PREDICATE GRAMMAR OR GRAMMAR
WITHOUT NOUNS AND VERBS

By

© K.B. Kiingi, PhD

kibuukakiingi@yahoo.com

3rd APRIL 2013

PREDICATE GRAMMAR OR GRAMMAR WITHOUT NOUNS AND VERBS

In my latest paper[1] I classified language signs into predicates (generated from semantic roles: change bearer B, nonchange bearer Z, reference R, comitative J, direction D, source S, mediate M, goal G, measure Q, member –of K, part-of W, augmentative –of U, equative-of I, diminutive L, dynamic contactor N, static contactor T, contacted A , causer C , caused E) , entities (mass or quantity a , set k , unit u , number n , space l , time t , matter m , abiotic r , biotic o , plant b , animal z , human h , perception e , emotion f , cognition c , psychomotor v , communication s, ratiocination p) , and situations (absolute α, relative ρ , contactive τ , causative ꭕ). It will be recalled that the domainal role theory stipulates twelve predicate classes as set out in (1).

(1)   [B]   [Z]
           [Bꭖ]   [Zꭖ]
           [NA]   [TA]
           CE[B]   CE[Z]
           CE[Bꭖ]   CE[Zꭖ]
           CE[NA]   CE[TA]

where ꭖ = R, J , D, S, M , G, Q, K, W, U, I, L . In (2) I record the generic characterization of a predicate, or situation.

(2)   (causative) { static / dynamic } { absolute / relative / contactive } { predicate / situation }

It will, furthermore, be recollected that one of the four conclusions drawn from the previous paper was to moot "the idea of a grammar without nouns, verbs, adjectives and propositions"[2]. Writing on the problem of word classification in sign languages, Waldemar Schwager and Ulrike Zeshan point out:

---

[1] "A Classification of Language Signs"
[2] *In his Elements of Symbolic Logic* (1947), Hans Reichebach undertook to logicize English grammar

In the description of undocumented spoken languages, determining the word classes and their properties is typically one of the first tasks. By contrast, sign language linguistics has been quite shockingly neglectful of this fundamental issue. Generally, signs are either labeled as "adjectives", "nouns" etc. on the basis of translation of the sign's meaning into a relevant spoken language-- DEAF in British Sign Language must be an adjective because *deaf* in English is an adjective-- or the PoS[3] system in American Sign Language (ASL), the most extensively documented sign language , is uncritically applied to a lesser-described sign language. Both approaches are, of course, neither methodologically nor theoretically viable.[4]

In line with Schwager and Zeshan's criticism, I am motivated to make two points. First, the Luganda verb **–somek-** is correctly rendered into English as "readable", whereby the Luganda verb and the English adjective are derived from the verbs **–som-** and " (to) read" respectively.

Second, hypothetically, a sign language in the Nootkan –speaking area would not attest to adjectives, for Nootkan does not attest to any. Therefore, if uncritical application of spoken language labels is to be discontinued, adoption of predicate grammar or grammar without spoken language word class labels promises to be good relief in that predicate grammar ensures a level playing field for both spoken and sign language linguists. To eliminate spoken language word classes , we start by discarding nouns (together with pronouns) and verbs in favour of arguments and predicates respectively. The elimination of adjectives, adverbs, prepositions, conjunctions, and determiners is exemplified in (3)-- (7)

(3a)   Kofi is **tall**.

(3b)   ZhKk

(4a)   Kofi runs **fast**.

(4b)   BhQa

(5a)   Uhuru walks **in** the park.

(5b)   BhRl

---

[3] PoS = part of speech
[4] In "Word classes in sign language", *Studies in Language* 32:3 (2008) 509-545, John Benjamin Publishing Company

(6a)   **If** Ali loves Fatuma, he will leave the UK.

(6b)   **If** Th_1Ah_2 , Bh_1Sl

(6c) $C\tau E\rho$

(7a)   **five** boys

(7b)   ZhKn = ZhK + ZKn

From (3) –- (7) it is clear that we substitute predicates for adjectives, adverbs, prepositions, conjunctions and determiners.

Classification of the visual-gestural signs of a sign language entails confirmation of the following hypothesis.

Hypothesis: In a sign language a definite proportion of the visual –gestural signs highly correlate with predicate classes.

The following tests implication suggests itself.

Test implication: If data on the twelve predicate classes are analyzed in terms of handshape, place of articulation, movement, orientation and nonmanual expression, then it will be established that there are sign parameter bundles that represent change, nonchange, absoluteness, relativity, contactivity, causativity, or noncausativity.

The test prediction translates tabularly in (8).

(8)

Sign Parameters / Predicate Classes	Handshape	Place of Articulation	Movement	Orientation	Nonmanual
[B]					
[Bχ]					
[NA]					
CE[B]					
CE[Bχ]					

CE[NA]					
[Z]					
[Zχ]					
[TA]					
CE[Z]					
CE[Zχ]					
CE[TA]					

Since sign languages are natural human languages, we are justified to assume that they are hierarchically structured. Disambiguating our language, we represent the hierarchy of a sign language as in (9).

(9)   Optotext
        Optosentence
        Optoclause
        Optophrase
        Optoword
        Optostem
        Optoroot
        Optoaffix
        Optosyllable
        Optosegment
        Optofeature

It should be noted that with the introduction of the prefixoid "opto-"(contrasted with " acousto-"), we avoid conceptual confusion which ensues , say, when we use the word "word" which can mean an "optoword" or an "acoustoword". What seems to be very challenging is the thesis that sign language does not only exhibit hierarchical structure but is also basic and analogous to spoken language, In other words, a signer will normally show the interrelatedness of "donor", "donation", beneficiary" , and " donate" as the equation in (10) shows.

(10b) $Ch_1E[Nh_2Ar]$ = $Ch_1E[NA]$ **donor**
                                    + $CE[Nh_2A]$ **beneficiary**
                                    + $CE[NAr]$ **donation**

10c) $Ch_1E [Nh_2Ar]$ = $Ch_1E[NAr]$ e.g. **food donor**
                                    + $CENh_2A]$ **beneficiary**

From the foregoing, it could be concluded that the problem of word classification in sign language(s) resides in the attempt if classifying optosigns as though they were in some sense reducible or mirrorizable as acoustosigns. Now, since a speaker using acoustosign and signer using optosigns or, more precisely reformulated: since an acoustosigner and their counterpart the optosigner have equal access to the world of predicates and arguments, classification of acoustosigns and optosigns should be conducted on the basis of predicates and arguments, this is precisely what predicate grammar purports to accomplish. It is high time we earnestly started looking at language as a medium of mental reflection of the physical world.