I

REVITALIZING THE STUDY OF KINSHIP AND EXCHANGE WITH NETWORK APPROACHES

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RECONSIDERING A NETWORK APPROACH TO KINSHIP AND EXCHANGE

The arguments put forward in this book are intended to help revitalize the study of kinship and exchange. To express some of the current contributions to this field of research, we adopt a network perspective (on current network analysis, see Burt 1992; Degennes and Forsé 1994; Freeman, White, and Romney 1989; Schweizer 1996; Scott 1991; Wasserman and Faust 1994; Wasserman and Galaskiewicz 1994; Wellman and Berkowitz 1988). We see five basic arguments that crisscross the various chapters in this volume. First, kinship and marriage, as Bourdieu argued (1976:141), grow out of practical and complex strategies. They are part of an entire system of "biological, cultural, and social reproduction," and in this sense they are fundamental to the constitution of social networks generally. Second, in accordance with this general precept, the analysis of social action – including kinship and exchange – requires that we look at how action and decision making are embedded in a specific nexus of social relations. Embedding occurs not just in local networks but also in connections to larger regional and global contexts (see Schweizer, in press). It also occurs within the dyads that compose the interactions of social networks. Third, to avoid the ellipsis of functionalist or culturalist explanations, empirical and theoretical studies of kinship require a dynamic approach to transactions and exchange, as well as to the emergence of global network properties, in social networks. The twin processes of the embedding of kinship and social relations in exchange – and reciprocally, of exchange in kinship and social relations – require dynamic treatment. Fourth, network studies should consider not only structural change but also actual flows or dynamics, and they should consider how both relate to the local variability of resources and positions in the network. Fifth, we need to accommodate actor-oriented perspectives, including the study of in order to enrich network analysis of social relations, cognition and decision
making, the better to show the intricate interplay of cause and effect in network processes.

BRIEF OVERVIEW OF THE CHAPTERS

The ethnographic case studies in this volume that exemplify these principles are rich and varied. Part I, which embraces the principles outlined above and focuses on the representation of kinship systems in the new kinship network framework, explores differentiation of household form in an Adriatic village (Milicic), commoner and elite network formation in rural Java (White and Schweizer), and the emergence of sidedness as a global marriage alliance structure out of local rules and strategies in Pul Eliya (Houseman and White). Houseman and White’s Sri Lankan study is based on a classic ethnography by Edmund Leach, which he used to invalidate the corporate kin-group axioms of British Social Anthropology. Finally, Barnes’ study examines the attachment of marriage alliance strategies to economic production and distribution in the region of Eastern Flores.

The ethnographic studies in Part II follow the leads established in the first section and look more closely at how individuals and social dyads are embedded in specific kinship and exchange networks. In Böck’s urban ethnography of the matrilineal Khasi, which is informed by the schema theory of Cognitive Anthropology, we see how one of her key informants schematizes her social actions as exchanges aimed at reaching well-being and at maintaining respect in a morally reputable way. The informant’s motivation for enactment of the schema is linked to its goal orientation, supporting birth and development of progeny. The particular composition of this informant’s personal network of kin is shown to shape her schema of the kinship system as a whole and the moral obligations she perceives within it. Bollig’s chapter on exchange of cattle, which adopts a rational actor framework and draws on fieldwork in hard times as well as good in the Kenyan pastoral periphery, shows Pokot herders embedded in a moral economy and pursuing at the same time a risk-spreading strategy which ensures them against environmental and economic hazards. Herders cannot predict which ties among many they will be able to activate in times of crisis, given the far-ranging distribution of ties in this security network. In Göbel’s ethnography of economic and social strategies among Andean pastoralist households, coping with risk and uncertainty is also an issue. She traces the effects of the internal social and economic composition of pastoralist households on long-term and short-term decision making as reactions to production risks and market insecurities.

Part III reconsiders dowry, bridewealth, and marriage exchange. It begins with Bell’s comparative study of how to consider wealth transfers, ones occasioned by marriage, between wealth-holding groups or individuals. If we tarry somewhat here in the discussion, it is because of the generality of its complex theoretical discussion of a range of comparative issues central to the topics of this volume. Unlike inheritance, which transfers rights within a group, transfers
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between groups constitute exchange. There are two ends to the continuum of exchange: that of a completed exchange, in which there is no residual indebtedness, and that of gifts, in which residual indebtedness is the basis of potential continuance of the exchange relation or alliance (Leach 1982). In Bell’s theory (see our introduction to Part III), bridewealth or groomwealth, as completed transactions, involves the transfer of wealth as rights in things that provide a potential stream of consumption benefits at the domestic level, as opposed to the transfer of rights in persons, such as in the fertility of a wife, which accrues as wealth to corporate groups in terms of their membership. Dowry or dower, transferred to the spouse or the conjugal unit of a bride or groom, respectively, is not a marriage payment to a wealth-holding corporation for transfer of rights; rather, it is a gift at the domestic level established with an expectation of a continuing alliance between corporate groups. Reformulating the basic anthropological concepts about bridewealth and dowry, Bell leads us to conceptualize distinct axes on which bridewealth and dowry are calibrated and to reclassify the various combinations of customs observed in different societies. Both Rao and Dietrich’s ethnographic studies of Bakkarwal and Larantuka exemplify some of the problems that studies of bridewealth and dowry must address, and they show the subtle interaction of moral rules, material and symbolic flows, and reproductive benefits in systems of marriage payments. For Rao, some of the crucial questions relate to how bridewealth and dowry function separately or jointly with respect to social and economic status as well as with respect to fitness in the survival of children. For Dietrich the point is that even monetary transactions can be incorporated into spheres of exchange that are less concerned with the logic of the marketplace than with manipulating status and social relationships.

The chapters in Part IV investigate change in kin-based exchange systems by applying combinatorial models and examining historical or ethnographic records. Hage and Harary propose the graph-theoretic minimum-spanning tree model as a tool for the historical reconstruction of the development of a chiefdom and the exchange system in Fiji. Tjon Sie Fat considers the emergence of a global marriage exchange structure from purely local rules and preferences. If emergent marriage alliance structures are typical of “semicomplex” kinship systems (see our introduction to Part IV), as postulated by Héritier (1981) in her much-debated extension of Lévi-Strauss’s (1969) theories, Tjon Sie Fat’s results provide a demonstration of how such structures might be identified. Wiessner and Tumu investigate the rich historical record which they collected to trace the development of the Tee ceremonial exchange cycle among the Enga of the Papua New Guinea highlands. This approach allows them to study the impact of close kinship on the emergence and transformation of this system of exchange. Görlich investigates ceremonial exchange and barter in the same area by applying a game-theoretic perspective. First, he reconstructs two basic types of economic and social transactions: gift exchange versus barter of commodities. Then, drawing on the extensive field data he has collected, he analyzes in game-
theoretic terms the patterns of war and peace in this society, and in a comparative framework he contrasts his fringe society case with societies from the central highlands of Papua New Guinea.

NOVEL ELEMENTS IN THE NETWORKS PARADIGM

Anthropology has much to contribute to a network paradigm, given the richness of contextual embedding of ethnographic data. The problem is not simply to apply standard techniques of network analysis to the ethnographic context, but to develop new means of representing and analyzing the richness of cultural nuances in relational systems. One would think that the more general techniques of network analysis, such as the block modeling of social networks (see Wasserman and Faust 1994: Ch. 11), would present an ideal set of tools for kinship analysis, but in fact the dynamics of kinship process are resistant to approaches solely based on the idea of structural pattern. Individuals, for example, change their kinship roles in the course of the life cycle, while social roles in kinship networks are not simply replicated from generation to generation but are also changing through time. White and Schweizer’s chapter in Part I, for example, developed out of previous work by Schweizer (1988), in which block modeling and scaling approaches proved inadequate.

What are some of the directions that the newer approaches to kinship and exchange exemplified here might take, based on social network perspectives? A number of novel elements in these essays supersede the “systemic elements” of structural and functional analyses which have been salient in earlier anthropological approaches to kinship. First, coming out of the network approaches to social relations that developed in recent decades are conceptions of organized diversity or variability of social contexts, within which individual actors and their behaviors are situated. Network approaches typically emphasize the dual relation between individuals as constituted by social relations and emergent structures of social positions generated by individuals (Breiger 1974; Coleman 1990: Ch.1; also Kappelhoff 1993). The newer representations of kinship used in the first three chapters of this book exploit this duality to analyze and account for microlevel data from rich ethnographic studies of kinship and exchange relations. The level of empirical detail made possible by these approaches was nearly unthinkable in an earlier era, one that depended for purposes of analysis on systemic abstractions of kinship rules or models which bore no clear relation to the variability in microlevel data. From the recognition of variability at the individual level in relation to emergent structures at the social level, there follows the possibility of treating the dynamics of social relations in more precise and realistic fashion. Gone is the assumption that kinship relations necessarily constitute a static-structure functional “system” of social roles. In its place is a series of questions about emergent properties in kinship networks, about how structures change, and about the role of individual actors versus systemic effects
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in the processes of change (see Bearman, 1997, for a similar network treatment of ‘generalized exchange’).

Second, new theoretical approaches to kinship and exchange are represented in a variety of formal representations of kinship, graph theory, game theory, exchange and network matrices, longitudinal analysis, and algebraic decomposition. Formal representations of kinship dynamics, in the first and the fourth parts of the book, illustrate the novelty of some of these approaches. Some of the new representations differ from the previous social network analyses of kinship, such as those in the algebraic tradition. They do not deal with abstracted rules of kinship systems, as in White’s (1963) or Tjon Sie Fat’s (this volume) models; nor do they posit a closed or static system of social roles, as in Boyd’s (1969) attempt to model actual networks with static marriage rules. Instead, they treat the problem of how to analyze kinship networks as they unfold dynamically in time. To do so, some of these approaches invert the normal graph-theoretic representation of kinship networks, in which actors are nodes and relations are arcs. PGRAPHS (parental graphs), which are used in Chapters 2–4 and 6, represent nodes as temporally ordered intersections between individuals in reproductive units (White and Jorion 1992, 1996). Arcs coming into these reproductive nodes are parents, and those going out are their children. In principle, the techniques of dynamic block modeling (see, e.g., Pattison 1993: Ch. 6) are applicable to these networks, but the present applications of the PGRAPH approach reveal some new graph-theoretic concepts of role analysis that are especially applicable to kinship and exchange.

Third, the newer conceptualizations of kinship as empirical networks of material, social, and symbolic flows are consistent with approaches (see, e.g., Goodenough 1963: Ch. 12) that focus on the dynamics of kinship in terms of the consequences for the macrostructure of various types of local constraints on individual behavior. Rethinking this hierarchical embedding problem is a focus of the Pulu Eliya study in Part I (Chapter 4), all of Part II, and the game-theoretic study in Part IV (Chapter 15). The assumption that kinship is an ascribed relation disappears under the scrutiny of analyses that focus on how kinship relations are constructed and transformed and on the processes that create flows within these relations.

Fourth, the content and meaning of social relations are related to the contexts of transaction and exchange in social networks. A series of chapters shows successive refinements of our theories and understandings of social exchange. Bell’s comparative chapter in Part III, for example, helps to connect the dynamics of social linkages in a marriage network with wealth transfers between wealth-holding groups. In so doing, he provides a set of hypotheses that bridge the ethnographic materials of our case studies insofar as different types of marriage transfers are associated with variations of social indebtedness or affinal alliance making. The key to his theoretical insights is the understanding of dowry as a gift for alliance and of bridewealth as a payment for rights in the domain of resources of a wealth-holding group (see our earlier discussion) –
with residual possibilities for alliance through indebtedness. Bridewealth transfers between wealth-holding groups, among our cases, exemplify a range of variation in accordance with Bell’s predictions – from full and immediate bridewealth payments associated with short-term self-canceling exchange (in Laran- tuka among the mainstream Lamaholot people – Chapter 5); to bridewealth in delayed payments, creating temporary indebtedness and longer-term affinal alliances (among the Pokot and Kobon – Chapters 7 and 15, respectively); to permanently incomplete bridewealth associated with permanent affinal alliances between groups (among both the offshoot Lamaholot of Lamalera and the Enga – Chapters 11 and 14, respectively). Dowry as a gift for alliance is found in association with permanent alliances (in Pul Eliya – Chapter 3); whereas as inheritance, dowry seems not to create new permanent alliances (in Selo – Chapter 2), although it may reinforce existing patterns of incorporation (in Bakkarwal – Chapter 10).

CONCLUSION: THEORETICAL THRUST AND DIVERSITY

At a broader level, refigurings of social exchange theories, based on a reconsideration of personal rights (Bell 1990, 1994; Weiner 1992) and on the social biography of material and symbolic goods (Appadurai 1988; Kopytoff 1988; Weiner and Schneider 1989), play a significant role in these essays. Refiguring ethnographic materials on kinship, gender, and exchange – already underway in many recent anthropological writings (including Brudner and White 1997) – is furthered here by the express concern of many of the chapters with the flow of symbolic and material goods through social networks. The issues raised in Bell’s chapter, for example, involve identifying inalienable rights and possessions, as in the traditional rights of intestate inheritance, or as in the basis of wealth and interpersonal identity in Polynesia (Weiner 1992), where women manufacture “inalienable possessions” that may nonetheless be loaned or given as gifts. These must be conceptually distinguished from exchanges that terminate further rights, such as quitclaims. The clarification of bridewealth and dowry in terms of the variant processes of social exchange that they may entail is an example of a much larger set of concerns – e.g., with the distribution of rights across persons and groups and with the transactions that occur within or between them (see our introduction to Part III). Concurrent with the interest in tracing material and symbolic flows in social networks is an attempt pursued by many of the chapters in this volume to assess both symbolic meanings at the level of actors as well as the social, economic, and political constraints of the context in which actors are embedded (see also Emirbayer and Goodwin 1994; Schweizer 1996; White 1992).

The approaches of this book do not force a single standardized modeling process onto the analysis of kinship data. While the analyses are theoretically compatible, they follow a variety of theoretical and methodological approaches to the study of kinship and exchange, each rigorous in its own way. Specific
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theoretical and methodological emphases will be discussed in our introductions to the four parts of the book. There we hope to clarify for the reader how the various substantive theories which are developed in different chapters (such as Bell’s wealth transfer theory) may be applied to the ethnographic materials in other chapters – or at least to give hints in this direction (as with Lévi-Straussian alliance theory, or the Trivers-Willard inclusive fitness theory cited in Chapter 10). We have not restricted our contributors to an artificially uniform terminology (e.g., “alliance” has somewhat different specific meanings in different chapters), but we have sought to be clear on how to navigate between the different usages which exist today in anthropology, while keeping the theoretical issues clearly focused through our introductions to the various sections of the book.

Two-thirds of our chapters attest to the theoretical vitality of the structuralist heritage of Lévi-Strauss. His contributions to kinship and alliance theory (1969, 1984) receive a variety of ethnographic or formally refined uses here. Lévi-Strauss’s concepts of elementary, complex, and semi-complex marriage systems and the connection of semi-complex systems to “Omaha” terminology, mentioned in our introduction to Bollig’s chapter (7), are explicated in our introduction to Part IV and in Tjon Sie Fat’s chapter (13). Milicic (Chapter 2) refers to “house systems,” Houseman and White (Chapter 4) to “symmetric alliance,” Barnes (Chapter 5) to “asymmetric alliance,”” and Dietrich (Chapter 11) to “circles of exchange.” Bell (Chapter 9) develops the concept of “alliance” in an exchange-theory context. This book is not the place for a primer on alliance theory (see Buchler and Selby 1968: Chs. 5, 6; Fox 1967), but it exemplifies some of the processes by which, as Hage and Harary (1983, 1991, 1996) and a host of French and other researchers have demonstrated, structural analysis and alliance theory are still actively evolving. In a poststructuralist flavor, some of the chapters (Böck, Chapter 6; and Bollig, Chapter 7) draw on Bourdieu’s (1977) praxis theory and rational choice theory (see Coleman 1990 and Chapters 7 and 15 by Bollig and Görlich, respectively) as frameworks for bridging the gap between institutions and actions. Thereby, they supplement an actor perspective at the microlevel with the structuralist concern with emerging social forms at the macrolevel.

In summary, a variety of questions are approached in the present studies through a new series of case studies that present either fresh ethnographic data or reanalyze extant empirical data from fresh perspectives. The ethnographic chapters also present original data in formats which open up the possibility of reanalysis and testing with different formal models (for instance, the chapters by Milicic, Houseman and White, and Rao). A vigor of hybrid approaches may be expected as connections between these approaches are explored in future work. Consistent with a theme of increasing analytic rigor without sacrificing ethnographic grounding, each section of the present book contains a mix of formal and ethnographic approaches. Whereas the more methodological contributions in this book do give a good general overview of the newer network approaches to data analysis, the advantage of having them combined with the
ethnographic richness of our contributions is twofold: First, some are applied
either to new or classic ethnographic data and contribute to help unravel some
of the classical problems of ethnography or ethnographic understanding; second,
insofar as most are not overly technical or abstract, they show methodologies
that are accessible to a wide range of practitioners for problems in the social

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PART I

REPRESENTING KINSHIP DYNAMICS, MATERIAL FLOW, AND ECONOMIC COOPERATION

The chapters in this section share common themes: First, they all address the linkage between kinship and economy. Second, they trace the intertwined temporal flows of marriage and descent on the one hand with property on the other and they do so in the context of specific ethnographic cases. Third, several try to detect order in the networks of kin relations and material flows described in earlier ethnographic sources as “loosely structured” or without explicit pattern. In some of the chapters structuralist alliance theory provides a theoretical starting point, and mathematical graph theory is used as a tool for unraveling complex social arrangements and the linkages of kinship and economy. Graph theory proves a flexible and precise method for the representation and visualization of the tasks at hand, enhancing pattern recognition of complex case materials, while allowing due regard to ethnographic detail.

Milicic studies a cognatic system of descent in a stratified Mediterranean “house society” (Lévi-Strauss 1984), in which landed wealth is accumulated by clusters of genealogically related households sharing the same surname. Her case is an instance of dowry as inheritance. The land in this village (Selo, Croatia) is fragmented by equal inheritance patterns. Milicic traces the development of houses and the strategies they use to ensure matching marriages that avoid the branching out of houses and the associated dissipation and loss of land. This goal is achieved by a mixed strategy of creating suitable marriage alliances among houses of the same standing, of genealogical amnesia (to facilitate marriages within the same stratum at later generations), and of celibacy, emigration, and keeping the number of children low. Loss of property through dowry has to be compensated for by the marriage of sons to dowried brides. In her paper Milicic presents rich ethnographic data on marriage and inheritance practices and on actors’ symbolic conceptions of the social and economic fields in which they are embedded. The major breakthrough of Milicic’s analysis of these dealings is, however, achieved by the application of graph theory. She demonstrates that the graph-theoretic concepts of tree, rooted tree, and path can