

French NSF Award for “Informatic Treatment of Kinship Phenomena : An Integrated Approach in Anthropology and History” funded in 2005

The new French peer-reviewed Agence Nationale de la Recherche (<http://www.gip-anr.fr/>), modeled after the U.S. National Science Foundation, made one of its first awards, \$183,000 (\$150,000 euros), to the European research team in which Douglas R. White (UCI Anthropology) is a central member. Their project, « Informatic Treatment of Kinship Phenomena : An Integrated Approach in Anthropology and History », follows White’s lead in a veritable revolution in the study of kinship.

“This project brings together anthropologists and historians of the family similarly concerned with the systematic analysis of consanguineous and affinal relationships. By pooling the materials and competences from these two disciplines, this research team aims to develop new conceptual and technical tools for computer-processing kinship and marriage data.

This project follows in the footsteps of recent anthropological and historical research whose use of computer software for the analysis of genealogical material, opened new directions for the empirical study of kinship and marriage practices. It will thus make use of a large number and variety of genealogical data-bases concerning both Western societies at different periods of their history and peoples in other regions of the world.

These data-bases will be approached so as to make them directly comparable, by concentrating on the networks that result from the interconnections between the multiple descent and marriage ties in them. Analysis will centre upon “relinking” phenomena. Indeed, even among those populations that authorize or prescribe unions between close kin, only a minority of the circuits that make up the marriage network are blood marriages. By far, most of these circuits involve one or more intermediate marriages and, as such, are affinal relinkings. Two things make it difficult to model relinking phenomena : (1) even a relatively small marriage network contains a very large number of relinkings of a very many types, and (2) these relinkings are themselves interlinked with each other (and with blood marriages whenever these occur) so as to form complex patterns whose conceptualisation remains to be done.

This project aims to provide a better grasp of the principles governing the coordinate aggregation of matrimonial practices, and to overcome the difficulties posed by the systematic analysis of affinal relinkings. Specifically, its objective, at once theoretical and technical, is to develop tools for the computerized processing of genealogical data that meet up to two complementary expectations:

(a) the typically anthropological concern to bring to light recurrent, cross-cultural organizational forms; from this point of view, kinship networks and sub-networks are seen as systems, i.e. as structured totalities governed by internal dynamics that are to be specified.

(b) the historical and ethnographic concern to identify the particular actors and their social attributes within these kinship and marriage networks. From this viewpoint, these networks provide a privileged field for the study of social organisation and its evolution over time, as deriving, in part, from factors external to the kinship and marriage system itself (semi-professional itineraries, residential choices, religion affiliation and so forth).”

(“Traitement Informatique des Phénomènes de Parenté en anthropologie et en histoire : une approche intégrée en anthropologie et en histoire : une approche intégrée ”)

The project builds on White’s work begun with Paul Jorion (1992, 1996; White 1997, 2004) on mathematical formalizations for network analysis of kinship, his collaborative historical and ethnographic applications with Brudner (1997), Houseman (1997, 1998,

2002) and Thomas Schweizer (1998), and a recent book (2005) with Ulla Johansen (University of Cologne), that lays out a new theory of social complexity in kinship networks. The anthropological team, working with White, published on the integrated methods to be used in this project in the Parisian journal, *Mathématique et Science Humaines*, along with examples of the ethnographic analyses.

The PIs of the historical and anthropological teams are Cyril Grange (Sorbonne) and Michael Houseman (EPRE). The research team in history consists of Sorbonne historians and their students and collaborators (seven in all) at the Centre Roland Mousnier, where White provided workshops in Network Analysis of Kinship and Marriage in spring 2004. The team in anthropology includes White and seven anthropologists at the Centers for Advanced Studies (EHESS/EPRE) and College de France in Paris, and at the Lille Institute of Sociology and Anthropology, and their students and post-docs. White's role on the funded project is in the conception and use of the informatic tools of network analysis, their applications to the historical and ethnographic case studies, and further reflections on theory, methods, and results.