# Gellner's Ideal Kinship Language And the Connection between Biological And Social Relatedness

# **Patrick Heady**

Max Planck Institute for Social Anthropology, Halle

#### ABSTRACT

Gellner's concept of an ideal kinship language anticipated later developments in methods for recording kinship connections, and also sparked a controversy about the relation between biological and social kinship. Though the debate has moved on, the topic has remained controversial. I argue that the idea of an ideal kinship language offers a way of analyzing the relationship between alternative theories, and opens up the possibility of a more integrated approach.

#### THE ORIGINAL IDEA

In 1957 Gellner published an article in the journal *Philosophy of Science* on 'Ideal language and kinship structure'. The article drew a strongly worded critique from R. Needham (1960) to which Gellner (1960) replied with an article on 'The concept of kinship'. This exchange in turn drew a comment from J. A. Barnes (1961), to which Gellner (1963) responded with a paper on 'Nature and society in social anthropology'. Gellner's three papers are reprinted as chapters 11, 12 and 13 in *The Concept of Kinship* (Gellner 1987).

Part of the background to the first paper was Gellner's opposition to the Oxford school of 'ordinary language' philosophers (set out at length in his book *Words and Things* [Gellner 1959]). In his 1957 paper he refers back to a previous philosophical notion of an

Social Evolution & History, Vol. 2 No. 2, September 2003 75–87 © 2003 'Uchitel' Publishing House

'ideal language'. An ideal language for a particular topic area would be one that was comprehensive and unambiguous, and which made it possible to distinguish statements which were true by definition (given the assumptions which define the field of interest) from those which were true as a matter of fact. Gellner writes that he is unsure whether the notion of ideal language is fully coherent and whether it can be realised in practice, but considers that, if it can, kinship would be a suitable field to develop such a language.

The reason for this is that the possible relationships of physical descent have a simple underlying structure. They all arise from the fundamental triadic relation whereby one woman and one man beget a child. Any statement of a more distant descent relationship can be analyzed into a string of these basic triadic relationships. Gellner therefore proposed that relationships of this kind should be taken as defining the field of kinship. The first component of the ideal language would be a system of labeling each individual's relations to his or her ancestors so precisely that for any two members of the society it would become instantly clear from these labels (Gellner refers to them as 'names') what, if anything, the biological relationship between the two individuals was. In one of the later papers Gellner compares these 'names' to coordinate references in physical space. They would make it possible to identify one aspect of the kinship structure of the society concerned: namely the relationship between (physical) descent and marriage (in the sense of reproductive partnerships).

Gellner wanted the ideal kinship language to be able to describe another aspect of kinship structure as well: namely the correspondences between physical kinship and social roles. To do this the language would have to incorporate expressions referring to these roles. However these statements would be contingent: unlike the statements about biological descent they would not define the field of kinship.

Gellner did not provide detailed specifications for either aspect of his ideal kinship language. However, if it could be constructed, he thought that certain benefits might result. By providing a transparent method of specifying relations of shared descent, the language would make it possible to record exactly how any given kinship terminology divided up the space of possible relationships, and to compare different kinship terminologies in a precise way. It would also make it possible to compare the kinship structuring of social roles between different societies without ambiguities introduced by the incommensurability of the societies' own kinship terminologies. It might also clarify the connections between kinship structure and demographic processes, and even help in the analysis of genetic data (presumably by providing a more accurate description of the degree of physical relatedness between individuals than the local kinship terminology).

# THE SEQUEL

One aspect of Gellner's paper can be seen as a remarkable anticipation of developments in the field of kinship over the following four decades. Since he wrote, there have been successful efforts to devise more precise and flexible notations for describing underlying kinship connections, in order to compare the ways these are classified by different kinship terminologies (D'Andrade 1995: 19–28). Techniques have also been developed to describe networks of descent and marriage relationships, and to identify patterns (or structures) within them, independently of whether these structures are recognised by the local kinship terminology (Schweitzer and White 1998). The contributions in Godelier *et al.* (1998) provide an overview of the progress achieved to date in these branches of kinship studies.

Gellner's paper anticipated future developments in another way as well – by provoking a controversy with Needham and Barnes that raised issues which, when revisited by Schneider (1984) two decades later, had a major impact on the study of kinship relations as cultural systems. Although I am basing this account exclusively on Gellner's papers (reproduced in Gellner 1987), it is clear from his ripostes that the main line of the criticisms made by Needham and Barnes was that kinship systems in other societies should be analysed in terms of their own categories (including, in Barnes's view, their own ideas about biological descent) rather than in terms of the observer's western ideas about biological descent. The tone of the exchange between Needham and Gellner was extremely aggressive – as well, as being, on Gellner's side at least, very witty and amusing. The following extract (Gellner 1987: 181) gives the flavour.

There are also certain criticisms of Needham's which are wholly unanswerable – namely the unspecific ones. He darkly hints at 'other erroneous or questionable points', and later at mistakes in another work of mine. (For my part, I do not wish to suggest that Needham committed any errors other than the sixteen which I have explicitly indicated.)

With this focus – started, it seems, by Needham – on who got what wrong, it is not surprising that Gellner should concentrate on the task of exonerating himself from the mistakes alleged by Needham, by showing that he rather than Needham had correctly defined the relationship between social and biological kinship. Thus to Needham's assertion that 'Biology is one matter and descent is quite another of a different order' he responds by pointing out that the idea of biological descent is implicit in anthropologists' operational definition of descent – since, if the local concept which the anthropologist identified with descent did not have some overlap with physical descent, the anthropologist would not have treated the concept as descent in the first place (Gellner 1987: 163–164).

In context this is fair enough, and Gellner's insistence that, except for its reference to biology, there is nothing to identify a concept as part of 'kinship' foreshadows Schneider's later argument that the fact that two cultural sub-systems, in different societies, are both connected in some way to physical procreation need not mean that they have anything else in common. Indeed, in the third of his papers, Gellner noted the possibility that some other analytic framework might ultimately prove more useful (Gellner 1987: 198). Nevertheless, this quarrel over definitions was a distraction from Gellner's initial focus on devising a conceptual system (the ideal kinship language) which could be used to explain the connections between social and biological kinship. From this point of view, it would have been better to consider the kind of predicates an ideal kinship language would need in order to describe the most important features of these connections.

Gellner does return to the question of explanations at the end of the third paper, in which he relates the disagreements between himself and Needham to a more general opposition between two philosophical views on how to explain social phenomena (Gellner 1987: 201–202). His own view he summarises as follows:

societies are situated in physical nature (which of course includes the biological natures of their members); anthropological explanations give accounts, amongst other things, of how societies cope with nature, and indeed of how they cope in it. Hence anthropologists cannot claim to be professionally oblivious of physical and biological facts (as opposed to their social images). For they are concerned with the social impact of physical facts as they are, and not merely as they appear.

The contrasting view, according to Gellner, is a kind of idealism which denies the rootedness of society in physical facts. He identifies two sources of this idealism. The first is that it provides a convenient excuse for anthropologists wishing to avoid mastering the academic disciplines that deal with these material constraints. The other is an aversion to deterministic explanations: 'if only social phenomena were wholly autonomous, if only their explanations never had to invoke extra-social realities, this would have the gratifying consequence of obviating disagreeable possibilities such as physical determinism'.

#### CAN THE IDEA OF AN IDEAL KINSHIP LANGUAGE CLARIFY CONTEMPORARY DEBATES ABOUT SOCIAL AND BIOLOGICAL KINSHIP?

One conclusion that we can draw from this story is that, although Gellner never actually constructed his ideal kinship language, the attempt to specify its features turned out be a very useful way of defining the points at issue between different approaches to kinship studies. The issues it raised are still relevant today. Some writers still detect a disjunction between the analysis of kinship as a system of cultural meanings, and its analysis as a basis of practical interaction in the material world (Schweitzer 2000). A widespread aversion to determinism is a continuing feature of academic anthropological culture, as shown by the debates recorded in Ingold (1996), and seems to be an important factor in the widespread opposition by anthropologists to ideas emanating from socio-biology and evolutionary psychology over the last couple of decades (Whitehouse 2001).

All the same the debates have moved on in some respects. Despite his affirmation of determinism, Gellner was far from the positions taken by evolutionary psychologists today. He rejected the idea of innate kinship sentiments - while implicitly acknowledging its popular appeal – as a mere myth of our own society, and emphasized that 'if there is an affinity or any other behavioral relationship between kin of given categories, then this is never a consequence of the physical kinship relationship as such, but of the social relationships sustaining it' (Gellner 1987: 171). In recent decades cultural accounts of kinship have been greatly influenced by Schneider's (1968) emphasis on the notion of shared substance, and Lévi-Strauss's (1984) notion of the house as a basic unit in some kinship systems. Theories of the practical role of kinship in economic and social strategies have also multiplied. Lévi-Strauss's (1969) alliance view of marriage was only just beginning to influence English anthropology at the time Gellner wrote. Since then Goody's (1976) views on the relationship between kinship, production and property systems have influenced the growing volume of studies on the historical anthropology of kinship systems. Bourdieu (1980: 249-331) and Bloch (1975) have offered analyses of kinship strategies which combine the alliance and property-centred perspectives, and have also suggested links between practical strategies and symbolic culture.

It seems to me that the time is ripe for another look at the idea of an ideal kinship language. Like Gellner, I am not proposing actually to construct one, but rather to discuss the kinds of empirical statement that such a language needs to allow for, if it is to enable us to assess the different theoretical approaches discussed above. The hope is that this will provide a way of clarifying the points at issue between the different theoretical approaches, and also of exploring possible connections between them – including the extent, and kinds, of determinism they may imply.

In order to keep the discussion focused, the remainder of this paper will illustrate these points in relation to the specific topic of marriage patterns and incest prohibitions. The substantive question is why people do or do not choose marriage partners from among people with whom they have various kinds of pre-existing kinship connection. The test of the theories is whether they successfully predict the actual choices people make.

I will consider three broad theoretical approaches. One is the idea that the restrictions should be understood as cultural ideals, to be explained in terms of ideas about what relatedness means. The second approach is instrumentalist: in this view the choice of marriage partner is based on strategic calculations on the part of the partners or their families, and apparent incest rules reflect these calculations. The third position is a variant of evolutionary psychology, which allows for the importance of both cultural factors and rational calculation but adds a third factor, namely that constraints on the choice of marriage partner may be imposed by innate features of human psychology.

What kinds of empirical statement can help us to assess these theoretical approaches? In each case we can start by asking what role would be played by the first component of Gellner's ideal language: namely data on real biological descent relationships. We should then go on to ask what other kinds of information we need in order to assess the approach concerned.

# CULTURAL EXPLANATIONS

In the case of the cultural approach, the first thing we need to understand, for any particular society, is how the relevant kinship categories are defined. Detailed information on actual descent relationships provides a useful starting point. But it needs to be supplemented by information about various forms of quasi-kinship: including ritual kinship, adoption, and possibly extending to such kinship-like relationships as having been suckled by the same woman, eating food from the same cooking pot, or spending time in the same dwelling space. These relationships could be mapped onto the data set of biological descent relationships by including codes to link individuals who are related by ties such as adoption.

The next questions for the cultural approach are then which of this expanded set of relatives are ruled out as marriage partners by incest restrictions, and what is the cultural rationale for this. If no explicit or implicit principles underlie the set of restrictions, then the cultural approach could be said to fail. However, in practice principles often (perhaps always) can be found. They often turn on ideas of avoiding sexual relationships with people to whom one is linked by ties involving shared physical substance or shared residence (Carsten 2000; Carsten and Hugh-Jones 1995). These ties could also be entered in the ideal language data base and correlated with both marriage rules and actual marriage practice.

Even if the restrictions form part of a coherent cultural system they may not always be followed. Ethnographies often contain accounts of sexual relationships, or even marriages, that violate the accepted norms – either because of mutual attraction, or because an incestuous marriage makes sense in strategic terms. Such incestuous marriages could easily be traced in the enhanced ideal kinship language data set described in the previous two paragraphs. The rarer they were, the more consistent the data would be with the claim that patterns of marriage with existing kin were culturally determined. However, not even total adherence to the cultural rules would demonstrate that culture was the sole determining factor – since the cultural rules themselves might be a rationalization of choices made on other grounds.

#### INSTRUMENTAL EXPLANATIONS

Two kinds of strategic calculation are typically advanced. In one case the objective is the conservation of property, and the strategy is to narrow the set of people who can make a claim to it. In the second case the objective is to maximize the extent of social ties, and the strategy is, almost be definition, the opposite (Schweitzer 2000).

These strategies connect with marriage practices in two ways. One way is direct: a marriage with a close relative means that the property rights of both partners remain within a relatively narrow kin group, while a marriage outside the existing kin group widens the web of social connections. The second way is indirect. Obligations to kin can be limited by not recognizing more distant connections as truly related, while social networks can be extended by the opposite strategy of extending recognition to more distant kin, and giving these more distant ties something of the force of ties with members of the immediate family. In many cultures, one of the signs that relatives consider themselves bound by close moral ties is that they treat their relationship as being bound by an incest taboo (*e.g.* Evans-Pritchard 1951: 46–48). Thus the wider the cooperating group of kinsmen, the wider the bounds set by the incest taboo.

In order to see whether these strategic considerations actually do affect marriage patterns within a given society, we need information about property ownership, inheritance rights, and the potential benefits of co-operation, as they affect the individuals and families involved. Once this information was added to the data set encoded in our ideal language, we could see whether preference for close or distant marriages (in kinship terms) was related to the strategic benefits involved. When comparing cultures we could see whether cultures with high levels of property were more likely to favour marriages with close kin. This point has been investigated by Goody (1976) using 'Ethnographic Atlas' data, and the answer is that there is some association between endogamous marriage and economic systems involving the accumulation of substantial property, but the association is by no means complete.

# EXPLANATIONS BASED ON EVOLUTIONARY PSYCHOLOGY

Evolutionary psychology makes the claim that various behavioral patterns which would promote the successful reproduction of the genes of people (or other organisms) that behaved in the way concerned, are likely to be genetically innate in all human beings. Two of these behavioral patterns are specifically related to kinship: namely kinship altruism, and the avoidance of sexual relationships with close kin. (It is not my purpose to discuss why these patterns are biologically advantageous. Those interested can consult Wilson [1999: 186, 192]. However, supporting evidence that these behaviors are part of our inherited repertoire is provided by the fact that they are found in all primate species [idem, p. 192]). Another adaptive behavior pattern involved in kinship relationships, which could well be innate, is reciprocity – though the arguments in favor of it being part of our inherited psychological make-up do not depend on those involved being kin (Axelrod 1984: Cosmides and Tooby 1992).

How could the data recorded in our ideal kinship language enable us to test these claims? At first sight the claim that kinship altruism and incest avoidance are biologically given human universals suggests that they should be closely associated with the degree of biological relatedness, in a way that varied very little between societies. In the case of incest avoidance, this hypothesis could be tested on the data about biological relatedness and marriage which forms the core set of statements in the ideal kinship language. In order to test the statement about kinship altruism it would be necessary to add information about helping behavior to the data base. We all know what the result would be: in every society we would find strong associations between biological relatedness and both incest avoidance and helping – but the precise patterns would vary a good deal between societies, in ways that reflected cultural factors and differences in the relative pay-offs of property- and alliance-based strategies. On the face of it, these results would provide little support to the idea of an innate basis for kinship behavior.

However, this is misleading - because it presupposes that evolution must have favored behavior patterns that were determined by actual biological relatedness. In fact this is very unlikely. Actual biological relatedness is almost always in doubt, and before the technical developments of recent decades an accurate, but fallible guess would have required careful sifting of a good deal of evidence. It is unlikely that this could have been done by creatures who had not yet evolved the use of language - and yet we know from observations on other primates that kinship altruism and incest avoidance must have developed long before the advent of language. Such behavior patterns could only have evolved if the stimulus for them was not kinship as such, but a set of natural signs that were regularly associated with kinship. Amongst these the most obvious would be sexual intercourse and suckling - two activities that involve the sharing of biological substance. Physical closeness during childhood - even membership of the same band and eating together would be similar signs of relatedness.

In fact, this is what evolutionary psychology predicts – namely that altruism and incest avoidance will be correlated with indicators of biological relatedness, not with relatedness itself (Wilson 1999: 194–195). To assess these predictions we would need to add

data on these indicators to the data set described in our ideal language – unless we had already done so when assembling the evidence needed to assess the cultural rationales for varying incest prohibitions.

## CONCLUSION: THE POSSIBILITY OF A COMBINED APPROACH

Indeed the same observations that would confirm the coherence of cultural systems based on ideas of shared substance and coresidence, would also confirm the universal relationship between these ideas and the practices of incest avoidance and kinship altruism. Explanations from culture and explanations from innate psychology appear to be complementary rather than contradictory. The reason for this is that the signs of biological relatedness can be deliberately manipulated, so that imagery of shared substance and coresidence is made to conform to the particular pattern of lineal, bilineal or cognatic kinship that prevails in the society concerned. The imagery could of course also be adapted to reinforce the pattern of kinship links that a particular group (or even individual) has adopted on instrumental grounds.

A further implication is that the existence of deterministic relationships in the psycho-biological part of the system (those between signs of relatedness and patterns of behavior) does not remove the scope for cultural variation or for individual manipulation of the signs and rules. What it does do, is provide the possibility of a coherent explanation of the relationship between the pragmatic and symbolic aspects of kinship.

It would be a pleasing irony if the idea of an ideal kinship language, whose first appearance stimulated a sharper theoretical separation between biological and social approaches to kinship analysis, could ultimately provide a vehicle for their theoretical reintegration.

#### REFERENCES

Axelrod, R. M.
1984. *The Evolution of Cooperation*. New York: Basic Books.
Barnes, J. A.
1961. Physical and Social Kinship. *Philosophy of Science* 28: 296–299.
Bloch, M.
1975. Property and the End of Affinity. In Bloch, M. (ed.) *Marxist Analyses in Social Anthropology*. ASA Studies 2. London: Malaby Press.
Bourdieu, P.

1980. Le sens pratique. Paris: Les Éditions de Minuit.

Carsten, J. (ed.)

2000. Cultures of Relatedness: New Approaches to the Study of Kinship. Cambridge: University Press.

Carsten, J., and Hugh-Jones, S. (eds.)

1995. About the House: Levi-Strauss and Beyond. Cambridge: University Press.

Cosmides, L., and Tooby, J.

1992. Cognitive Adaptations for Social Exchange. In Barkow, J. H., Cosmides, L., and Tooby, J. (eds.) *The Adapted Mind: Evolutionary Psychology and the Generation of Culture*. New York: Oxford University Press.

D'Andrade, R. G.

1995. The Development of Cognitive Anthropology. Cambridge: University Press.

Evans-Pritchard, E.

1951. *Kinship and Marriage among the Nuer*. Oxford: Clarendon Press. Gellner, E.

1957. Ideal Language and Kinship Structure. *Philosophy of Science* 24: 235–242.

1959. Words and Things: a Critical Account of Linguistic Philosophy and a Study of Ideology. London: Gollancz.

1960. The Concept of Kinship. Philosophy of Science 27: 187-204.

1963. Nature and Society in Social Anthropology. *Philosophy of Science* 30: 236–251.

1987. The Concept of Kinship – and Other Essays on Anthropological Method and Explanation. Oxford: Basil Blackwell.

Godelier, M., Trautman, T., and Tjon Sie Fat, F. (eds.)

1998. Transformations of Kinship. Washington: Smithsonian Institution Press. Goody, J.

1976. Production and Reproduction: a Comparative Study of the Domestic Domain. Cambridge: University Press.

Ingold, T. (ed.)

1996. Key Debates in Anthropology. New York: Routledge.

Lévi-Strauss, C.

1969. *The Elementary Structures of Kinship*. Boston: Beacon Press. 1984. *Paroles données*. Paris: Plon.

Needham, R.

1960. Descent Systems and Ideal Language. *Philosophy of Science* 27: 96–101.

Schneider, D.

1968. American Kinship: a Cultural Account. Englewood Cliffs, N.J.: Prentice-Hall.

1984. A Critique of the Study of Kinship. Ann Arbor: University of Michigan Press.

Schweitzer, P. (ed.)

2000. The Dividends of Kinship: Meanings and Uses of Social Relatedness. New York: Routledge.

Schweitzer, T., and White, D. R. (eds.)

1998. Kinship, Networks and Exchange. Cambridge: University Press.

Whitehouse, H. (ed.)

2001 The Debated Mind: Evolutionary Psychology versus Ethnography. Oxford: Berg.

Wilson, E. O.

1999. Consilience: the Unity of Knowledge. New York: Vintage Books.