

Genericity in event semantics: A look at Yoruba generic sentences

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Abstract

In this paper, I argue for a theory of genericity that is based on neo-Davidsonian event semantics (Parson 1990& 2000; Higginbotham, 2000; etc). I argue that in generic sentences there are ontologically two sorts of things that have generic interpretation: individuals and eventualities. I claim that any treatment of genericity should account for this ontological distinction. I distinguish broadly between three types of individual: kind individuals, generic individuals and concrete individuals (which are subdivided into specific, non-specific, definite and proper individuals). A distinction is made between particular events and generic events on the one hand; and between kind-level states, individual-level states, stage-level states and generic states on the other hand. I propose that only generic individuals truly require the presence of the Gen operator and that kind and concrete individuals are existentially closed with kind individual involving type-shifting operation. Also, I propose that particular events, kind-level states, individual-level states and stage-level states are given the standard neo-Davidsonian treatment but that generic events and generic states contain the generic predicate ‘gen (e)’ which turns concrete eventualities into generic ones. Using this framework to account for genericity in Yoruba leads to some conclusions that border on current theories of genericity and event semantics. For example, it is shown that Kimian states (Maienborn, 2007) in Yoruba have an E-position that the generic predicate (the imperfective) *máa-ń* targets (contrary to expectation), and that in some constructions *máa-ń* is best treated as the operator Gen, suggesting that the so-called silent operator Gen is not always silent in Yoruba.

1. Introduction

My major concern in this paper is to propose a theory of genericity that is based on neo-Davidsonian event semantics (advanced in such works as Parson (1990& 2000)), and to account for how generic sentences are constructed in Yoruba, within the framework proposed. One of the most interesting things about generic sentences in Yoruba is that they are tied to different aspects of the syntax. That is, generic interpretation can be traced to those aspects of the syntax that are overtly available. Sometimes, genericity can be constructed with simple predication as in (1), assuming that kind-referencing is a subset of the term ‘generics’ (Krifka et al., 1995 and Pelletier, 2010). In (1), a singular NP is combined with a predicate made up of a copula and a compound noun. In some other constructions, availability of generic reading is tied to focus as demonstrated in (2).

1. Ewure jé ẹran-ile
Goat be animal.house
‘Goats are domestic animals.’
2. Baba ni olori ile
Father FOC leader house
‘A father is the head of the family.’

Generic interpretation can also be tied to the imperfective aspect which is overtly marked with the imperfective marker, *máa-ń* (Ajiboye, 2005). When this marker is appropriately applied to a predicate, generic interpretation results naturally. Consider the following:

3. a. Bólá jẹ ewé

- Bólá eat leaf
 ‘Bólá ate the/a leaf’
 b. Bólá máa-ń je ewé
 Bólá Impv eat leaf
 ‘Bólá eats leaves.’

The idea in (3a) is that there is some goat that ate a particular leaf, but with the introduction of the imperfective marker, we get a generic reading in (3b). These and some other syntactic features (which are considered subsequently), such as negation and epistemic modality, make generic reading available in Yoruba.

One other interesting thing about genericity in the language is the fact that singular NPs (what are later referred to as Bare Noun Phrase) can have up to three different interpretations. They can be interpreted existentially as in (4a), generically as in (4b) and as reference to kind as shown in (4c). This ambiguous interpretation is also true of Plural Noun Phrases as will be shown subsequently.

4. a. Ajá wà lábé igi
 Dog eat in.under tree
 ‘A/the dog is under the tree.’
 b. Ajá máa-ń só ilé
 Dog IMPFV guard house
 ‘Dogs guard houses.’
 c. Ajá jé ẹranko ẹlẹsẹ méeerin
 Dog be animal owner.leg four
 ‘Dogs are four-legged animals’

An important question that any theory of genericity needs to address is: what exactly is generic in a generic sentence (where generic sentences are taken to include habituals and reference to kind)? In most of the examples in (1) through (4), there is a sense of some things being quantified over generically. It is therefore an ontological requirement to state the nature of things that are quantified over or about which some generalizations are made.

According to Carlson (1989), a generic sentence is one that expresses a regularity. Asking about what is regular in a generic sentence is the same as asking about what is generic in a generic sentence. Ontologically, there are two things that can be regular or generic in a generic sentence. These are entities (what I will later refer to as individuals), realized in the syntax as NPs, and eventualities, realized as VPs and their adjuncts in the syntax. These two can occur together in the same sentence as in (5a), but they can also occur independently as seen in (5b-d). Note that in (5b), a generic entity appears without a generic eventuality, whereas, in (5c), there is an individual entity and a generic eventuality. The most interesting of the examples in (5) is the case of (5d), which does not appear to have any entity but contains a generic event that is specified in spatio-temporal terms.

5. a. Dogs bark [(Generic *dogs*) (*bark* generically)]
 b. Dogs are friendly [(generic *dogs*) (*are* friendly)]
 c. John smokes a lot [(an individual *John*) (*smokes* generically)]
 d. It rains at night in Lagos (some event of raining occurs generically at night in Lagos)

Summing up the foregoing, this paper argues that only eventualities and entities are capable of generic interpretation. Put differently, there are two sources of genericity that are supplied in the syntax which can be combined in a single clause but which can also function independently as the foregoing examples have shown. As a result, we can distinguish between entity-driven genericity and eventuality-driven genericity. This distinction is close to that made in Krifka et al (1995) between characterizing statements and reference to kind but defers in a number of ways that are considered in the remaining sections of this paper. Languages defer in what sort of NPs can be generic and what sort of predicates can be generic based on the configuration of the syntax. However, there are a number of cross-linguistic generalizations that can be made on the semantics of generic individuals and eventualities. For example, we can make a pre-theoretical assumption that all languages have generic individuals and eventualities as well as other kinds of individuals and eventualities, which are considered in subsequent sections.

In Section 2, I review some of the theories of genericity in the literature. Since a theory of genericity which uses events is scarce in the literature, I lay out a pre-theoretical framework for genericity in event semantics in Sections 3 and 4—a caveat is in order: this framework is only proposed to be able to examine generic sentences from the viewpoint of the ontological distinction made above, using events; as a result, the assumptions here are purely pre-theoretical, but I am hopeful that further research will refine it into an empirically valid theory. I then apply this to Yoruba generic sentences in Sections 5 and 6. I identify some preliminary advantages of the framework in section 7. Section 8 concludes with a general summary of the paper

2. Theories of genericity

Cohen (2004:2) observes that it sometimes seems that there are as many theories as there are researchers who have investigated the meaning of generics and habituals. While there are indeed many theories of genericity (including habituals), it turns out that we can now classify these theories into two basic categories. First, we can recognize those theories that assume that generic sentences consist of an underlying Gen operator. This is the standard view and most works on generic sentences fall into this category. However, with the work of Liebsman (2011), a new kind of approach to the study of genericity is given voice. Liebesman calls this approach the theory of simple generics. Because it claims essentially that treatment of genericity does not have to include Gen, we can call this approach a non-Gen theory of genericity.

There are basically two questions that theories of genericity have sought to answer over the years. These are (1) what is the nature of generic sentences? (2) what are the appropriate logical forms of generic sentences? A consensus answer to the second question in the standard approach is that generic sentences are tripartite in their logical form, consisting of an unpronounced operator called Gen, a restrictor and a matrix, so that the generic sentence in (6a) has the logical form in (6b).

6. a. Soldiers are brave

b. Gen x [x is a soldier \longrightarrow x is brave]

There are only a slight variation in how scholars working with the standard approach implement the Gen operator. For example, Cohen (1999 and 2004) takes Gen to be a quantifier, rather than an operator as widely assumed by other scholars such as Greg Carlson and Manfred Krifka in their works on genericity. This is an issue that concerns a hotly debated topic in the study of generics

on whether they are quantificational or not. See Leslie (2007) for a survey of this topic. On the other hand, Liebesman's non-Gen theory of simple generics holds that generic sentences like the one in (6a) need no Gen operator in their logical form, and claims that generics involve simple-kind predications just like ordinary monadic predications (like the one in (7b)):

- | | | |
|----------------------------|--------------------|------------------------------|
| 7. a. Soldiers are brave. | [brave (soldiers)] | simple-kind predication |
| b. The soldiers are brave. | [brave(soldiers)] | ordinary monadic predication |

On the view of the theory of simple generics, the subject of (7a) is kind referring and the predicate "are brave" is a property that is inherited by members of this kind i.e. the kind soldier. The subject of (7b) on the other hand does not refer to the kind soldier and this is why it lacks a generic reading. One question that arises from this view, however, is: what is (should be) the difference between the logical forms in (7)? Given that these two sentences have different meanings, one would expect them to have different logical forms. Liebesman's argument is that, in the (7a) form there is inheritance of a property from a kind to its members, something that is generally lacking in the (7b) form. According to him, this inheritance is not a question of semantics, but that of metaphysics. As a result, to account for the difference in the logical forms of (7a&b), one must appeal to metaphysics.

The answer to the first question seems to be what has generated most of the theories in the literature. But before we go into the details of those theories, let us first note that Liebesman's non-Gen theory of simple generics is relatively recent so that most of the nuances that are described subsequently for the standard theory are generally lacking in this approach. For example, it is not clear how the theory of simple generics will handle habituals, nor do we know what categories of genericity it will recognize, for generics are far from being homogenous, a reason for why there are so many theories of genericity out there.

In the standard approach, the answer to this question comes in the form of categories of theories which are devoted to different aspects of what counts as generic. There are those that examine their truth-conditions: just what conditions have to be met for generic sentences to be true? The theories in this regard can be divided into two: inductive theories that are based on the frequency of observed phenomena and rule-and-regulations theories that hold that generics are about rules in the world, specific or general, which interact to produce the truth value of generics. Carlson (2008) contains a survey of these two ways of looking at the truth conditions of generics. An elaborate formalization of the truth conditions of generics can be found in Cohen (1996). There are also those theories that examine some specific peculiarities of generics. As examples of those kinds of theories we may make reference to Cohen's (2004) existential generics, which distinguishes between quasi-existential and quasi-universal generics, and Krifka's (2013) definitional generics. Other theories seek to establish the interaction between genericity and grammatical functions. Cohen's work on genericity and focus (particularly Cohen, 1996; 2003; and Cohen et. al. 1997) are good examples in this regard. We may also mention Carlson's (2008) treatment of genericity and negation, which establishes that negated generics appear to be strong and amount to a near-total prohibition.

Another category of theories of genericity can be found in the work of Sarah-Jane Leslie (Leslie, 2007 and 2008). These works examine the relationship between genericity and cognition. Perhaps one of the most salient contributions of these works is the conclusion they make that generics are verbal expressions of accumulated cognitively fundamental generalizations. That is, generics are the most basic and default form of generalization in human cognition. As a result, since generics

are unmarked, Leslie's theory predicts that languages are not likely to have an articulated operator, thereby vindicating the standard approach in its assumption of an unpronounced Gen operator. Finally, there are theories that attempt to classify generics into different categories, sometimes based on truth-condition and some other time to distinguish it from other closely related phenomena such as kind-referencing (which of course is often treated as a class of genericity in its own right, as in the discussion below). For example, Assarsson (2012:12) reframing Leslie's theory (Leslie, 2008), categorizes generic sentences into three according to their truth conditions. These are (1) Characteristics generic like 'birds fly', which are such that they admit of some exceptions; (2) Striking generics like 'Mosquitoes carry the West Nile virus' (Leslie 2008) which admit many exceptions; and (3) Majority generics, which are all other kind of generics that admit of only few exceptions. A more elaborate classification, which, though, is not based on truth conditions can be found in Krifka et al. (1995).

In the overarching framework of Krifka et al. (1995), generic sentences are broadly classified into two: reference to kind and characterizing sentence. Reference to kind involves propositions that are true of the kind of individuals, such as *dinosaurs are extinct*, and not just some individuals of a kind as in *boys are brave*. The latter describes what obtains for generic sentences. Characterizing sentence on the other hand include habituals such as *John smokes after dinner*, recurrent events such as *birds fly*, and states such as *lions are dangerous* and *goats have horns*. There are other sub-categories that are identified such as collective reading, representative object reading, avant-garde reading, kind predicates and so on. Pelletier (2010:6) contains a further discussion of this classification. However, the framework provided in that influential work, which was built on the standard theory of Carlson (1977), does not apply in the sense of entity-eventuality distinction that I have identified above. Nor does Liebesman's theory of simple generics account for such an ontological distinction. For this reason, I choose to look at genericity from the viewpoint of event semantics, and argue for a theory of genericity that is rooted in event semantics, by making some pre-theoretical assumptions. While doing this, I draw heavily from the general assumptions in the standard theory of Krifka et al. (1995). For example, I assume that kind-generic-existential interpretation of NPs is determined by the kind of predicate in which they are serving as arguments (similar to Carlson's standard theory). However, rather than looking at the types of predicate from Carlson's angle and distinguishing broadly between individual and stage level predicates, I seek to look at predicate types through the lens of Neo-Davidsonian Event Semantics, so that for this paper, what is responsible for Bare Plurals' existential reading (in English) is the kind of eventualities in which they are serving as arguments.

Essentially, in order to answer the first question (above) that theories of genericity have sought to answer over the years (i.e. what is the nature of generics?), I claim that, in addition to all the answers found in the literature, we must recognize that generics make an ontological distinction between entity-driven genericity and eventuality driven genericity as examples in (5) adequately demonstrate. To answer the second question about what constitute the logical form of generics, I claim that, though generics have an unpronounced operator Gen, not all generic sentences, need to have this operator. These ideas are fleshed out in subsequent sections.

3. Three ontological types of individuals (concrete, generic and kind)

In this section, I develop an ontological system that distinguishes between individuals that NPs and DPs refer to (where 'individual' is pretheoretically conceived as referring to different sort of things in the world that NPs or DPs refer to such as person, animal, thing, entities, etc.). I propose

an ontological system that first recognizes the nature of things we talk about and then assess how we talk about them by looking at what part of the language manifest the different sorts of ontological distinctions we make. This is so as to avoid the restrictions that any sort of theories in this domain places on one while looking at a language like Yoruba, whose generic constructions have not been examined in much impressive details as English.

Genericity is such a vast phenomenon with myriads of facets that elude an overarching theory. The picture we have developed in the previous section is more or less the picture we find in works that concentrate on sub-domains of genericity. NP/DP referencing is one sub-domain of genericity that has received a lot of attention in recent years. In the literature that deals with this topic, one finds a host of theories, that in most cases concentrate on the types of NPs that are known to have generic reading in English. One example of such is the English Bare Plurals (BPs). An early influential theory of BPs is that of Carlson (1977) which assumes that English BPs uniformly refer to kind in all their uses and that their existential or generic reading is as a result of the type of predicate they are used in. This theory is later defended by Chierchia (1998) who proposed a new theory he called the neo-Carlsonian approach. Chierchia's theory was developed in the midst of a different kind of theory that has come to be known as the Ambiguity Approach, which appeared to be dominant at that time. The ambiguity approach developed in such works as Wilkinson (1991), Diesing (1992) and Gerstner-Link and Krifka (1993), holds that, rather than uniformly referring to kind, English BPs are ambiguous between reference to kind and being indefinite plurals. Both of these major ways of looking at NP/DP referencing have been shown to be unable to handle certain counter examples in English as well as in other languages, thereby giving rise to other theories such as the theory of incorporation, which is advocated in works like Geenhoven (1998), Dayal (1999) and Frakas and de Swart (2003). For an elaborate description of the development of theories on this topic, see Mari et al. (2013).

Another body of works in this subdomain has concentrated on understanding the distinction between specific and nonspecific NPs. Discussions of this distinction can be found in Baker (1973), Hawkins (1978) Fodo and Sag (1982) and Enc (1991). A common distinction often made between the two relates to the scope position of the NP. NPs that have narrow scope are generally taken to be nonspecific (*a student* in (8c)) while those that have wider scope are taken to be specific (*a student* in (8b)).

8. a. Every teacher in that school beat a student yesterday.
b. **A student** was such that all the teachers in that school beat him yesterday.
c. For each of the teachers in that school, there was **a student** they beat yesterday.

A distinction that plays a major role in the ontology developed below can be found in Krifka et al. (1995). According to Mari et al. (2013:6), Carlson (i.e. 1977) was the first to propose an ontology for kind, distinguishing it from 'normal individuals' like John. This ontology is recognized and advanced in Krifka et al. (1995). The NP 'dinosaurs' in (9) refers to the kind individual 'dinosaur kind'.

9. Dinosaurs are extinct.

Krifka et al. (1995) also makes a distinction between specific and non-specific NPs but this distinction was different from the traditional distinction that is based on the difference between (8b) and (8c). For them, a specific NP refers to a particular individual while a nonspecific NP does

different kinds of concrete individuals in our system. At this point, we can recognize at least four types: specific, non-specific, definite and proper. This is illustrated as follows:

- | | |
|--|---|
| 12. a. A dog is barking. | [concrete specific individual] |
| b. Everyone brought a dog each. | [concrete non-specific individual] |
| c. The dog is barking. | [concrete definite individual] |
| d. Jack barks at night. | [concrete proper individual] |

I assume that these types have the same general logical form which can be modified variously to account for the minor differences. For example, (12a), will have the following logical form, leaving out events for now:

13. $\exists x [\text{dog}(x) \wedge \text{barks}(x)]$

To distinguish (12b) from (12a), all we have to do is appeal to scope position. To do the same for (12c), we can make use of the iota notation. For (12d), we might consider ‘Jack’ a referring expression rather than a predicate that is bound by existential closure as it is the case in (12a-c). That is, we can simply render it as $[\text{barks}(j)]$. What will seem to be common to different types of concrete individuals is that they are bound by existential closure. There are a number of ways that we can account for the logical difference between these subtypes of concrete individuals. In most cases, I give them the standard neo-Davidsonian treatment.

Next, I consider the kind individual. According to the general assumptions of Carlson (1977), kind individuals are abstract individuals that may have actual instantiations. Since they are not concrete, they lack the kind of regular existential closure in (13). There are broadly two ways in which we can implement the logical form of kind individuals. We can treat them as proper names with direct kind predication as in (14b); we can also assume that they involve variables with existential closure which are type-shifted into the kind individual. The latter way can be implemented in the various ways shown below (14c-e). I continue to leave events aside till the next section.

14. a. Dinosaurs are extinct
 b. extinct (dinosaurs)
 c. $\exists x [\text{dinosaur}_k(x) \wedge \text{extinct}(x)]$ (after Krifka et al 1995)
 d. $\exists x [\uparrow \text{dinosaur}(x) \wedge \text{extinct}(x)]$ (after Link 1995:382)
 e. $\exists x [{}^U \text{dinosaur}(x) \wedge \text{extinct}(x)]$ (after Chierchia 1998)

Another way to implement (14) is to assume that there is a Gen operator, which binds a type-shifted variable that refers to the kind. I assume here that kind individual as well as concrete individual does not need the Gen operator and that it is only the generic individual that the Gen operator binds. This assumption is based on the following argument. I assume here that an inherent part of the concrete individual and the kind individual is that they are existentially identified in terms of ontology. For example, when we say *a dog is outside*, we can paraphrase this as ‘there is something in the world namely a dog that is outside’; likewise, when we say *dogs are widespread*, we can paraphrase this as ‘there is some kind in the world namely the kind dog that is widespread’; it will be awkward however, to paraphrase a statement like *dogs bark* as ‘there is some individuals in the world namely some dogs that bark’. Generic individuals are not existentially closed at least not in the sense that concrete and kind individuals are.

One of the major assumptions of this paper is that there is a third kind of individual that is neither concrete nor is a kind individual. I identified this as the generic individual. Like kind individual, it is an abstract individual but it gets its own properties from generalizations about instances of a kind. Put differently, kind and generic individuals are different from concrete individuals in that they are not actual instances, but they defer from each other in that kinds are constructed from their instances (one can think of this in terms of type-shifting) while generic individuals are constructed from generalizations about these instances. I assume here that since they are based on rough generalizations about instances of a kind individual, they are bound by the unpronounced Gen operator as shown in (15).

15. a. Dogs bark
- b. Gen x [dog(x) → bark (x)]

My argument up to this point can be summarized as follows. There are three kinds of ontological individuals: kind, concrete and generic. These three have different logical forms. Concrete individuals are variables bound by existential closure; kind individuals are type-shifted variables bound by existential closure (which can also be treated as proper names), while generic individuals are variables bound by Gen. In the following section, I sketch how these individuals interact with events.

4. Eventualities

Davidsonian events semantics, starting with the work of Donald Davidson (Davidson, 1967), assumes that verbs of action and change in natural language have a hidden event argument now commonly referred to as the E-position (see Higginbotham, 1985:555). The idea is that, in addition to the other information encoded in verbs of action such as thematic roles, there is an event variable that is existentially closed. This idea has been extended in the neo-Davidsonian tradition (represented in such work as Parsons 1990 and 2000; Landman, 2000; Higginbotham, 2000, etc.) which assumes that all predicates, including statives, have the E-position. While this has been widely accepted in the literature, scholars such as Maienborne (e.g. Maienborn, 2006, 2007 and 2011) and Katz (e.g. Katz, 2000) have continued to argue for a Davidsonian view that only eventive predicates (Katz, 2000) and ‘Davidsonian states’ like *sit* and *sleep* (Maienborn, 2007) have an E-position. Maienborn (2007), for example, demonstrates that a kind of state she describes as Kimian state, ontologically and linguistically, defers from eventive predicates and Davidsonian states in a number of ways, arguing that they lack the E-position.

For the purpose of this paper, I do not address this distinction between eventives and Kimian states or what Moltman (2013) calls ‘abstract states’ in this section (but see Section 8 for the consequences that the framework advanced in this paper has for Kimian states). This is so as to be able to explore fully the interaction between individuals (kind, concrete and generic) and different kinds of eventuality that I identify below. In the pre-theoretical framework that I lay out shortly, I assume that all predicates have an E-position (I explore how this fact is born out in Yoruba in the next section). I also assume (following Parson, 1990) that there are three sorts of things that predicates generally encode: events, states, and process. I follow Bach (1986) and refer to these three entities with the label ‘eventuality’. For the purpose of this paper, my focus is on events and states.

First, I propose that there are different kinds of states and events with regard to their interaction with individuals, their duration and number of instances across time and space. For example, states such *is extinct*, only apply to kind individuals, a state such *is hungry* is shorter induration than a state like *is intellegent*, while a particular event such as *smoked last night* has one instance whereas an event such as *smokes after dinner* has multiple instances. It is based on these fact that the following ontological distinctions are made. I start with events.

4.1 Events

The general tradition in event semantics is to think of events in concrete terms. Events are located in space and time. We can have multiple events such as e_1, e_2 , etc.; we can also have subevent (e') commonly proposed for such constructions as resultatives and causative-inchoatives. What is not common is to think of events as having uncountable instances. But there are some events which cannot be given the description of a particular event and which seem to have multiple instances that are not countable. Consider the following:

- 16. a. Mary smoked at the party
 - b. $\exists e$ [**smoking** (e) \wedge **ag** (e , Mary) \wedge **at_the_party** (e)]
- 17. a. Mary smokes after dinner
 - b. * $\exists e$ [**smoking** (e) \wedge **ag** (e , Mary) \wedge **after_diner** (e)]

While the interpretation in (16b) is accurate for (16a), ignoring tense and salience, (17b) does not give an accurate interpretation of (17a) for the reason that (17b) suggests that there is a concrete event which took place at a certain time but which does not take place with some regularity. This is against the meaning of (17a). Although (17a) can be given the standard analysis in the following way: GEN [x, s ;] (x = Mary & smoke (x, s); after.dinner (s)) (Krifka, 1995:238), the question is: can Event Semantics handle the regularity that is associated with some events such as the one in (17a)? To answer this question, I first propose that there are two types of events, based on the nature of what is taken to be an event. These are particular events and generic events. This particular distinction can be found in the work of Montague (Montague, 1969) as reported in Pianesi and Achille (2013). According to them, Montague distinguishes between *sun rises* which he called generic event and *sun rose yesterday* which he termed particular events. For him generic events are a kind of property and particular events are instantiations of generic events. Montague's theory is metaphysical however, and its major assumption is that particular events are derived from generic events. In the system that I advocate in this paper, generic events are derived from particular events with an addition of a predicate. My own distinction between generic and particular events, therefore, is purely linguistic and ontological rather than metaphysical. Let us start by observing the following:

- 18. There are ontologically two kinds of events in natural language:
 - a. Particular events with countable instances
 - b. Generic events with uncountable instances

I define particular events here as a kind of event that is located in a specific time and location, and does not express any form of regularity. I also assume that they have single instances. Of course, they can be distributive as in *John buttered three loafs of bread*, and have subevents, but they

generally lack the property of having uncountable instances. On this account, (16b) generally represents the logical form of particular event that is envisioned in this system.

A generic event, on the other hand, is an event which expresses some regularity. A generic event is true only when there is some regularity involved and it is not the case that it has definite instances. For instance, the event in the expression *Africans drink palmwine*, it is hard to think of how many instances this event *drink* has. To formalize this regularity in the neo-Davidsonian framework, I propose an additional predicate for the derivation of generic sentences like the one in (17a). This is captured in (19).

$$19. [[\text{generic}]]_{\langle v, et \rangle} = \lambda P \lambda e [P(e) \wedge \text{gen}(e)]$$

When this is applied to an event, it turns such an event into one that occurs with some regularity and allows for counterfactuals. To turn the particular event in (16b) into a generic event, all we have to do is apply (19) as in the following:

$$20. [\lambda P \lambda e [P(e) \wedge \text{gen}(e)]] (\exists e [\text{smoke}(e) \wedge \text{ag}(e, \text{mary}) \wedge \text{at_the_party}(e)]) = \\ \exists e [\text{smoke}(e) \wedge \text{gen}(e) \wedge \text{ag}(e, \text{mary}) \wedge \text{after_dinner}(e)]$$

This derivation defers from the standard treatment of events only with the introduction of the generic predicate. Introducing a new predicate is not uncommon in the event semantics literature. Parson (1990:28) for example, uses **Cul** and **Hold** to account for tense and aspect; **gen** is no less a predicate accounting for a functional category. Summarily, what distinguishes concrete events from generic events is the generic predicate.

4.2. States

Four distinct types of states can be identified in terms of duration, number of instances and the kind of individual that can be their argument. Let us start with (21):

21. Four ontological kinds of states can be identified:
- | | |
|---------------------------|----------------------|
| a. kind-level state | b. stage-level state |
| c. individual-level state | d. generic state |

Kind-level states are a kind of state that only takes a kind individual as a theme. For example, *is extinct* is a state that can only be true of the kind *the dinosaur*. I borrow Carlson's (1977) terminology of individual-stage-level predicates and distinguish between stage-level states and individual-level states. A stage-level state is one which applies to stages of an individual; this is tantamount to what one might regard as temporary state. *Is hungry* is an example of stage-level states. An individual-level state applies to each and every stage of an individual. This is what one might consider a permanent state. An example of this is *is brave*. Generic state is a kind of state that comes with some regularity and has multiple instances that are not definite. An example of this is *is always hungry*. This is neither a pure stage-level state nor an individual-level state. It is a state that is scattered among the stages of an individual and does not apply to each and every stage of such individual. For the sake of space, I assume that kind-level, stage-level and individual-level states are given the standard treatment in the neo-Davidsonian tradition, but that generic states have the generic predicate proposed in (19). The generic predicate therefore can apply to events

and state. To make the distinction between the four types of state identified above clearer, consider the following examples:

22. a. Dinosaurs are extinct
 b. $\exists s$ [**being-extinct** (s) \wedge **th** (s, \uparrow dinosaurs)] kind-level state
23. a. John is hungry.
 b. $\exists s$ [**being-hungry** (s) \wedge **th** (s, john)] stage-level
24. a. John is clever.
 b. $\exists s$ [**being-clever** (s) \wedge **th** (s, john)] individual-level
25. a. John is always hungry.
 b. $\exists s$ [**being-hungry** (s) \wedge **gen** (s) \wedge **th** (s, john)] generic

The reader might find it unusual that the adverb of quantification *always* in (25a) has been reduced to a predicate in (25b), given that it is often treated as an operator. In the next section, I show that Yoruba treats both generic state and event the same, so that (25a) is expressed with the same grammatical means that generic events are expressed with. In the next section, I provide an account of how the various types of eventualities I have identified above are realized in Yoruba, with a focus on generic events and states.

6. Generic eventualities in Yoruba

Let us start with non-generic eventualities. These eventualities have the common characteristic that they are realized in the syntax with simple predication. No additional particle or marker is needed to express them. For example, kind-level state is expressed in (1) with the copular *jé* ‘be’, stage-level state is expressed in (4a) with simple existential verb *wà* ‘be/exist’, while particular event is expressed in (3a) with the simple verb *jẹ* ‘eat’. Only individual-level state is expressed with focus marking in (4a), but this again involves simple predication. Generic events and states on the other hand, are explicitly marked in the language. A generic eventuality is generally marked with the imperfective marker *máa-ní*. This marker has the function of taking particular events and turning them to events with indefinite instances. This is exactly what the **gen** predicate (proposed in the previous section) do. This was illustrated in Section 1 with the examples in (3a&b). Let us give the logical form of (3a) repeated in (26a) as in (26b) and the logical form of *máa-ní* as in (26c). If (26c) is applied to (26b) as in (26d), the result is (26e).

26. a. Bólá jẹ ewé (Bólá eat leaf)
 b. $\exists e$ [**eating** (e) \wedge **ag** (e, bólá) \wedge **th** (e, leaf)]
 c. [[*máa-ní*]] = [[generic]] _{<v,et>} = $[\lambda P\lambda e [P(e) \wedge \mathbf{gen}(e)]]$
 d. $[\lambda P\lambda e [P(e) \wedge \mathbf{gen}(e)]] (\exists e [\mathbf{eating}(e) \wedge \mathbf{ag}(e, b) \wedge \mathbf{th}(e, \text{leaf})])$
 e. $\exists e [\mathbf{eating}(e) \wedge \mathbf{gen}(e) \wedge \mathbf{ag}(e, \text{bólá}) \wedge \mathbf{th}(e, \text{leaf})]$

While (26b) states that there is a particular one-instance event of eating leaf that has Bólá as an agent, (26e) states that there is an indefinite multiple-instance event of eating leaves that has Bólá as an agent. The implication of (26) therefore is that the category of events that was identified as

generic event in the previous section not only has an ontological support but also a linguistic support in Yoruba. Next, let us consider the case of generic state.

Linguistic support for the category of generic state is not readily available in English since what corresponds to *máa-ní* is not phonologically available. But this support is found in Yoruba. Generic states, just like generic events, are constructed from particular states (stage-level states in most cases) by using *máa-ní* (the generic predicate). Consider the following:

27. a. Bólá wà ní ilé ọ́tí
 Bólá exist in house alcohol
 ‘Bólá is/was at the bar.’
 b. Bólá **máa-ní** wà ní ilé ọ́tí
 Bólá **gen** exist in house alcohol
 ‘Bólá is/was at the bar in multiple indefinite instances.’
 c. $\exists s$ [**being-in-the-bar** (s) \wedge **gen** (s) \wedge **th** (s, bólá)]

(27c) which is the logical form of (27b) states that there is a generic state of being at the bar whose theme is *bólá*. Note that the generic state in (27b) can also be expressed in English as ‘Bólá is always at the bar’. But this cannot give the accurate information that is expressed in this sentence, because (27b) does not contain anything that corresponds to adverb of quantification. It only states that there are multiple occasions of Bólá being at the bar, and does not specify whether this is usually, seldom or always. To do that, prepositional constructions that correspond to English adverb of quantification (e.g. *ní è̀ẹ̀kò̀òkan* ‘sometimes/seldom’, *ní ọ̀pọ̀ ẹ̀gbà* ‘often/usually/ in most cases’, etc.) will have to be used. The consequent intuition, therefore, is that *máa-ní* is a true generic predicate that modifies an eventuality variable to give it the property of having multiple instances whose exact number is not specified.

Let us note here that our generic predicate can reduce to a clitic in some constructions. Some examples of this are presented as follows:

28. a. Bólá kíí mu ọ́tí
 Bólá NEG.gen drink bear
 ‘Bólá doesn’t drink bear (habitually).’
 b. Bólá kò mu ọ́tí
 Bólá NEG drink bear
 ‘Bólá did not drink bear.’
 29. a. Gbígbo ní ajáá gbó
 barking FOC dog.gen bark
 ‘BARKING is what dogs do (generically/habitually)’
 b. Gbígbo ní ajá gbó
 barking FOC dog bark
 ‘The/a dog BARKED.’
 30. a. Ewúré kíí gbó
 Goat NEG.gen bark
 ‘Goats don’t bark.’
 b. Ewúré kò gbó
 Goat NEG bark
 ‘the/a goats did not bark.’

31. a. Ajá ní gbó
 dog FOC.gen bark
 ‘DOGS bark generically./ It is dogs that bark generically/ habitually.’
 b. Ajá ní ó gbó
 dog FOC 3SG bark
 ‘THE/A DOG barked/ It is the/a dog that barked.’

In all of the (a) examples above, the generic predicate *máa-ń* reduces to a clitic *í*, whose surface representation is determined by phonological processes that I do not address here. But note that in all these cases, the high tone (´) remains the same. In the next section, I consider how the different categories of eventuality that we have identified and exemplified interact with different kinds of individuals in Yoruba.

5. Concrete, generic and kind individuals in Yoruba

There are only two forms of NP in Yoruba that make reference to kind individuals and generic individuals. These are what I refer to in this paper as Bare NPs (BNPs) like *ajá* ‘dog’, *ewúré* ‘goat’, etc., and Plural NPs (PNPs) such as *àwọn ajá* ‘dogs’, *àwọn ewúré* ‘goats’, etc. These two forms can also make reference to the different kinds of concrete individuals identified in Section 3. The result then is that these two forms are ambiguous between reference to kind, generic and concrete individuals. What determines which individuals they refer to is the type of eventuality in which they are serving as argument and the nature of the second argument in the eventuality. Let us start with the kind individual. The two forms are interpreted as kind individuals when they serve as a theme of a kind-level state (henceforth, K-state) as shown in (32Aa). But only the BNP yields kind interpretation with individual-level state (henceforth, I-state) as in (32Ba); PNP is odd in this context. Also, when both forms are a theme of an I-state with an experiencer (see footnote 1), kind interpretation is obtained as in (32Ca). Generic interpretation of BNP is also obtained in deontic modality even when the eventuality is a particular event as shown in (32Da). In this latter case, it is assumed that the deontic modality turns a concrete event into a state (property) which can be predicated of a kind as shown in (32Db). This property can then be inherited by members of the kind in appropriate worlds.

32. A. BNP/PNP as theme of K-state → kind individual
 a. (Awọn) Ajá wà káàkiri
 (PL) Dog be everywhere
 ‘Dogs are everywhere.’
 b. $\exists s$ [**being-everywhere** (s) \wedge **th** (s, ↑dog)]
 B. BNP as theme of I-state → kind individual
 a. Ewúré ní èjè
 Goat have blood
 ‘Goats have blood.’
 b. $\exists s$ [**having-blood** (s) \wedge **th** (s, ↑goat)]
 C. BNP/PNP as theme of K-state with an experiencer¹ → kind individual
 a. Bólá fẹràn (àwọn) ọmọdé

¹ I use the term ‘experiencer’ to refer to the individual who is aware of a stimulus (following Hilpert, 2014:27). The term is used here to distinguish between the arguments of verbs like *love*. For example, in *Jane loves dogs*, *Jane* is the experiencer and *dogs* is the theme. I use the notation ‘exp’ to signify the term ‘experiencer’ in logical forms.

Bólá like (PL) child
 ‘Bólá loves children.’

b. $\exists s$ [**loving** (s) \wedge **exp** (s, bólá) \wedge **th** (s, \uparrow child)]

D. BNP as an agent of particular event in deontic modality \rightarrow kind individual

a. Ayékòótó lè kọrin
 Parrot can sing
 ‘A parrot can sing’

b. $\lambda w \exists e$ [singing (e) \wedge $\exists s$ [able-to-be-agent-of-‘e’ (s) \wedge **th** (s, \uparrow parrot) \wedge in (s, w)]]

Next, I consider how concrete individual interpretation is obtained from both forms. Both are interpreted as concrete individuals when they are either an agent or a theme of a particular event (henceforth, P-event) as in (33Aa). They are also interpreted as concrete individuals when they are an agent (33Ba) or a theme (33Ca) of a generic event (henceforth, G-event) that has a concrete individual argument.

33. A. BNP/PNP as an agent or theme of P-event \rightarrow concrete individual

a. (Àwọ̀n) ajá jẹ egungun
 (PL) dog eat bone
 ‘A/the dog/ the dogs ate a piece (some pieces) of bone.’

b. $\exists e$ [**eating** (e) \wedge **ag** (e, dog) \wedge **th** (e, bone)]

B. BNP/PNP as an agent of G-event with concrete individual theme \rightarrow concrete individual

a. (Àwọ̀n) ajá maa-n lé Bólá
 (PL) dog **gen** chase Bólá
 ‘A certain dog or some certain dogs chase Bólá in indefinite occasions’

b. $\exists e$ [**chasing** (e) \wedge **gen** (e) \wedge **ag** (e, dog) \wedge **th** (e, bólá)]

C. BNP/PNP as a theme of G-event with concrete individual agent \rightarrow concrete individual

a. Bólá maa-n lé (àwọ̀n) ajá
 Bólá **gen** chase (PL) dog
 ‘Bólá chases a certain dog or some certain dogs in indefinite occasions’

b. $\exists e$ [**chasing** (e) \wedge **gen** (e) \wedge **ag** (e, bólá) \wedge **th** (e, dog)]

Concrete individual interpretation is also obtained when BNPs and PNPs serve as the theme of a stage-level state (henceforth, S-state) as in (34Aa) and as the experiencer of an I-state with concrete individual theme as in (34Ba). They are also interpreted as concrete individuals when they are an experiencer in a generic state (henceforth, G-state) that has a concrete individual argument as in (34Ca) or when they are a theme of a G-state with a concrete individual experiencer as in (34Da).

34. A. BNP/PNP as a theme of S-state \rightarrow concrete individual

a. (Àwọ̀n) ajá dáké
 (PL) dog be.silent
 ‘the dog(s) are silent or the dog(s) became silent.’

b. $\exists s$ [**being-silent** (s) \wedge **th** (s, dog)]

B. BNP/PNP as an experiencer of S-state with concrete individual theme \rightarrow concrete individual

a. (Àwọ̀n) ajá fẹ̀ràn mi
 (PL) dog like 1SG
 ‘The dog(s) like me.’

- b. $\exists s [\text{liking}(s) \wedge \text{exp}(s, \text{dog}) \wedge \text{th}(s, \text{me})]$
- C. BNP/PNP as an experiencer of G-state with concrete individual theme \rightarrow concrete individual
- a. (Àwọn) ajá máa-ń fẹ̀ràn mi
 (PL) dog **gen** like 1SG
 ‘A dog/ some dogs like me in indefinite number of occasions’
- b. $\exists s [\text{liking}(s) \wedge \text{gen}(s) \wedge \text{exp}(s, \text{dog}) \wedge \text{th}(s, \text{me})]$
- D. BNP/PNP as a theme of G-state with concrete individual experiencer \rightarrow concrete individual
- a. Mo máa-ń fẹ̀ràn (àwọn) ajá pupa
 1SG **gen** like (PL) dog red
 ‘I like red dog(s) in indefinite number of occasions’
- b. $\exists s [\text{liking}(s) \wedge \text{gen}(s) \wedge \text{exp}(s, \text{I}) \wedge \text{th}(s, \text{dog})]$

A generalization that can be observed with regard to the interpretation of BNPs and PNPs as concrete individuals is that they require an aspect of a proposition to be concrete or to be located in time and/or place. That is, they require that either the eventuality is particular or that there be a second argument that is particular (concrete). For instance, we saw in (33) and (34), that concrete-individual interpretation is tied to P-events (33Aa), S-state (34Aa), and the requirement that the second argument have a concrete-individual interpretation (33Ba, 33Ca, 34Ba, 34Ca and 34Da). It should be noted as well that there are different types of concrete individual in (33) and (34). For instance, *ajá* ‘dog’ and *egungun* bone in (33Aa) refer to concrete specific individuals, *ajá* ‘dog’ and its plural form *àwọn ajá* ‘dogs’ in (33Ba, 33Ca, 34Ca and 34Da) refer to non-specific individual, *ajá* ‘dog’ and *àwọn ajá* ‘dogs’ in (34Aa) and (34Ba) refer to concrete definite individual, while *Bólá* in (33Ba) refers to a concrete proper individual. Next, consider how generic-individual interpretation is obtained.

Let us start by observing that, generally, only BNPs are naturally interpreted as generic individual; PNPs either yield existential interpretation or are generally odd. One peculiar characteristic of interpreting BNPs as generic individuals is that they occur in generic eventualities. However, it should be noted that things are not as quite straightforward with this observation, as there are some of these eventualities that superficially appear as generic but are best analyzed as non-generic. The starting point then is to make the distinction between true generic eventualities in this regard and superficial generic eventualities and then see how the BNPs behave. Examples of true generic eventualities that yield generic interpretation of BNPs is given in (35). (35Aa) shows how BNPs are interpreted as generic in G-event with no theme while (35Ba) shows how they are interpreted as generic in G-event with concrete non-specific theme.

35. A. BNP as an agent of G-event with no theme \rightarrow generic individual
- a. Ajá máa-ń gbó
 Dog **gen** bark
 ‘Dogs bark.’
- b. Gen x [**dog**(x) \rightarrow $\exists e$ [**barking**(e) \wedge **gen**(e) \wedge **ag**(e, x)]]
- B. BNP as an agent of G-event with concrete non-specific theme \rightarrow generic individual
- a. Ajá máa-ń jẹ egungun
 Dog **gen** eat bone
 ‘Dogs eat bone.’

b. Gen x [**dog** (x) → ∃e [**eating** (e) ∧ **gen** (e) ∧ **ag** (e, x) ∧ **th** (e, bone)]]

What (35) basically shows is that when BNPs occur in generic eventualities, they are interpreted generically. The source of their generic interpretation can then be located in those generic eventualities. However, note that (35Ab) and (35Bb) defers from the standard Gen approach in two respects: first, the predicates is interpreted as event and this event is taken to be generic; second, the generic interpretation of the NP is said to be tied to the genericity of the eventuality. As such, (35Ab) states that generally for dogs there is some generic event of barking that they do, while (35Bb) states that generally for dogs there is some generic event of eating concrete (non-specific) bones that they do. Next, consider the superficial generic eventualities that also yield generic interpretation for BNPs:

36. A. BNP as an experiencer of superficial G-state with kind theme → generic individual

a. Ajá máa-ń fẹ̀ràn egungun
Dog **gen** like bone
'Dogs eat bone.'

B. BNP as an experiencer of superficial G-state with concrete non-specific theme → generic individual

a. Ewúré máa-ń ní ìwo
Goat **gen** have horn
'Goats have horn'

C. BNP as a theme of superficial G-state → generic individual

a. Mààlù máa-ń tóbi
Cow **gen** be.big
'Cows are big.'

We can go ahead and give (36Aa, Ba and Ca) the same kind of treatment as before, so that their logical forms are as in (37a-c) respectively. But this will be counter-intuitive as argued below.

37. a. Gen x [**dog** (x) → ∃s [**liking** (s) ∧ **gen** (s) ∧ **exp** (s, x) ∧ **th** (s, bone)]]

b. Gen x [**goat** (x) → ∃s [**having** (s) ∧ **gen** (s) ∧ **exp** (s, x) ∧ **th** (s, horn)]]

c. Gen x [**cow** (x) → ∃s [**being-big** (s) ∧ **gen** (s) ∧ **th** (s, x)]]

(37) states, wrongly, that some generic individuals undergo an I-state in indefinite number of occasion. For instance, (37c) states that generally for cows, there is some state of being big that each of them undergoes in indefinite number of occasions. This is contrary to the meaning of (36Ca) which only says that there are indefinite number of occasions where each given cow is big. To resolve this mismatch, we have to do away with the generic predicate in (37) and treat the eventualities therein as I-states rather than G-states constructed from I-states. The implication of this then is that the source of generic interpretation for the BNPs in the examples in (36) cannot be located within the eventualities but must be from a different source in those sentences.

The most available intuition is that, if the generic interpretation of the BNPs cannot be due to the eventualities in those sentences, then it must be due to the imperfective marker *máa-ń*, which has been argued above to be the generic predicate that takes particular eventualities and turns them to generic ones. The case of the examples in (36) is different. As it has just been argued, *máa-ń* does not turn the eventualities in those sentences to generic eventualities; what it does rather is to ensure that the BNPs in those sentences are interpreted generically. In other words, the generic

interpretation of those BNPs is due to *máa-ń*. If this observation is in the right direction, then *máa-ń* does not serve as the generic predicate in those sentences, but as an operator that binds the variables supplied by the BNPs. From this viewpoint, *máa-ń* in (36), therefore, has a semantics that is very close to or the same as that given to the generic operator, Gen. We can then posit that *máa-ń* has two denotations (logical forms), one where it is a predicate (26c repeated in 38a) and the other where it is an operator (38b):

38. a. $[[máa-ń]] = [[\text{generic}]]_{\langle v, et \rangle} = [\lambda P \lambda e [P(e) \wedge \text{gen}(e)]]$
 b. $[[máa-ń]] = [[\text{Gen}]]_{\langle e, t \rangle} = \lambda P \lambda Q \text{Gen } x [P(x) \rightarrow \exists e/s [Q(e/s) \wedge \text{ag/th}(e/s, x)]]$

Let us demonstrate (38b) with the example in (36Ba) given as (39b) below. Recall that BNPs that serve as a theme/experiencer of an I-state are interpreted as kind individuals (see 32B). Without the imperfective marker *máa-ń*, the BNP in (36Ba) is interpreted as a kind individual as in (39a). Consider the following:

39. a. $\text{Ewúrẹ ní iwó} = \exists s [\text{having-horn}(s) \wedge \text{exp}(s, \uparrow \text{goat})] = \text{kind individual}$
 b. $\text{Ewúrẹ máa-ń ní iwó} =$
 c. $\text{Máa-ń}_x [\text{Ewúrẹ}_x \text{ ní iwó}] =$
 d. $\text{Gen}_x [\text{Ewúrẹ}_x \text{ ní iwó}] =$
 e. $\text{Gen } x [\text{ewúrẹ}(x) \rightarrow \exists s [\text{níní}(s) \wedge \text{exp}(s, x) \wedge \text{th}(s, \text{iwó})]] =$
 f. $\text{Gen } x [\text{goat}(x) \rightarrow \exists s [\text{having}(s) \wedge \text{exp}(s, x) \wedge \text{th}(s, \text{horn})]]$

(39 b-f) demonstrates the compositional derivation for *máa-ń* as an operator. (39c) demonstrates that *máa-ń* specifically targets a variable that is supplied by the BNP. The other examples in (36) has to be given the same logical form in (39f) where there is no generic predicate, but rather a generic operator that is phonologically available.

If (38b) is correct and the derivation for *máa-ń* in (39 b-f) is accurate, then it follows that the so-called silent operator Gen, may not be silent in some languages and some contexts after all. The discussion above has shown that, while it is silent in some constructions as in the examples in (35) where its presence is due to the nature of the eventuality, it has a pronounced counterpart in other constructions, as demonstrated by the examples in (36). The implication, therefore, is that Yoruba provides an empirical support for the so-called Gen operator.

A generalization that can be taken from the discussion so far is that BNPs are naturally interpreted as abstract individual (kind or generic) while PNPs naturally have existential interpretation of concrete individuals. It was shown that PNPs are possible as kind individuals but this is rather far restricted. The fact that PNPs are generally odd as generic individuals also suggest that PNPs are naturally existential and that their interpretation as kind individual is rather due to a type-shifting operation whose source can be located in the eventuality. Existential interpretation of BNPs can also be explained away by a type-shifting operation that is occasioned by the eventuality. This type-shifting operation might be reminiscent of Carson's theory, but I am not committed to that theory. I have only employed this conceptualization ad hoc to put the general distribution of these two forms of Yoruba NP in proper perspective.

7. Some preliminary advantages

The most important advantage of the pre-theoretical framework proposed in this paper is the freedom it allows for one to look at genericity in a language like Yoruba that has not been robustly researched in this area. I was able to account for genericity in Yoruba without having to commit to any specific theory of genericity whose limitations could have hindered exploratory pursuits. The framework also has cross-linguistic applicability. For languages whose generic sentences have not been researched before, the framework provides a guideline that can be adapted variously to account for generic sentences. This is possible because of the various ontological predictions that the framework makes. This includes that there are three ontological individuals that natural language distinguishes and that eventualities can be concrete (particular) and generic (non-particular). It would be expected that, to make these ontological distinctions, a language might have cross-linguistically available means or means peculiar to its grammar.

The framework is also able to account for not only subject arguments but also object arguments in terms of generic-kind-existential interpretation. Most theories of genericity concentrate on subject arguments (see Mari et al., 2013:2), but it seems that we need to be able to account for object arguments as well to have a more elaborate understanding of the nature of genericity in natural language. The fact that this framework is able to account for both subject and object arguments makes it possible, for instance, to account for grammatically conditioned genericity in Yoruba which can be found in the syntactic account of Ajiboye (2005). As we have seen in the previous sections, sometimes, generic-kind-existential interpretation of an NP may be conditioned by the nature of the second argument. Using event semantics makes it possible to account for this fact.

This framework also avoids recourse to pragmatics, as is often the case in the standard Gen approach, where a situation variable is said to be bound in the restriction of Gen for some sentences that do not readily conform to the logical form of Gen. For instance, (5d) repeated in (40a) will be given a logical form like that in (40b). According to the proposals of this framework, a more elegant way of stating the logical form of (40a) will be (40c).

40. a. It rains at night in Lagos
 b. Gen s [s is a situation appropriate for raining in Lagos \rightarrow it rains]
 c. $\exists e$ [**raining** (e) \wedge **gen** (e) \wedge **at** (e , **night**) \wedge **in** (e , **lagos**)]

(40c) does not specify more than what is present compositionally in (40a). Since there is no generic individual in (40a), there is no need for the Gen operator. This is consistent with the assumption of the framework that only generic individuals are bound by the Gen operator.

Another significance of this framework is in the fact that it makes some predictions that may have bearing on current issues in event semantics. Maienborn's theory of statives and copula + adjectives (Maienborn, 2004, 2005 and 2007) states that statives and copula + adjective are Kimian states that lack Davidsonian event argument. If this assumption were true for Yoruba, then there would be nothing we can refer to as generic state. But as the discussion above has shown there is indeed a generic state in the language. Let us consider this here again:

41. a. Ade bínú
 Ade be.angry
 'Ade was angry.'
 b. Adé máa-ń bínú
 Ade **gen** be.angry
 'Ade is *generically* angry.'

First, note that (41b) is not available in English. The closest we can get in English is ‘Ade is usually angry’, but as I have mentioned earlier, this does not accurately represent the meaning of sentences like (41b) in that it does not contain any prepositional phrase that are equivalent to English adverb of quantification. (41b) only states that Ade is angry in multiple number of occasions that is not definite just as ‘Mary smokes’ indicates that Mary smokes in indefinite number of occasions. According to Maienborn’s theory, (41b) should not be possible since *bínú* ‘be.angry’ would lack a Davidsonian event argument. Our generic predicate *máa-ń* would therefore have no event argument to turn to generic. My argument here is that since Yoruba treats both regular events and Kimian states (like the one in (41)) the same by using *máa-ń* (the generic predicate) to turn them from particular eventualities to generic eventualities, generic states have an ontological as well as an empirical basis. This fact therefore suggests that there may be languages where it can be shown that Kimian states do have a hidden event argument. If my assumptions are correct, Yoruba will be one of those languages. Adopting this framework also led to a situation where the only viable logical form that can be given to *máa-ń* is the same as the logical form of the Gen operator (see (39) above), thereby suggesting ambitiously that the Gen operator is indeed pronounced in some constructions in Yoruba.

Finally, the framework is able to handle issues relating to focus and ambiguity. Both individuals and eventualities can be put in focus. The mechanism developed here can be implemented variously to account for each case. (29a) repeated below as (42a) and (31a) repeated below as (43a), demonstrate respectively how Yoruba grammatically puts eventualities and individuals in focus. Both sentences express the same idea; the difference is in what is put in focus. This difference is reflected in the logical forms in (42b) and (43b).

42. a. Gbígbo ni ajáá gbó
 barking FOC dog.gen bark
 ‘BARKING is what dogs do (generically/habitually)’
 b. $\exists e [\text{barking}(e) \wedge \text{gen}(e) \wedge \text{Gen } x [\text{dog}(x) \rightarrow \text{ag}(e, x)]]$
43. a. Ajá ní gbó
 dog FOC.gen bark
 ‘DOGS bark generically/ It is dogs that bark generically or habitually.’
 b. $\text{Gen } x [\text{dog}(x) \wedge \exists e [\text{barking}(e) \wedge \text{gen}(e) \rightarrow \text{ag}(e, x)]]$

We can illustrate how the framework handles ambiguity with the popular example ‘Typhoons arise in this part of the Pacific’. The two popular readings associated with this sentence can be given as follows:

44. a. $\text{Gen } x [\text{typhoon}(x) \rightarrow \exists e [\text{arising}(e) \wedge \text{gen}(e) \wedge \text{ag}(e, x) \wedge \text{in}(e, \text{this_part_of_the_pacific})]]$
 b. $\exists x [\text{this_part_of_the_pacific}(x) \wedge \exists e [\text{arising}(e) \wedge \text{gen}(e) \wedge \exists y [\text{typhoon}(y) \wedge \text{ag}(e, y) \wedge \text{in}(e, x)]]]$

The basic difference between the logical forms in (44) is that one contains both generic individual and generic eventuality (44a) while the other contains generic eventuality and concrete individual. (44a) states that the generic individual ‘typhoons’ is such that it generically occurs in this part of the pacific, while (44b) states that this part of the pacific is such that some generic event of arising whose agent is concrete individual ‘typhoons’ occurs in it. Again, since (44b) does not contain a generic individual, Gen is not necessary. This also supports the idea that only generic individuals

require the binding of the Gen operator. Summarily, to account for the ambiguity of ‘Typhoons arise in this part of the pacific’, we can simply say that it has a reading which contains both generic individual and generic eventuality and the other which contains only generic eventuality and additionally concrete individual.

8. Conclusion

The overarching claim of this paper has been that in the kind of sentence that we regard as generic, two different sorts of things have generic interpretation. These are individuals and eventualities. This was demonstrated by pointing out that a sentence may contain both generic individual and generic eventuality but that both can occur without the other, thereby suggesting that this distinction is ontologically grounded. In other words, an ontologically grounded distinction was made between individual (entity)-driven genericity and eventuality-driven genericity. The classification of individuals into different categories in the system resolves the conflict of terminology that revolves around specific and non-specific NPs. But perhaps the most notable proposal in this part of the system is that there is a generic individual which is distinct from kind individual and concrete (normal) individual. The distinction made between particular (concrete) and generic eventualities also appears to be conceptually and empirically supported. It was shown that Yoruba makes this clear distinction and that this distinction determines how noun phrases in the language are interpreted. Using this framework that is grounded in neo-Davidsonian event semantics to describe Yoruba generic sentences led to two major issues that border on current theories of genericity and event semantics. First, it was suggested that there is evidence in Yoruba that Kimian states do have the E-position which the generic predicate *máa-ń* applies to. Second, it was shown that the most intuitive treatment of *máa-ń* in certain constructions in the language is to give it the semantics of the Gen operator, thereby suggesting that Gen is not silent in all contexts in Yoruba after all. Adopting the framework also provides the opportunity to avoid recourse to pragmatics and an avenue to account for not only the subject argument of generic sentences but also the object ones. The general prediction that the pre-theoretical framework in this paper makes is that the different kinds of individuals and eventualities that are identified are present cross-linguistically and that each language may have its own grammatical ways (which may be cross-linguistic) of expressing them. Since these proposals are pre-theoretical, further research will do well to test some of the predictions and refine the system advanced here accordingly.

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