It is instructive to observe that Rongier translates the sentence in (15) with the verb 'crack' even though he has the other synonyms 'split', which I would have preferred, and 'open'. In fact cracked walls are not represented in the language with the verb **ke** 'open' rather the verb

dze 'crack, split' is used (see Ameka & Essegbey 2007 for a description of this verb). The situation of 'the wall is cracked' will thus be characterised as $\mathbf{gli} = \varepsilon$ dze [wall = DEF crack]. The difference between 'a wall is cracked' and 'the wall is open or split' is precisely that there is a division into two parts and that one can see through the line of separation in the case of the latter (the **ke** verb). In the case of the former there is no 'opening' entailed that will make it possible for one to see through. There is probably only a line which does not have an opening. Thus, the compositional semantics of the argument selected and of the verb yields an interpretation that is not a sense of the verb, but an online interpretation of the utterance. The same argument can be made for all the other senses and readings provided, as I demonstrate next with another class of nouns which are not physical objects but abstract entities.

5.2 The verb ke predicated of abstract entities in one-place construction

The verb **ke** in its prototypical one-place use can also be predicated of eventive nominals that denote state of affairs with negative connotations. Both Westermann and Rongier propose a separate sense for the verb based on its occurrence with such nominals functioning as subject. As we have seen Westermann presents this usage as a separate entry and glosses the verb in this context as 'come to an end, stop' (see (7)); while Rongier presents it as a separate sense, his sense number four (see (9)). His French glosses are **achever** 'finish', **etre achevé** 'to be completed', **terminer** 'to terminate', **etre fini** 'to be finished', **arreter** 'stop'.

The eventive nominals that function as the sole argument in this subconstruction involving the verb include **tsi** 'water, rain' **dzo** 'fire', **do** 'hunger, famine' **dzre** 'quarrel, dispute' and **ava** 'war'. Consider the following excerpt from an Ewe cartoon series. The context is that there was a party laid out for special guests and as the party was in progress, all of a sudden it started raining. The writer describes what happens next as follows:

(16)	a.	tsi lá	mé-dza	fuu o,	
		water DEF	NEG-drip	a.lot NEG	
		deko	wò-dza	kpatakpatakpata	víe ko hé-tó.
		pFOC.only	3SG-drip	IDEO:spattering	a.little only ITIVE-halt
		Ési	wò- ke	lá	
		When	3SG- V	TP	
		'It did not rai	n a lot, It only	rained spatteringly an	d stopped. When it (the rain)

The eventive nominals that occur in this construction denote states of affairs which have temporal intervals which can be construed as parts. Moreover when these states of affairs are unfolding, bad things can happen to people. They are situations that in general people do not want to be affected by negatively. When the verb **ke** is predicated of these nominals, the

(*de modzaka* 1 p. 57)

stopped ...'

utterance is interpreted as involving the coming apart of the temporal parts that hold the event together as one thing. As such when they come apart that one thing is no more, that is, the event is ended. In example (16a) above the author as it were describes the temporal phase of the occurrence of the situation till it ended. This is indicated by the verb **t5** 'halt'. He then uses the verb **ke** 'open' to characterise the ending post-state in a bridging construction, when the rain ended ... This illustrates the 'ending' reading of the verb. Similarly, in (16b) the eventual cessation of war is characterised by the predication of the verb **ke** of **ava** 'war':

'At last the war came to an end.' (Dogoe 1975:35)

The question is whether this online interpretation (Semantics 2) is a distinct sense or is the result of the interaction of the semantics of the nouns and of the prototypical semantics of **ke** proposed above, as well as the constructional semantics of one-place constructions. It can be assumed that these events are presented as having come to an end due to some inherent cause rather than being externally caused by someone. The claim is that it is only the outcome components in the meaning of the verb that seem to be suppressed by the semantics of the nouns involved. These are abstract things that do not have an interior that one can see. I maintain that the same semantics of the verb is applicable here, therefore, there is no need to postulate polysemy. In the next section I will examine the interaction between the verb semantics proposed and the use of the verb in two-place constructions. I will show that the type of entity that occurs as the grammatical object of the verb also affects the interpretation (cf. Spalek 2015).

5.3 The use of ke in two-place constructions

There are two transitive or two-place argument structure constructions identified for Ewe (Essegbey 1999). One of them is what Essegbey calls the "causal two-place construction", and the other is dubbed the "Theme-Locative construction". As the names imply, the former construction entails "cause" while the latter relates to the condition or state of the Theme (Subject) with respect to the object. The monovalent verb **ke** occurs in both types of constructions as already pointed out when discussing the lexicographic entries for the verb. It is my contention that the readings of the utterances involving the verb and two-place constructions derive from the interaction of the semantics of the verb proposed above and the semantics of the constructions. In addition, the interpretations also depend on the type of entities that fill the various argument positions especially the object positions. Paraphrasing Essegbey's suggestion that one of the two-place constructions involves 'cause' as the subject argument is an Actor that affects the internal argument, I propose the following characterisation of the construction following reductive paraphrase principles of NSM.

Causal two-place construction

NP (Actor = X) V NP/PostpP (Undergoer = Y)

someone (X) did something to someone/something (Y)

because X wanted something to happen to Y

because of this something happened to Y

When the verb **ke** occurs in this construction the subject argument is typically animate and the object argument is typically inanimate. The entities that fill the object slot can be categorised into semantic classes. The first class are objects that are construed as having symmetrical parts. All situations chracterised by the causal two-place construction involving the verb can be reversed, i.e., the objects can be returned to their state before the "opening" event occurred. In the ensuing discussion, I will provide lexical evidence from the language to support this assertion.

The first semantic class of entities that function as object (or part of the object) are body parts which have two symmetrical parts such as $\eta k \acute{u}$ 'eye', n u 'mouth' $at\acute{a}$ 'thigh', $as\acute{i}$ 'hand', $gl\~{a}$ 'jaw' and $t\acute{o}$ 'ear'. The reversal of the situations involving the body parts or the opposite of ke in this usage is $m\'{i}\acute{a}$ 'be close together, to be tight'. A children's game song provided in (17) illustrates the use of the two verbs and their opposite relations (cf. Egblewogbe 1968). The context of the song is as follows. There is a small plant whose leaves are all joined at one point to the stock, when it is touched the leaves spread out and when touched again the leaves come together and form one ball. The game centers around relations between co-wives and how they behave in front of one another. One is not to flaunt their special qualities towards the co-wife and when they are gone, they can do so to win the favours of the husband. Children sing this song as they play with the plant and the synchronization between the spreading out of the leaves and the verb phrase ke $at\acute{a}$ 'open thigh' and the folding up of the leaves into one with $m\'{i}a$ $at\acute{a}$ 'close up thigh'.

(17)atsú-si gbo-o ďá mia atá, mia atá husband-wife come.back-HAB in.the.distance tighten thigh tighten thigh atsú-si dzó ke atá ke atá husband-wife leave open thigh open thigh 'Your co-wife is coming, close your thighs, close your thighs,

Your co-wife has gone, open your thighs, open your thighs.'

The unconscious spreading of these body parts is also described with the verb **ke**. Significantly, the bivalent open verb **vu** 'open' is also applied to these body parts to describe their separation. There is a difference in the construal of the scenarios evoked by the two verbs though. Following on from the differences between the verbs pointed out in Section 4, the situations invlving **vu** are construed as being highly agentive (cf. Ameka and Essegbey 2007) and involving more force

than the **ke** verb. A piece of evidence for this is that even though the verb **vu** participtes in the causative/inchoative alternation, with these body parts the inchoative alternation involves a semantics different from the cuastive form (see examples in (18)).

- (18)é-vu a ŋkú 3SG-open eye 'S/he opened eyes.' Ъ. (fífíe) ŋkú υu eye open now lit: 'Eye is open', i.e. 'There is civilisation now.' c. é-fé ŋkú υu 3SG-POSS
 - eye open lit. 'His/Her eye is open' i.e. 'S/he is civilised.'

Another subset of entities that function as object in the causal two-place construction with ke as predicate are those entities which have parts that can be stretched out such as xexí/ sowuiá 'umbrella' or **golomeh**ễ 'pocket knife, i.e., jackknife'. Bound books could also belong to this class. Like the other object types seen so far, the verb vu 'open' can co-occur with these entities functioning as its object. However, like with the other subsets, the construal of the separation situation is different. This is best illustrated with utterances involving agbale 'book'. Compare the examples in (19) and (20).

(19)a. Teacher to pupils:

> mì-vu agbale = wó mìa-fé 2PL-POSS book = PL2PL-open

'Open your books.'

- b. mì-vu ewo-liá axa 2PL-open ten-ORD page 'Open page 10!'
- (20)mì-ke mìa-fé agbale = wó a. 2PL-POSS book = PL2PL-open 'Open (flip through) your books.'
 - b. * mì-ke axa ewó-liá 2PL-open ten-ORD page 'Open page 10.'

As the examples show, when the verb **ke** is used to describe the opening action with respect to a book, it evokes a flipping through, an untargetted scenario (20a). This explains the unacceptability of the utterance in (20b), whereas the minimal pair counterpart in (19b) involving the verb vu is acceptable. The use of the verb vu suggests a purposive action of opening the book. The reversal of the opening of the entities in this subset (e.g., umbrella, jackknife, book) whether described as a vu- or ke-event is expressed by the verb $t\acute{u}$ 'close, block access' as illustrated in (21). That there are different verbs for the different subclasses of objects confirms that the object type does have an influence on the construal and interpretation of the utterances representing the separation by opening events.

Another closely related set of entities which function as object in a causal two-place construction with the verb ke are those which are flat (and flexible) things such as $ab\check{a}$ 'mat', $ts\acute{t}tse$ 'mat', asabu 'fishing net', d_{a} 'fishing net', and av_{a} 'cloth'. When these flexible things function as the object of the verb e they are construed as having parts. Typically they are presented as dependent arguments of the postposition e 'containing region of' which provides ascent to the component of the effect of the e-action giving access to the inside of the object acted upon (see the examples in (22)). Significantly the separation action on these entities cannot be expressed using the other verb e 'u 'open'. This is instructive and suggests that it is preempted in this context because of its force dynamics. The spreading out of a flexible thing does not need much force as it is not something that is firmly closed. In fact the reversal of the spreading action is expressed by a different verb than those we have seen already, namely, e fold'.

- (21) mi-tú mia-fé $agbal\tilde{e}=wó$ 2PL-close 2PL-POSS book=PL 'Close your books.'
- (22) a. **ke do-ɔ me né má-kpɔ́**V cloth-DEF containing.region CONSEC 1SG:SBJV-see 'Open up the cloth and let me see'
 - b. **nlo do-o ná-m**fold cloth-DEF DAT-1SG
 'Fold the cloth for me.'

In all these examples there is an Actor who brings about the realisation of the event. The claim is that this aspect of meaning is contributed by the Causal two-place construction. The other contextual features come from the semantic properties of the arguments, and, in interaction with the semantics of the verb proposed, the interpretations are generated. The same applies to the Theme-Locative Construction to which we turn next.

The Theme-Locative Construction does not involve cause, rather the Subject argument is a participant whose condition or state is at stake. Its meaning can be paraphrased as follows:

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Theme-Locative two-place construction

NP (Theme = X) V NP (Locative = Y)

something happened

not because X did something

one can say something (Y) about X because of it
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In other words, the "Locative" argument stands for a property that can be attributed to the Theme Subject. When the verb **ke** occurs in this construction it tends to take the noun **dzo** 'fire' as its object. Consider the examples in (23):

b. **tete nútufé-á ke dzo zi deká mia**just smithy-DEF V fire times one IDEO
'Just then a flash of light struck the balcksmith's workshop at once.'
(de modzaka I p. 2)

Example (23a) is the routine way of talking about the occurrence of lightening. Example (23b) is taken from a description of a flash of lightening occurring in the blacksmith's shop suddenly. These situations are construed as occuring spontaneously so internally caused. Moreover it is as if there was a separation of the sky or the workshop in a line with the parts being on each side through which a flash of light emerges. Thus the semantics of the verb in these instantiations is not different from the one proposed. The interaction of the verb semantics with the constructional semantics yields the online interpretation. Apart from the interpretations associated with the one- and two-place constructions, therre are other readings associated with other constructions. For these, the same hypothesis applies: the verb has the same semantics outlined above in these contexts too.

5.4 The verb ke in other argument structure constructions

It should be abundantly clear from the discussion thus far that the various entries we find in the Ewe dictionaries are based on contextual interpretations of a monosemic verb in interaction with the semantics of the arguments that are expressed with it as well as the semantics of the constructions. Due to limitations of space, I cannot demonstrate the processes of interpretation and interaction for each of the other constructions. I can only catalogue some of the other constructions in which the verb participates. The reader is invited to consider how the verb semantics proposed is applicable and how it interacts with the semantics of the constructions to generaate the online readings.

As noted earlier the verb participates in a three-place construction where an Actor and a Goal argument are introduced. The three-place construction in which the verb participates has the following structure:

Actor
$$(= X) - V - THEME (= Y) - GOAL (= Z)$$

'The teachers gave the children vacation.'

Essegbey (1999:170) argues that the semantics of this construction can be summed up as 'caused transfer' and the way the transfer is encoded is dependent on the semantics of the particular verbs. Arguably, in this instantiation of the construction with the verb **ke** the relevant semantics can be understood as X (the teachers) causes Y (literally, the road) to open onto (make contact) Z (the children). This is what yields the interpretation 'The teachers gave holiday to the children'. This utterance is also understood against the background of the frame of 'schooling'.

A related three-place construction is the Dative oblique Theme-Goal construction (cf. Ameka 2013). As the name implies, the Goal participant is coded as the complement of the Dative preposition. The relevant semantics here is that the Goal argument is presented as an Experiencer or a beneficiary. Thus, the utterance in (25) which is partially synonymous to (24) implies that he children are the beneficial experiencers of the situation characterised in the rest of the clause. For our purposes, the critical thing is that it is the Dative Oblique structure that adds this argument and that the relevant semantics of the verb is the same as when it is used in a causal two-place construction.

'The teachers gave vacation to the children.'

Similarly, as noted in the discussion of the lexicographic entries of the verb, **ke** occurs as V2 in a take-SVC. The structure of this subconstructions is:

Actor
$$(= X) - ts3$$
 THEME $(=Y)$ ke $- GOAL (=Z)$

Roughly speaking, this structure can be understood literally as 'someone takes something and exposes it onto another entity'. Consider the following example from a written fiction:

(26) Context: The main character Dzanka has been leading a debauched life and prostituting herself. The parents did all they could to make her change her ways but to no avail. She

became completely out of the control of the parents. As many times as Dzanka made herself uncontrollable by the parents ...

```
... zi nenémá ké=é wò-tsó é-dókui ke vlo-dó-do ...

time same very = aFOC 3SG-take 3SG-self V evil-RED-put

'... the very same times she exposed/gave heself to evil [and shameful things].'

(Dogoe 1975: 16)
```

An instantion of this structure in which the object of **tsó** 'take' is realised as a nominal that pertains to something bad that someone has done, the structure gets a reading of 'forgive' as both Westermann and Rongier have identified in their dictionaries. In fact **tsó núvố ke** [take sin open] has become a standard collocation for 'forgiveness of sins'. Arguably, a semantic frame related to Christianity and the knowledge structures associated with 'sin' have lead to an entrenched collocation based on the "expose" component of the verb in an SVC.

Another construction in which the verb participates can be labelled the 'extended intransitive allative oblique construction'. The structure of this construction is (cf. Ameka 2008):

NP (=X) V [[
$$\mathbf{d\acute{e}}$$
 [NP $\mathbf{n\acute{u}}$] PostpP]PrepP

This construction profiles two participants, the subcategrised argument of the verb, the Subject of the construction and a GOAL argument that is introduced by the construction and signalled by the allative preposition. The interpretation of this construction when the verb slot is filled by **ke** is that the subject argument comes across or chances upon the oblique GOAL argument. Consider the following examples:

In (27a) the subject of the verb was moving, one could say aimlessly, and then came to be exposed as it were to a palm tree. Recall that the verb **ke** does not entail force nor an external cause. Rather there is something that happens in its single profiled participant in a moment. In addition there is a spreading out of the entity involved. I suggest that this spreading out and the happening in a moment combine to yield the contextual interpretation of 'come across'. And the entity that

one comes across is introduced by the allative preposition. Thus the Spider was moving and becomes exposed, as it were, to a palm tree. Similarly in (27b) the participants that function as the subject were probably looking for the thief and not knowing where he was. Then they came across him.

Contextual interpretations and readings of utterances are the result of the interaction between the semantics of the verb, the semantics of the construction and the semantics of the arguments. I maintain that the verb **ke** has only one sense and that all the multiple readings of the verb can be derived from this one sense in interaction with other contextual factors.

6. Concluding remarks

In the foregoing, I have explored the multiple interpretations of the verb ke in Ewe. As orientation, I presented the lexicographic treatment of the verb in two dictionaries. I have argued that the various readings of the verb proposed in the dictionaries can be accounted for on the basis of a monosemic representation. I have shown that the different readings are related to issues of argument selection, argument realisation and alternation. Thus some readings, for example, the one related to events coming to an end, arise from the interaction of the semantics of the subject argument and that of the verb. The nominals involved in such utterances are nominal events which can have negative effects and which have temporal parts. Other interpretations of the verb identified are related to variable argument realisation in interaction with argument structure constructional semantics. Thus when the verb occurs in the extended one-place construction where an allative marked oblique argument is supplied by the construction we get an interpretation of 'chance upon someone/something'. I claim that in this context the outcome component of exposing the entity is highlighted and then the allative argument is the participant to which the exposure is made. Similarly when the verb occurs in the two-place constructions or three-place constructions, the semantics of the constructions contribute to modulate the interpretation.

Different pieces of evidence were adduced along the way to support the proposed semantics of the verb and the way the contextual readings are arrived at. It was shown for example that verbs tend to covertly categorise the arguments they combine with. In the case of **ke** this categorisation surfaces if one looks at the verbs that are used to charactise the reversal of the situation being described. Thus the reversal of the spreading out of flat (and flexible) things is expressed by the verb **ŋl5** 'fold', while the reversal of the spreading out of entities that are of two parts and joined as it were at one end e.g body parts such as eyes or thighs is expressed by a different verb **míá** 'be tight'.

I have argued that to adequately account for the multiple interpretations and to address the syntax-semantics interface challenges, one has to adopt a view of meaning construction which assumes a two-semantics level approach. One has to distinguish between the senses of signs (lexical, grammatical, prosodic) that are stored and stable from the on-line interpretations that are contextual modulations on the senses. As the sense of a sign is a structured idea intersubjectively shared by its users, we follow NSM and other lexicographers in representing them using semantic templates or semagrams (cf. Moerdijk 2008). When action verbs of the kind discussed here are reductively paraphrased, one can show among others the Process or Manner as well as the Effect and Outcome components. Such analysis allows for and facilitates comparison of meanings of verbs in a language and across languages. Heath and MacPherson (2009) independently suggest that languages seem to differ in which of the structural components of the semantics of action verbs languages profile and which can be seen as an aspect of the cognitive style or cognitive set of the language that drives lexicalisation. They argue that while Standard Average European (SAE) and English pay attention to Result and Force, many languages, and in particular for Dogon languages of Mali, Manner and Process are more salient. They suggest that more crosslinguistic studies should be carried out that pay attention to the fine distinctions encoded in verbs. I submit that the decomposition of meanings of verbs into structured components of the kind employed here will go a long way to provide information that can be compared cross-linguistically.

Abbreviations

1 = first person, 2 = second person, 3 = third person, ALL = allative, CONSEC = consecutive marker, DAT = dative, DEF = definiteness marker, aFOC = argument fcus marker, pFOC = predicate focus marker, HAB = habitual, IDEO = ideophone, INDEF = indefiniteness marker, ITIVE = itive preverb marker, NEG = negative, NPRES = non-Present, ORD = ordinal, PL = plural, POSS = possessive marker, PRES = present, PROG = progressive, RED = reduplicative, SG = singular, SUBJV = subjunctive, TP = topic marker, V = Verb, VENT = Ventive

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