

## **Biological and social aspects of kinship**

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There is increasing interest on the part of demographers and family historians in kinship connections that reach beyond the reproductive couple and the co-residential household. Biological and social theories of kinship offer different ways of understanding these connections. Biological (a.k.a. evolutionary) theories use the idea of “inclusive fitness” to explain how patterns of mutual care, partner choice, and property transmission may vary in relation to each other and to the economic environment. Socio-cultural theories of kinship look at family ties as instances of wider patterns of social classification and interaction. Long thought – particularly by socio-cultural anthropologists – to be incompatible, there have recently been significant attempts at a rapprochement between the two perspectives.

In these two sessions we hope to contribute to this process – and demonstrate its relevance to historical and demographic concerns – with the following papers.

### **SESSION 1**

Paper 1. Murray Leaf, University of Texas at Dallas, USA

**“Prohibiting the inconceivable: the terminological basis of the definition of incest”**

Abstract to follow.

Paper 2: Sayana Namsaraeva: MPI Halle, and Institute of Oriental Studies, Russian Academy of Sciences, Moscow

**“The ambiguous use of avuncular terminology in defining Buryat diaspora relations with homeland and host country”**

#### **Abstract**

The significance of the relationship between mother’s brother and sister’s son (avunculate) in kinship has been one of the most discussed topics in the history of social anthropology. The fact that it faded from the major topics of the discipline after the 1960s, when much of scholarship on the topic was produced (see R. Lowie 1919, A. Radcliffe-Brown 1958; J. Goody 1959; C. Lévi-Strauss 1949 and others), does not mean that the question does not require new approaches anymore, especially if ethnographic material continues to bring more evidence of its importance.

Maurice Bloch and Dan Sperber in their recent article again drew attention on the peculiar mother’s brother and sister’s son relationship. They remark that “even today recent ethnographers are repeatedly struck by the prominence accorded to this relationship by the people they have studied in many different places...” (2006:116). My ethnographic material also turned my attention to the importance of this relation. In this paper I present two cases of how Buryat diaspora communities in Mongolia and China involve the mother’s brother and sister’s son relations in a wider and more flexible classificatory sense than just biological relatedness. Specifically I focus on how they metaphorically extended relations of avunculate to define their ambiguous relationship with homeland and host country. This local phenomena shows that

kinship terminology continues to be used in a wider social context to express power relations, social inequality and conflicts.

Paper 3: Austin Hughes, University of South Carolina, USA

**“Biological realism in kinship studies.”**

**Abstract**

Cultural anthropologists have treated kinship relations as a symbolic system divorced from biological reality. However, evolutionary theory provides reasons for predicting that animals (including humans) will interact differently with other individuals on the basis of biological relatedness (assuming that individuals have some method of determining relatedness, even approximately). I examine data that test this prediction, and discuss possible applications of an understanding of biological kinship in dissecting and predicting human social interactions.

Paper 4. Björn Vollan, University of Mannheim, Germany

**“The difference between kinship and friendship: (Field-) experimental evidence from Namibia on trust and punishment”**

**Abstract**

This paper continues a tradition of using economic games in field settings to test evolutionary theories of cooperation. It reports on a one-shot trust experiment with and without third party punishment (TPP) where participants were either paired with one of their reported family members, a friend or an unrelated villager. So far, microeconomic experiments have not investigated kinship in an anonymous way and also its relation to punishment is unknown. Experimental trust and trustworthiness varies between only twenty per cent when playing with a villager and nearly eighty per cent when matched with a family member. TPP is positive and significant for first and second player in interactions among villagers and friends but detrimental among family members.

**SESSION II**

Paper 1: Douglas White, University of California, Irvine, USA

**“Kinship networks from social and genetic perspectives”**

**Abstract**

A simple way to construct kinship networks from genealogical data that enables analysis of kinship structure and genetic transmission is to let mated pairs or unmated individuals be nodes and the arcs between nodes be the link between child and parent. This parental-graph forms a directed asymmetric graph (p-DAG). Individuals may have more than one line of matings or progeny. Pseudo- or p-generations are constructed by line-length minimization of the p-DAG. These are not unique whenever generational length differs for males and females. P-graph frequencies of types of mating (or marriage) and their overlaps are unique. Given the numbers of offspring of distinct mating types their effects of inbreeding can be partitioned. A simulator such as Repast, using random permutations of who mated with whom within pseudo-generations, is used to compute, for a given p-DAG, a statistical baseline for random mating,

given the composition of families by generation within the network. P-DAGs and computations are illustrated for real populations, including expected frequencies for matings classified by type and departures from expectation that are statistically significant. This allows for study of kinship structure and how structured deviations from random mating affect inbreeding and avoidance of genetic inbreeding effects for specific populations and for kinds of kinship structure. Findings from the case studies have relevance to historical and demographic concerns.

Paper 2: Aksana Ismailbekova, MPI Halle and American University of Central Asia, Kyrgyz Republic

**“Renewing the bone: kinship categories and kinship practice in rural Kyrgyzstan”**

**Abstract**

When Kyrgyz see each other, the first question they ask is : "Where are you from?" When this part is clarified, whether from the south or the north, specification is followed further: "Who are you?" – meaning the descent. Once this part is clarified, a question goes on – “which lineage do you belong to?” And after –“Who is your grandfather? And who is your father?” In this way, they are able to place each other, either as patrilineal kin or as affines, in a segmentary lineage system – in which the same terms are used for close biological relationships and for classificatory social relationships.

In this paper I investigate the way that kin and affinal relationships are mapped onto territory at the level of the household, the village and the region – and how they are also used to provide a conceptual framework for employment relationships. Finally I discuss the formation of marriage ties, and how the process of kidnap is accompanied by “the renewal of the bone” within the husband’s patrilineage.

Paper 3: Patrick Heady, Max Planck Institute for Social Anthropology, Halle, Germany

**“Words and lives: the influence of kinship terminologies on European marriage and residence patterns”**

**Abstract**

European kinship terminologies typically treat marriage partners as implicitly equivalent for the purpose of tracing kinship connections – but differ as to whether the partnership in question is that of the reference person (ego), that of ego’s parents, or both. Network data collected from nineteen field sites across Europe in the course of the EU-funded KASS project (\*) made it possible to compare marriage and residential patterns with national kinship terminologies. The results show a sharp and statistically significant correlation between terminologies, household structures and marriage patterns. However, residence and marriage are equally strongly influenced by the environment (whether urban or rural) and, within rural areas, by the contrast between farmers and non-farmers. I argue that kinship terminologies should not be seen as the expression of definite social rules, but rather as encoding certain implicit assumptions which help to shape people’s life strategies in the varying practical circumstances which they face.

(\*) [www.eth.mpg.de/kass/eu](http://www.eth.mpg.de/kass/eu)

Paper 4: Neha Gondal, Rutgers, USA

**“With(out) a Little Help from my Siblings: A Cross-Cultural Investigation of the Relationship between Sibsize and Social Network”**

## **Abstract**

Recent trends indicate a near pervasive decline in fertility rates around the world. Decreasing fertility rates imply that, on average, individuals have fewer siblings than before. While considerable research has been devoted to understanding the influence and salience of siblings over the life-course, the literature has largely remained silent on the relationship between the number of siblings one has (sibsize) and the overall structure of social relationships within which one is embedded. By structure of relationships I mean the number, form, and variety of an individual's network of primary ties including those with family, friends, neighbors, and colleagues. Sibsize can be expected to have a bearing on social networks for two analytically distinguishable sets of reasons. One, structurally speaking, the size of a person's potential close and extended familial network is directly related to family-size. Two, expanding upon Simmel's ideas, childhood socialization experiences can be expected to be contingent upon family-size with consequences for relationships throughout the life course. Using data from 26 countries in the International Social Survey Programme, I conduct a cross-cultural examination of the relationship between sibsize and social networks. I find that net of demographic and socioeconomic factors, family structure, and religious affiliation, social networks are highly contingent upon sibsize. Briefly, I find that as compared with people with 4 or more siblings, people with 0, 1, 2, or 3 siblings are significantly more likely to abstain from participating in civic and voluntary organizations. They are also less likely to be socially embedded in their neighborhood. They are considerably less likely to rely on their siblings, and more likely to rely on their parents for a broad range of social support, and upon their friends and neighbors for emotional support. While many of these results are robust, some of them vary by culture. In light of declining fertility rates all over the world, the paper concludes with some implications of these results for individual relational embeddedness, access to vital resources, civic participation, and overall community structure.