

Editorial Manager(tm) for Behavioral and Brain Sciences  
Manuscript Draft

Manuscript Number:

Title: Commentary on Jones.

Short Title: Conceptual structure is constrained functionally, not formally

Article Type: Commentary Article

Corresponding Author: Dr. Richard Hudson,

Corresponding Author's Institution: UCL

First Author: Richard Hudson

Order of Authors: Richard Hudson

Abstract: Kinship systems are best explained functionally, in terms of the conflicting needs of the society concerned, rather than in terms of universal constraints, whether OT or other; but OT is particularly unsuitable as it rules out taxonomies. A conceptual analysis of kinship terminology shows, not that 'grammar' extends to kinship, but that general cognition has the formal power to handle grammar.

Commentary on Jones

WORD COUNTS:

ABSTRACT: 61 words

MAIN TEXT: 972 words

REFERENCES: 110 words

ENTIRE TEXT (TOTAL + ADDRESSES etc.): 1191 words

## **Conceptual structure is constrained functionally, not formally**

by Richard Hudson

UCL (Gower Street, London WC1E 6BT)

020 83401253, [dick@ling.ucl.ac.uk](mailto:dick@ling.ucl.ac.uk), [www.phon.ucl.ac.uk/home/dick/home.htm](http://www.phon.ucl.ac.uk/home/dick/home.htm)

### ABSTRACT

Kinship systems are best explained functionally, in terms of the conflicting needs of the society concerned, rather than in terms of universal constraints, whether OT or other; but OT is particularly unsuitable as it rules out taxonomies. A conceptual analysis of kinship terminology shows, not that ‘grammar’ extends to kinship, but that general cognition has the formal power to handle grammar.

### MAIN TEXT

Jones argues that any kinship system has to find a balance between splitting and lumping – between the need to distinguish relatives who are different and the need to generalise about those who are similar. Needs such as these are part of any functional account of how languages change and develop (Nuyts, 2007) as ‘stable engineering solutions satisfying multiple design constraints’ (Evans and Levinson, 2009). It is easy to imagine a functional account of the data that Jones lays out: of why, for instance, English lumps cousins together while Seneca lumps older sisters with older female cousins. As Jones says, these differences are probably related to the social structures of the societies concerned, so we already have an explanation for them. Why, then, do we also need cognitive constraints, such as his proposed OT constraints?

One possible argument would lie in the process by which children learn kinship terminology, which, according to Jones, would be speeded up if the child knew the constraints and just has to learn their rankings (p. 35). This argument would work only if constraints were innate; but Jones himself thinks this is unlikely (p. 36). Moreover, we don’t need innate constraints in order to explain how the learning of one term and its meaning might facilitate the learning of a later term. An even easier explanation is that the later term’s meaning incorporates the meaning of the earlier one. For instance, when a child learns to lump a mother together with her sister, as in Seneca, a concept is created which can then be recycled in lumping together siblings and cousins.

Another possible argument would be that the constraints ‘generate’ (as Jones puts it) a limited range of kinship systems, thereby explaining why only these are found; similarly, but at the level of the individual, once a child has learned the correct rankings, the child’s mind ‘generates’ the correct meanings for the language’s potential kinship terminology. But once again the explanation fails if not only the

rankings but even the constraints themselves have to be learned. And once again alternative explanations are easily available: languages only have kinship systems that are socially useful, and children only learn the terminology to which they are exposed.

My conclusion is that general cognitive constraints on kinship terminology are redundant. On the one hand, kinship systems themselves evolve under social pressures in a society, and are best explained in terms of the social, communicative and cognitive benefits to individuals of learning to lump and split in one way rather than others. If kinship systems in different societies show differences, that is because different pressures apply to different human societies; and if there are limits to this variation, it is because these societies are subject to similar social pressures.

As for kinship terminology, this evolves to fit the kinship system, so once the system is explained, we are already heading for an explanation for the terminology. It's true that the fit may be imperfect; for example, there may be gaps in the terminology such as the lack of an English equivalent for the everyday German word *Geschwister*, meaning 'sibling'. However, it seems unlikely that any general constraint could predict this difference between English and German. (One explanation we can't give is that a term isn't needed because the concept doesn't exist in the English kinship system; this must be wrong because we can only define 'cousin' in terms of 'sibling', as the child of a sibling of a parent.)

If constraints of all kinds are redundant, there's little point in discussing the merits of particular proposals for constraints such as the OT account that Jones develops. However, it is worth pointing out one general limitation of the OT mechanism when applied to the mapping between concepts and words. At least as presented here, it seems to exclude the possibility of a taxonomic organisation of meanings. For instance, if the ranking of DISTINGUISH SEX explains why we have to distinguish mothers from fathers, how can we accommodate the term *parent*? The fact is that, at some points, languages typically give us a choice between splitting and lumping; so we can either split our mother from our father, or we can lump them together as our parents. These lumped concepts don't seem to be covered by Jones's analysis, but they play an important part in the English system because we recycle them in defining more distant relatives following the pattern suggested above for 'cousin'; so an aunt is the sister of a parent and a grandfather is the father of a parent.

In spite of these reservations about the approach that Jones takes, I agree totally that 'The study of kin terms ... leads beyond kin to "fundamental structures of the human mind"' (p. 36). Kinship terminology has featured in some of my own work (Hudson, 1996:85-88, Hudson, 2007:237-8, Hudson, 2010: 47-50) as an example of what I call 'I-society', our mental representation of society, comparable with Chomsky's 'I-language'. Like Jones, I believe it is important to consider the conceptual structures that we use for kinship, and to consider what they tell us about the mind and about language. But my argument runs in the opposite direction from his. Whereas he finds a 'grammar' in kinship terminology, I find structures like those of kinship in grammar; for example, as he points out, both kinship and grammar allow recursion. Moreover, my conclusion is that if our minds can cope with the complexities of I-language, then they also have the ability, without any specialised 'modules', to cope with the complexities of language (Hudson, 2009, Hudson, 2010:50, 160).

In short, the best explanation for the facts of language, including kinship terminology, is not OT or any other theory specific to language, but a general theory of cognition combined with a general theory of the functional demands of communication.

## References

- Evans, Nicholas and Levinson, Stephen 2009. 'The Myth of Language Universals: Language diversity and its importance for cognitive science', *Behavioral and Brain Sciences* 32: 429-492.
- Hudson, Richard 1996. *Sociolinguistics (Second edition)*. Cambridge: Cambridge University Press
- Hudson, Richard 2007. *Language networks: the new Word Grammar*. Oxford: Oxford University Press
- Hudson, Richard 2009. 'Word Grammar', in Bert Heine & Heiko Narrog (eds.) *The Oxford Handbook of Linguistic Analysis*. Oxford: Oxford University Press, pp.951-983.
- Hudson, Richard 2010. *An Introduction to Word Grammar*. Cambridge: Cambridge University Press
- Nuyts, Jan 2007. 'Cognitive linguistics and functional linguistics', in Dirk Geeraerts & Hubert Cuyckens (eds.) *The Oxford Handbook of Cognitive Linguistics*. Oxford: Oxford University Press, pp.543-565.