A short note on the typology of exocentric compounds[1]

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Bauer (2008, 2010) provides a whole new way of looking at exocentric compounds, supplying, for the first time, both a typology and the requisite terminology for discussing exocentric compounds. Bauer's papers constitute a marked deviation from other approaches that perceive exocentricity as a marginal feature of the lexicon of a language, where it is attested. Appah (forthcoming) has subsequently shown that three of the five types posited by Bauer occur in Akan. This paper shows the current state of the typology of exocentric compounds and suggests the need for more research based on Bauer's typology to test the robustness of the typology, to see what other (sub)types may be proposed and, more importantly, to find the best way of eliciting data on exocentric compounds within and across languages.

Keywords: *Akan, bahuvrihi, co-compounds, exocentric compounds, Typology metaphorical, synthetic, transpositional,*

1. Introduction

In this brief note, I attempt to show how the typology of exocentric compounds put forward in two papers by Laurie Bauer (Bauer 2008, 2010) provides new direction in the study of exocentric compounds. In section 2, I present a quick overview of the types of exocentric compounds Bauer posits. I reveal the types that have been shown to occur in Akan, in section 3. Note that apart from a few comments on aspects of the work on Akan, my aim is not to critique the papers referred to in this paper. For that, the interested reader may consult Appah (forthcoming).

In section 4, I show, based on the languages studied by Bauer and data from Akan, what the typology of exocentric compounds looks like now. I conclude, in section 5, indicating the need for more research on exocentric compound to test Bauer's typology, to reveal what other (sub)types may be found in the languages of the world and to ascertain the best way of eliciting appropriate data on exocentric compounds.

2. Bauer's typology of exocentric compounds

Bauer (2008, 2010) provided a typology of exocentric compounds. In these papers, Bauer breaks new ground in the study of exocentric compounds, providing both a typology and, as he puts it, "a (provisional) terminology for discussing them" (Bauer 2008, 51-52). The types Bauer posits, on the basis of data from about fifty typologically diverse languages, are *bahuvrihi*, *exocentric synthetic*, *transpositional exocentric*, *exocentric co-compounds* and *metaphorical exocentric compounds*. Appah (forthcoming) observes that a close reading of

[1]I am grateful to Pavol Štekauer for his comments on an earlier draft of the present paper. I am solely responsible for any remaining weaknesses.

Bauer's work reveals that we have to posit subtypes of some of Bauer's types. Each type is defined and exemplified in the next several paragraphs.

Bahuvrihi is the type of compound in which the whole is not a hyponym of either constituent. Rather, it "expresses some salient facet of the denotatum" (Bauer 2008, 56). The compound *bahu vrihi* which means 'much rich' itself exemplifies this type of exocentric compound because it may refer to 'one who/which has much rice', although none of the constituents names a person.

Appah (forthcoming) has suggested that, based on the examples provided (Bauer 2008, 2010), we have to posit two subtypes of bahuvrihi compounds. The first is the ***possessive*** type whose meaning may be schematised as "entity which possesses X", where X stands for the denotatum of the compound. This is the commonest and, oft-assumed, only reading of bahuvrihi compounds (cf. Ralli 2013; Ralli & Andreou 2012; Andreou & Ralli 2015; Benczes 2015). The second type of bahuvrihi compounds is the ***causer*** type which refers to the entity that causes the denotatum of the compound. This is exemplified by the compound *red eye* 'cheap whisky/overnight flight' which does not denote anything that possesses *red eye* (cf. Bauer 2010, 167). Rather, the denotatum of the compound – cheap whisky or overnight flight – is that which causes the *red eye*.

Exocentric synthetic compound, unlike the endocentric synthetic compound, is the one in which there is no morpheme like English *-er*, which corresponds to the external argument of the verb. Rather, the head verb and its internal argument form a noun that denotes the entity that performs the role of the external argument. In the French compound *gratte-ciel* 'skyscraper' [lit. scratch-sky], only the verb and its internal argument are present but the compound as a whole refers to the external argument – that which scratches the sky.

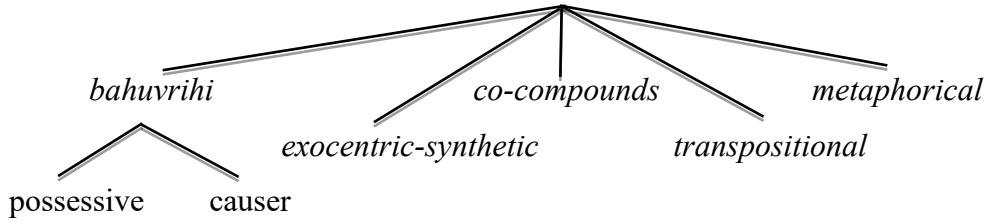
In a *transpositional exocentric* compound, it is only the word class of the output compound that is not overt (Bauer 2010, 171). That is, the meaning of the transpositional exocentric compound may be a compositional function of the meanings of the constituents. However, it is exocentric because it "functions as a member of an unexpected word-class" (Bauer 2008, 64). This makes it an extreme case of formal exocentricity, where there is no relation whatsoever between the word-class of the constituents and that of the output, making the exocentric synthetic compound look like conversion or transposition (Bauer 2008). For example, Swahili *ujauzito* 'pregnancy' (lit. come + heavy), which is a noun, is made up of a verb and an adjective.

Exocentric co-compounds is the class of coordinate compounds in which two constituents enjoy parity in terms of their importance in the compound. An example is the Chantyal compound *nhe thara* 'dairy products' [lit. milk buttermilk], (Bauer 2008, 2010; Wälchli 2005).

Metaphorical exocentric compounds, according to Bauer (2010), arise when a compound fails the hyponymy test because the head element or the compound as a whole has a metaphorical interpretation. Examples include *dust bowl* 'an area with no vegetation', *catlick* 'quick wash'. It may also arise when the head has metonymic interpretation (e.g., *phone neck* 'pain in the neck caused by using a phone', or the whole compound is metonymic (e.g., *bear skin* 'hat won by certain soldiers').

The foregoing shows that the typology of exocentric compounds presented by Bauer (2008, 2010), together with the subtypes suggested by Appah (forthcoming), has the shape represented on the taxonomic tree in (1).

(1) *Typology of exocentric compounds (Bauer 2008, 2010)*



3. Appah on Akan exocentric compounds

Appah (forthcoming) has shown that three of the five types of exocentric compounds posited by Bauer (2008, 2010) are attested in Akan. They are bahuvrihi, exocentric synthetic and transpositional exocentric compounds. Appah further identified two subclasses of bahuvrihi as well as exocentric synthetic compounds in Akan.

The two subclasses of bahuvrihi compounds are the possessive type (Table 1) and the non-possessive type (Table 2). The possessive type refers to the possessor of the denotatum of the compound.

Table 1: Possessive bahuvrihi compounds in Akan

Compound	Constituents	Element gloss	Meaning	Pattern
ìtsìr̀kɛ̀sé	ìtsír + kɛ̀sé	head + big	person with a big head	N-A
ìtsìr̀kɛ̀lɛ̀nkélɛ̀	ìtsír + kɛ̀lɛ̀nkélɛ̀	head + big	person with a big head	N-A
kɔ̀ǹtsɛ́ǹtsɛ́ǹ	kɔ́ǹ + tsɛ́ǹtsɛ́ǹ	neck + long	person with a long neck	N-A
hwɛ̀ǹkɛ̀sɛ́ɛ́	hwéné + kɛ̀sɛ́ɛ́	nose +big	person with a big nose	N-A
náǹkɔ̀ǹhwɛ́áá	náǹ-kɔ́ǹ + hwɛ́áá	ankle + thin	person with thin legs	N-A
ànàǹtá	à-náǹ + (ǹ)tá	PL-leg + twin	person with crooked legs	N-N
àsò kɛ̀tɛ́	àsó + kɛ̀tɛ́	ear + mat	person with big ears	N-N
tsìr̀pá	tsír + pá	head + bald	bald head person	N-V

The class of Akan non-possessive bahuvrihi compounds, which differ from the possessive type in not referring to the possessor of the denotatum of the compound, is so diverse in membership that is not easy identifying a common semantic feature that unites the members.

Table 2: Non-possessive bahuvrihi compounds in Akan

Compound	Constituents	Gloss	Translation	Pattern
àbírékyíré ábɔ́dwèsɛ́	àbírékyíré + àbɔ̀dwèsɛ́	goat + beard	elephant grass	N-N
ànòkórɔ́	ànó + kórɔ́	mouth + one	unity	N-Num
hwɛ̀ǹtéáá	hwéné + téáá	nose + slim	rosemary, a spice	N-A
m̀móá náǹ	m̀-móá + náǹ	PL-animal + leg	a lost course	N-N
ǹtr̀ɔ̀bànáḿ	ǹtr̀ɔ́bá + náḿ	egg plant + fish	a weakling	N-N
òdwáńkɔ́kɔ̀ɔ́	òdwáǹ + kɔ̀kɔ̀ɔ́	sheep + red	a dog (for the Kwahu tribe)	N-A

In the discussion of exocentric synthetic compounds, Appah (forthcoming) distinguishes a class of compounds that refer to the action/event, manner of carrying out the action, the fact

of the action occurring, the result of the action, etc. They are called action nominals exocentric synthetic compound. They are exemplified in Table 3.

Table 3: Action nominal exocentric synthetic compounds in Akan

Compound	Constituents	Gloss	Translation	Pattern
àdzè-sɛ́	àdzé + sɛ́é	thing + to destroy	wastefulness	N-V
èdzìbàǹdzí	èdzìbáń + dzí	food + to eat	(act of) eating	N-V
àdzè-tɔ́	àdzé + tɔ́	thing + to buy	(act of) buying	N-V
àdzè-tɔ́ń	àdzé + tɔ́ń	thing + to sell	(act of) selling	N-V
èdzìbàǹnòá	èdzìbáń + nòà	food + to cook	(act of) cooking	N-V
bàkà-nú	bàká + nú	lagoon + to stir	fishing in a lagoon	N-V
àdzè-sùá	àdzé + sùà	thing + to learn	education, learning	N-V
àsè-kyèrǽ	àsè + kyèrǽ	meaning + to show	interpretation/explanation	N-V

In these compounds, the internal argument of the verb assumes a generic non-referential function and the meaning of the whole compound can usually be worked out from the meanings of the constituent verb and its argument. However, it will not be accurate to claim that they are endocentric compounds because they fail the hyponymy test.[2]

The other class of exocentric synthetic compounds are the participant exocentric synthetic compounds. They may refer to any one of the participants involved in the action designated by the denotatum of the compound. Appah (forthcoming) identified three subtypes. The first is the agentive type, which refers to the agent of the action/event designated by the compound (Table 4).

Table 4: Agentive exocentric synthetic compounds in Akan

Compound	Constituents	Gloss	Translation	Pattern
kɔ́ǹsúó	kɔ́ + ǹsúó	fetch + water	one who fetches water	V-N
kɔ́àyíé	kɔ́ + àyíé	attend + funeral	one who attends funerals habitually	V-N
kɔ́ànyíná	kɔ́ + ànyíná	fetch + firewood	one who fetches firewood	V-N
bɔ́ɔ̀tiré	bɔ́ + etíré	plait + hire	one who plaits hair/hair dresser	V-N
díàwúó	dí + àwù	cause + death	murderer (this is a surname)	V-N
kúm̀kɔ́ḿ	kúḿ + kɔ́ḿ	kill + hunger	early-maturing maize variety	V-N
kyɛ́ǹkwáń	kyɛ́ + ǹkwáń	share soup	one who shares soup	V-N
díàbórɔ́	dí + àbórɔ́	engage in + wickedness	a malevolent person	V-N
díàsɛ̀m̀pá	dí + àsɛ̀m̀pá	do + good things	a benevolent person	V-N

The second is the patient type, which refers to the entity that undergoes the effect of the denotatum of the compound, as in Table 5. For example, the first compound in Table 5 refers to the entity that suffers a misfortune rather than the one that causes the misfortune, and the

[2]The compounds in Table 3 look like Romance V-N type compounds, where the composition of a verb and its object denotes the entity which carries out the action. Pavol Štekauer observes that these compounds, like French *garde-manger* 'keep food' = 'pantry', can have a number of different readings. However, these Akan compounds refer to the action only rather than the person involved in the action or any other entity, for that matter. The data in Table 4 rather look like the Romance agentive type (cf. Appah forthcoming).

meaning, patient, is external to the compound. The second refers to an animal that is located somewhere, rather than the one "locating" something somewhere.

Table 5: Patient exocentric synthetic compounds in Akan

Compound	Constituents	Gloss	Translation	Pattern
díàmìá	dí + àmìá	suffer + state of being helmed in	one who has suffered a misfortune.	V-N
dáàmònà	dá+àmònà	sleep+hole	an animal that dwells in holes	V-N

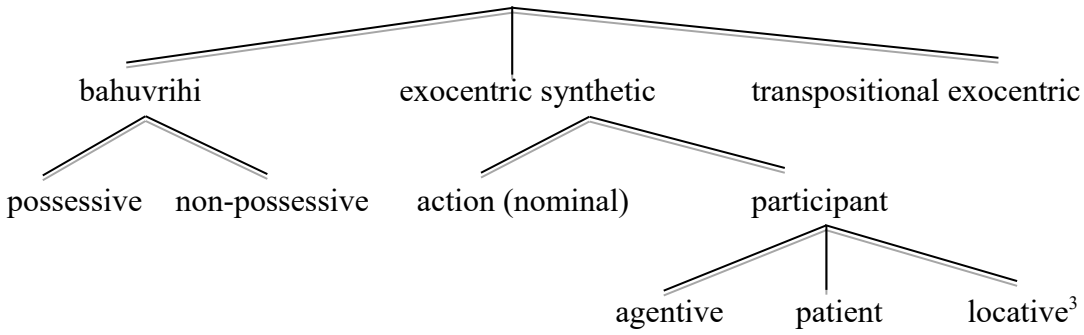
The third is the locative type, where the compound usually refers to a location in time or space, as in Table 6. The posited Akan locative exocentric synthetic compounds has an N-N structure in which the left-hand constituent mostly names a concrete object such as *àfí(é)* 'house/home', *m̀-mòfrá* 'children', *dùá* 'tree', etc., and, in one instance, an activity – *àkɔ́ḿ* 'ritual dance (of the traditional priest)'. The right-hand constituent, on the other hand, is usually a locative/relator noun like *àsé* 'underside/bottom' and *dó* 'top' (Osam, Duah & Blay 2011).

Table 6: Locative exocentric synthetic compounds in Akan

Compound	Constituents	Gloss	Translation	Pattern
àfíásé	àfí+àsé	house + under	prison	N-N
dùáásé	dùá+àsé	tree + under	name of a town	N-N
m̀mòfráásé	m̀-mòfrá+àsé	PL-child + under	childhood (time)	N-N
gáès-àsé	gáès-àsé	guys+under	place where guys meet	N-N
àkɔ́ḿásé	àkɔ́ḿ+àsé	ritual.dance + under	location of a ritual dance	N-N
ḿbóádúá dò	ḿbóádúá+dò	fishing net tree + top	place for keeping fishing nets/location of mboadua	N-N

Thus, the typology of Akan exocentric compounds is as represent on the tree in (2).

(2) Typology of Akan exocentric compounds (Appah forthcoming)



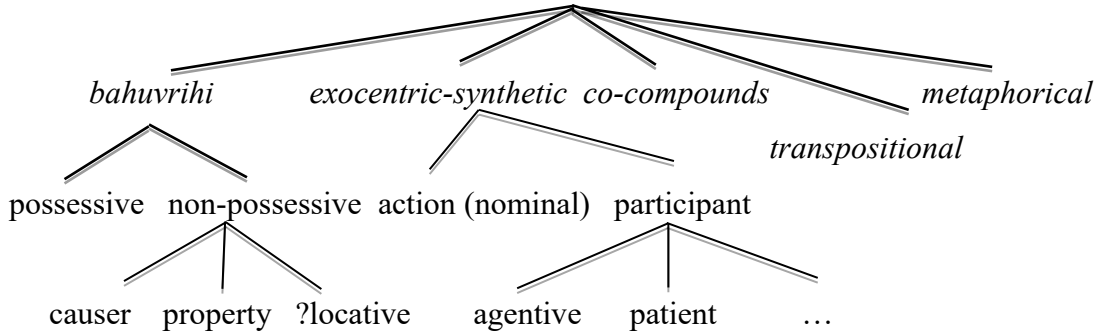
[3]Pavol Štekauer has pointed out the fact that the class called locative exocentric synthetic compounds is pretty unusual. This is because synthetic compounds are expected to contain deverbal heads. However, none of the exemplars meets this condition, making them look rather like primary compounds. I agree that the compounds do not fit the description and so the classification has to be modified, and I think they may be properly classified as a subtype of non-possessive bahuvrihi compounds. It is worth noting, though, that Grimshaw (1990, 70) observes that the head of the synthetic compound needs not be derived, but must be argument-taking.

4. The current state of the typology

As noted above, the class of Akan non-possessive bahuvrihi compounds is rather heterogeneous, and not easy finding a shared semantic feature for the members of the class. It seems to me, however, that those in Table 2 mainly refer to some property of the referent of the denotatum of the compound. Thus, we can tentatively identify a ***property*** type, which covers the varied membership of the non-possessive type posited for Akan (Appah forthcoming). This becomes the second sub-type of non-possessive bahuvrihi compounds, the first being the causer type posited for English. We may also treat the current locative participant exocentric synthetic compound as a subtype of non-possessive bahuvrihi compound.

Thus, the taxonomic tree in (3), which is based on Bauer (2008, 2010) and Appah (forthcoming), shows the state of the art on research on the typology of exocentric compounds based on Bauer's framework. The question mark before the locative type is meant to point to the yet unsettled affiliation of the type.

(3) Typology of exocentric *compounds (Appah forthcoming; Bauer 2008, 2010)*



5. Conclusion

Bauer (2008, 2010) has indeed provided us with both criteria and terminology for the discussion of exocentric compounds. This has enabled us to see beyond previous approaches to the study of exocentricity which equated exocentric compounds to the subtype of bahuvrihi, creating the impression that exocentric compounds constitute one homogenous class. Bauer has opened up a new research space that needs to be populated. As the study reported in Appah (forthcoming) shows, there might be so much to be discovered about the types and properties of exocentric compounds in and across languages and language families. There is need, therefore, for more studies on exocentric compounds, which build on the works mentioned in this paper, with the view to provide us with a clearer picture of the nature of exocentricity and the typology of exocentric compounds in the languages of the world.

To end, I would like stress that, in addition to helping us to answer the question of what other types of exocentric compounds may be found in the languages of the world, further studies should help us to deal with the even more fundamental issue of the best way to elicit data on exocentric compounds in and across languages.

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