The Vines of Complexity

Egalitarian Structures and the Institutionalization of Inequality among the Enga

by Polly Wiessner

The initial stages of the institutionalization of hierarchical social inequalities remain poorly understood. Recent models have added important perspectives to “adaptationist” approaches by centering on the agency of “aggrandizers” who alter egalitarian institutions to suit their own ends through debt, coercion, or marginalization. However, such approaches often fail to take the recursive interaction between agents and egalitarian structure seriously, regarding egalitarian structures as the products of simplicity or blank slates on which aggrandizers can make their marks. The approach here, drawing on insights from the work of Douglass North, views egalitarian structures as complex institutions which, together with their accompanying ideologies, have arisen to reduce the transaction costs of exchange in small-scale societies. It will be argued that egalitarian structures and the coalitions that maintain them vary as greatly in configuration, scope, and nature as do hierarchical structures of power, presenting a variety of obstacles on the path to institutionalized inequality. Data from the precolonial historical traditions of 110 Enga tribes, covering a time span of some 250 years in which vast exchange networks developed and hierarchical inequalities began to be institutionalized, will be used to examine (1) the nature of egalitarian structures and coalitions in Enga at the outset, (2) how these steered the perceptions, motivations, and strategies of agents, and (3) the outcomes of different courses of action. By exploring egalitarian structures in this way it should be possible to depart from neoevolutionary models of political “evolution” without abandoning a more encompassing theoretical framework.

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Perhaps the dimmest areas that remain in studies of political “evolution” are the initial stages in which inequalities beyond those of age, ability, and gender emerged, grew, and became institutionalized. Engendered in a climate in which social and material discretion was the rule, the onset and dynamics of the institutionalized inequality remain concealed by sparse archaeological evidence. What is apparent, however, is that the process was often protracted and punctuated by booms and crashes [Bender 1990, Drennan 1991, Earle 1997, Kirch 1991, Paynter 1989]. The emergence of institutionalized inequality is considered to be a threshold in political evolution when deeply rooted orientations of small-scale societies were overcome, paving the way for the development of complex polities [Earle 1997, Feinman 1995, Flannery 1972, Hayden 1995, Roscoe 1993, Upham 1990]. When seen in the longer-term perspective of human evolution, however, inequality is more accurately portrayed as “reemerging.” Hierarchy characterizes societies of our closest nonhuman primate ancestors [Knauf 1991, Kummer 1971] and seems to be deeply rooted in human behavior [Eibl-Eibesfeldt 1974, 1989; Salter 1995; Tiger and Fox 1971]. Therefore it is likely that societies in which individuals held equal rights to resources and status first developed in the Lower or Middle Paleolithic. Explanations for the origin of egalitarianism are still highly hypothetical [Boehm 1999a, Hawkes 2000, Knauf 1991]. However, egalitarianism appears to have provided the context for the evolution of more elaborate forms of cooperation, including networks of mutual support based on kinship that extended far outside the local group [Ambrose 1998, Gamble 1998, McBrearty and Brooks 2000, Wiessner 1998]. New levels of cooperation fostered by egalitarian relations provided powerful tools for the enterprising to work with, on the one hand, and rigid constraints governing competition, on the other.

Several approaches have been employed to address the reemergence of inequality and its subsequent institutionalization into systems with hierarchical organization, hereditary position, and control by the elite over institutions that extend beyond the boundaries of the local group [Brumfiel 1994, Earle 1987, Hayden 1995, Paynter 1989, Roscoe 1993]. Arnold [1993:80] has divided these approaches into two groups according to whether or not individuals are portrayed as active agents of political change. The first, called adaptationist or managerial models [Brumfiel and Earle 1987], contend that change is spurred by conditions that affect the whole cultural system. These may come either from without, for example, population pressure, resource stress, drought, or warfare [Carneiro 1970, Cohen 1985, Johnson and Earle 1987, Keeley 1988, Webster 1975, Wittfogel 1957, Wright and Johnson 1975], or from within, for ex-

1. I thank Akii Tumu and Nitze Pupu for their collaboration over more than a decade. Funding for this project was provided by the Forschungsstelle für Humanethologie in the Max Planck Society and the Enga Provincial Government. Special thanks go to the hun-

dreds of Enga who gave us their time and their knowledge. I am also grateful to CA referees and John Clark, who provided substantive criticism on earlier drafts of this paper.

2. Insightful in this context is Clastres’s (1977:34) remark that “cultu-
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ample, the need for redistribution of resources within or between societies [Fried 1960, 1967; Halstead and O'Shea 1982; Isbell 1978; Polanyi 1944; Rathje 1972; Sahliens 1958; Service 1958]. Inequalities arise out of the corresponding need for “managers” to solve such problems. The degree of functionalism in adaptationist models and the motivations attributed to managers vary considerably. Perhaps their strongest point for the emergence of hierarchical inequality is that the seeds of inequality can take root only when the population stands to gain real benefits from stronger leadership. They suffer, however, from an inability to account for internally generated change, human agency [Brumfield 1992, Cowgill 1975], and the impact of preexisting cultural orientations. Moreover, empirical evidence from numerous studies indicates that inequality first appears under conditions of resource abundance, not stress [Hayden 1995, Price and Brown 1985, Price and Feinman 1995, Paynter 1989]. Redistribution by elites does little to manage resources of a region in such a way as to benefit a wide segment of the population [Earle 1977, Hayden and Gargett 1990, Peebles and Kus 1977].

In response, the focus has shifted to explanations which center on human agency—the vying of “aggrandizers” for prestige and wealth. Demographic and environmental factors take second place as facilitating or constraining the designs of actors. Agency approaches are founded on the premise that every society has ambitious individuals who provide a motor for change. Portrayals of the strategies chosen by aggrandizers and their intentionality differ. Hayden [1995], Boone [1992], Earle [1997], Arnold [1993, 1995], and others, drawing on cultural ecology, evolutionary ecology, and Marxism, respectively, propose that aggrandizers strive to gain control of strategic resources or manipulate the production of others through debt and contract, coercion, marginalization, or exploitation made possible by restricted mobility. Though power comes from several sources, primacy rests in material processes [Earle 1997:12]. Materialist stances depict aggrandizers as individuals who, through the alchemy of ambition, are able to manipulate others to achieve a standard outcome—preferential access to resources and the domination of others. Quantitative economic gains are applied to bring about alterations in the social order, which are then legitimized through ideology. Clark and Blake [1994:17], drawing on practice theory [Bourdieu 1977, Giddens 1979, Ortner 1984], see the situation somewhat differently and add important considerations to agency approaches. They argue that institutionalized inequality is the unintended outcome of self-interested competition among political actors vying for prestige by employing tactics that conform to the self-interests of their followers. Competition over physical resources is not an end in itself, though controls of land, labor, and resources may occur in the course of its pursuit. Agency approaches raise important questions: Under what conditions do people in an egalitarian society allow others to take control? Are they pleased or squeezed to do so? Does primacy really rest in material processes?

Despite their substantial contributions, agency approaches have seldom investigated the recursive interaction between structure and agency, in part because they consider egalitarianism not as structure but as a “slate of simplicity” on which aggrandizers can leave their mark. By “structure” I mean institutions—the humanly and historically devised rules of the game [North 1990]—and ideology, “values and beliefs that determine people’s goals and theories of how the world works” [Engleminger 1992:168]. The omission of structure from the equation has obscured fundamental dynamics. For example, adaptationist models see context-dependency as the mother of new cultural structures, the impact of the old presumably disintegrating under demographic or ecological pressures. The approaches of Arnold [1993], Hayden [1995], and Boone [1992] do not seriously question whether it is possible or desirable to indebted or marginalize when kinship and egalitarian ethics reign and dependence on egalitarian institutions is high. And, once aggrandizers get a foot in the door, can they secure incremental gains, or does “the structure strike back” as people employ sanctions to topple them and defeat hierarchy [Mitchell 1988]? Or, as Clastres [1977:32] has proposed, if the structure of egalitarian societies lies in the exchange of women, goods, and words, then the power, as “the rejection of reciprocity,” is essentially “the rejection of society itself” and meets with strong resistance. Clark and Blake’s [1994] model is sensitive to structure, but in being so it tends to collapse structure into the ends and interests of the actors and their followers, making it difficult to grasp the tension between agency and structure. Without such tension there is no motion, and the failures in social reproduction that cause the booms and crashes seen in the archaeological record are obscured.

Here I will use ethnohistorical data from the Enga of highland Papua New Guinea to explore the interaction between structure and agency at the point in their political evolution when hierarchical inequalities emerged and began to be institutionalized. The data come from the historical traditions of 110 tribes recording events of significance starting some 250–400 years ago, shortly before sweet potato vines were introduced to Enga, and continuing well beyond first contact with Europeans in the 1930s [Wiessner and Tumu 1998]. The sweet potato released constraints on production, allowed a substantial surplus to be produced in pigs, and permitted rapid demographic and economic growth [Watson 1965a, b, 1977]. During the period considered, inequalities grew significantly as vast exchange networks were constructed under the initiatives of enterprising men. The greatest of these, the Tee cycle, involved some 40,000 participants by the time of first contact. Enga historical traditions detail the personalities of some of the Tee cycle managers involved and their dreams, strategies, victories, and failures as they jockeyed to construct and master these networks in the pursuit of “name,” fame, and wealth.

The thrust of my argument will be that egalitarianism is not the product of organizational simplicity or “traditionalism,” not the tabula rasa for human affairs.
Agents and Egalitarian Institutions

As a point of departure for understanding institutions, I will draw on some insights from the work of Douglass North [1990, n.d.] and relatively complete information (see also Ensminger 1980, 1990, n.d.). Institutions, following North [1990: 3], are “the rules of the game in a society or, more formally, the humanly devised constraints that shape human interaction.” Exchange, whether social, economic, or political, is costly because of the many uncertainties of human interaction; institutions exist to reduce the uncertainties that generate transaction costs. In doing so they facilitate cooperation and trust. Transaction costs are threefold: assessing value, protecting rights, and enforcing agreements. Institutions, as the rules of the game, contribute to setting the incentive structure of a society by determining opportunities that are open to individuals and influencing evaluations of costs and benefits. They vary widely in their efficiency and consequences for economic performance. Institutions structure transaction costs and, together with technology, the feasibility of engaging in economic activity. What may appear as advantageous exchange may not pay off if transaction costs are too high. Because past, present, and future are connected by the continuity of a society’s institutions, history matters—today’s and tomorrow’s decisions are shaped by institutions of the past (1990:vii).

North [1990] proposes that in traditional societies transaction costs are low because of repeated interaction and relatively complete information [see also Ensminger 1992:25], but I disagree.4 In nonmarket economies in which kin-based exchange systems play an important role in reducing risk Wiessner [1982, 1996], the goal of exchange is to be covered during times of need. In this context the social and the economic are closely intertwined [Mauss 1925], and it is undesirable for returns to be stipulated as to time, quantity, or quality (Sahlins 1972). The most valuable information in such exchanges is the details of the partner—what he or she has to offer and will offer over the long run. This information is very costly to obtain. Moreover, protection is trickier when transgressors are close kin and enforcement difficult when people “vote with their feet” to avoid conflict. In response to high transaction costs, many small-scale societies provide a set of egalitarian institutions which foster trust and make interactions more predictable.

Egalitarian institutions and ideologies do much to reduce transactions costs in exchange. First, they standardize important information about biological and fictive kin by stipulating that kin hold equal rights to resources and status. These rights are not compromised if one party is unable to reciprocate over long periods; inability to reciprocate does not incur debt. Second, the costs of “kinship dues” are lowered and trust is fostered in egalitarian settings because assistance received cannot be used to build position and exploit. Those who prosper from the help of others must similarly assist them, limiting competition that disrupts cooperative social relationships. Third, equality facilitates the mobility that is so necessary to maintain broad networks of mutual assistance—people move between groups more easily when dominance and exploitation are not issues [Wiessner 1996:186–87]. Egalitarian institutions are effective for reducing transaction costs, but they are not maximally efficient. They constrain competition and emphasize redistributive activities, curtailing individual incentive and accumulation of material capital.

Egalitarian norms and relations must be constantly enforced against aggressors and free riders. However, because breaches threaten all coalition members, enforcement is shared, lowering its costs for individuals [Boehm 1993, 1999a; Eibl-Eibesfeldt 1982; Sober and Wilson 1998]. The initial response to transgressions may be leveling during everyday talk [Wiessner 1981], the spice of life in egalitarian societies, which brings “big shots” and slackers into line without threatening dyadic relationships. If milder sanctions go unheeded, criticism may escalate to such measures as witchcraft or ostracism, with the offender departing either permanently or until feelings cool. Not all efforts to excel are judged as threatening—if individual achievements benefit others [for example, mediation, hunting, sharing, or defense] the doer may elicit respect for efforts to excel, for example, priority in having his or her opinion heard, praise rather than criticism for marrying more than one spouse, or more tolerance for bending the obligations of kinship.

If equality is the product of social institutions, then one can never expect that egalitarianism will be complete or all-encompassing. Still, it is possible to formulate a definition of egalitarian societies that is meaningful for social analysis. I will consider as egalitarian societies that maintain equal access of individuals, within age-sex categories, to resources and status positions or, following Fried’s [1960] classic definition, societies in which there are as many positions of prestige in any age-sex grade as there are persons capable of filling them. Of the many societies that fit this definition of “egalitarian,” none is strictly undifferentiated [Flanagan 1981]. Most institute internal divisions on the basis of age, sex, kinship, or ability in order to apportion tasks and promote complementarity within families or groups. What is difference and what is inequality may be difficult to distinguish. Moreover, the structure of coalitions that

3. Some linguistic studies suggest that egalitarian societies may have characteristic strategies of verbal interaction [Sugawara 1997].
4. See also Cashdan [1990], Koosje, Flannery, and Johnson for discussions of the complexities of information flow in simple societies.
enforce equality and cultural definitions of what constitutes transgression vary considerably and generate different social realities. A minority of “egalitarian societies,” usually marginalized hunter-gatherers in high-risk environments, achieve high degrees of equality owing to strong mutual dependencies and lack of surplus to distribute to others, amongst other things (Lee 1993, Mitchell 1988, Tanaka 1991, Wiessner 1996, Woodburn 1982). These are often taken as the baseline in models for the emergence of inequality on the dubious assumption that current hunter-gatherer populations provide the best models for Paleolithic societies (Wilmsen 1989, Wobst 1978). Given that most humans, past and present, inhabited richer environments, societies tolerating some competition [Lederman 1986:4, McDowell 1990] and moderate inequalities based on achievement probably constitute more appropriate starting points. Such inequalities may be based on wealth, ritual knowledge (Godelier 1978, Harrison 1985), or cosmologically based moral evaluations such as witchcraft (Kelly 1993, Knauff 1987).

Institutional Change

North [1990] argues that the players [entrepreneurs] and their collaborators [organizations] bring about institutional change intentionally or unintentionally in the course of the pursuit of wealth, income, or other objectives. Competition provides the motor for change, though the path is by no means a straight one. Individual pursuits require the deciphering of a complex environment with ideologies. Because information is incomplete, models are subjective, incentives are incompatible, and feedback is imperfect, actors’ choices are often not “rational” and may have unintended consequences. Change is path-dependent because it takes place within the existing institutional matrix and is governed by the knowledge and ideology of the agents; it has its own history. Transaction costs have everything to do with hampering or facilitating change.

The above considerations all contribute to what might be called the “egalitarian bind.” The path on which the emergence of inequality begins is one in which competition is dampened and enterprising individuals are not in a position of power to bring new ideas into regular practice. The ethos of egalitarian societies and their actors centers on redistribution and measured generosity, discouraging accumulation of economic capital. Moreover, pursuing inequality threatens the very egalitarian structures that reduce transaction costs for both the actor and potential followers, drawing social disapproval. Consequently, the attempts of agents to bring about incremental change by deploying gains made from short-term enterprises often dead-end in “little big men” or local despots (Feil 1987, Watson 1971), both with relatively short careers.

To explore how egalitarian structures and coalitions steered the motivations and strategies of actors and impacted the institutionalization of inequality in Enga, I will focus on four questions:

1. To what extent could maximizing strategies of agents within existing institutions produce incremental changes in structure that gave them preferential access to resources and allowed them to dominate others? How did egalitarian structures and coalitions hinder or facilitate their efforts?

2. What role did the construction of new institutions to take advantage of new social and economic opportunities with reduced transaction costs play in the emergence of institutionalized inequality? Who constructed these, how, and what selection pressures led to their acceptance?

3. How was ideology involved in altering existing institutions and ushering in new ones?

4. What was the upshot of juxtaposing old institutions and ideologies with new ones?

The Enga and Their Historical Traditions

The Enga are a highland horticultural population of approximately 220,000, most of whom live at altitudes of 1,500–2,500 m (fig. 1). They are well known in the anthropological literature through the works of Feil (1984), Lacey (1975, 1979, 1980), Meggitt (1956, 1972, 1974, 1977), Talyaga (1982), Waddell (1972), and Wohlt (1978), amongst many others. Their staple crop, sweet potato, is cultivated in an intensive system of mulch mounding to feed large human and pig populations. The Enga population is divided into a segmentary lineage system of phratries or tribes composed of some 1,000 to 6,000 members and their constituent exogamous clans, sub-

![Fig. 1. Location of the Enga and their neighbors on the main island of Papua New Guinea.](Image)
clans, and lineages. The politics of land, social networks, and exchange occupy much of men’s time and effort, while women devote themselves primarily to family, gardening, and pig husbandry. Nine mutually intelligible dialect groups have been identified within the Enga population [Brennan 1982]. Despite variation among these, all Enga share a language and important economic, social, political, and religious orientations.

The Enga historical traditions (atome pii) on which this paper is based are straightforward oral narratives that have been passed down in men’s houses and during public events for generations, transmitting information about past events. They are said to have originated in eyewitness accounts and are held distinct from myth (tindii pii). Historical traditions contain information on subsistence, wars, migrations, agriculture, the development of cults and ceremonial exchange networks, leadership, trade, environmental disasters, and fashions in song and dress. They cover a period that begins just prior to the introduction of the sweet potato (250–400 years ago) and continues until the present. Accompanying genealogies allow events to be placed in a general chronological framework [table 1].

Between 1985 and 1995, Akii Tumu, Nitze Pupu, and I collected and analyzed the historical traditions of 110 tribes (phratries) of Enga. Testimonies were heard from powerful and ordinary men alike to uncover the distribution of knowledge and differential interpretation of meaning by men from different segments of the population. We maintained dialogues with the most knowledgeable for evaluation of our ideas as the evidence accumulated. Testimonies were painstakingly analyzed with the help of the pioneering research of the oral historian Roderic Lacey [1975, 1979, 1980] to work out the strengths and weaknesses of the Enga oral record as history. More detailed evidence for most of the topics discussed can be found in Wiessner and Tumu [1998]. [For a more detailed discussion of the research methodology, see the appendix that appears in the electronic edition of this issue on the journal’s web page.]

**Equality at the Starting Point**

Around the time of the introduction of the sweet potato, a sparse population of some 10,000 to 20,000 people inhabited the major valleys of Enga. In eastern Enga (1,500–1,900 m above sea level), sedentary horticulturalists cultivated taro, yams, and other crops on the flat terraces, reserving the mid-slopes for pig forage and the high forest for hunting and gathering. For areas of central Enga (1,900–2,100 m) roughly equal emphasis was placed on gardening, hunting, and gathering. In the vast high country of western Enga (2,100 m+), lived scattered mobile groups who depended heavily on hunting and gathering. Hunters were attributed great physical strength and the possession of powerful ritual and magic. Shifting horticulturalists, who subsisted on taro and other garden products supplemented by game meat and pork, inhabited the steep, narrow valleys below. Oral traditions of western Enga depict culturally recognized distinctions between “horticulturalists” and “hunters,” accompa-

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**Table 1**

**Chronological Scheme of Events Discussed in Text**

<table>
<thead>
<tr>
<th>Generations B.P.</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>ca. 9–12</td>
<td>Introduction of sweet potato to Enga and beginning of Enga historical traditions (ca. 250–400 B.P.)</td>
</tr>
<tr>
<td>8</td>
<td>Population shift from high altitudes to lower valleys</td>
</tr>
<tr>
<td>7</td>
<td>Kepele cult first practiced by horticulturists of western Enga</td>
</tr>
<tr>
<td></td>
<td>Sangai bachelors’ cult instituted and spread westward</td>
</tr>
<tr>
<td>6</td>
<td>Ambum wars</td>
</tr>
<tr>
<td>5 (ca. 1855–857)</td>
<td>Beginning of Great Ceremonial Wars</td>
</tr>
<tr>
<td></td>
<td>Kepele cult, called Acatee, imported into central Enga</td>
</tr>
<tr>
<td></td>
<td>War reparations initiated for peacemaking</td>
</tr>
<tr>
<td>4 (ca. 1885–1915)</td>
<td>Tee cycle expanded to finance Great Wars</td>
</tr>
<tr>
<td></td>
<td>Acatee cult developed to coordinate Tee cycle and Great Wars</td>
</tr>
<tr>
<td></td>
<td>Female-spirit cult imported into eastern Enga</td>
</tr>
<tr>
<td>3 (ca. 1915–45)</td>
<td>Bachelors’ cults begin eastward spread</td>
</tr>
<tr>
<td></td>
<td>Tee cycle begins to subsume Great Wars</td>
</tr>
<tr>
<td></td>
<td>Acatee/Kepele cult used to organize the Tee</td>
</tr>
<tr>
<td></td>
<td>Female courtship added to bachelors’ cults</td>
</tr>
<tr>
<td>2 (ca. 1945–75)</td>
<td>First contact with Europeans (1934)</td>
</tr>
<tr>
<td></td>
<td>Last Great War fought (1938–41)</td>
</tr>
<tr>
<td></td>
<td>Tee cycle subsumes Great War exchange routes</td>
</tr>
<tr>
<td>1 (ca. 1975–2005)</td>
<td>Ain’s cult 1941–42</td>
</tr>
<tr>
<td></td>
<td>Tee cycle continues to expand</td>
</tr>
<tr>
<td></td>
<td>1975 Papua New Guinea’s Independence</td>
</tr>
</tbody>
</table>

**Note:** We have calculated a generation to be 30 years, though certainly for the earliest generations time distortions are likely to occur. In view of this, events that occurred in the second to fourth generation before the present were roughly dated in relation to known occurrences; from the fifth to eighth generation before the present they were sequenced by genealogy but no attempts were made at dating. Prior to the eighth generation, they can be neither dated nor sequenced. It is reassuring that trends such as the spread of the Tee cycle or major cults do show temporal consistency within and between areas.

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5. As discussed elsewhere [Wiessner and Tumu 1998], I use “tribe,” a less precise notion than “phratry,” because it is a term familiar to the Enga themselves.

6. Akii Tumu, the director of the Enga Cultural Centre, worked with me during every phase of the project, as well as carrying out essential interviews between periods of joint fieldwork. Nitze Pupu, an Enga lawyer, collected superb family histories from his own clan and did much of the translation work for the project. Without their political acuity and knowledge of Enga culture and history, the project would not have been possible.

7. This is a rough estimate made on the basis of genealogical information [Wiessner and Tumu 1998:appendix 2].
nied by ambiguous relationships of tension and misun-
derstanding, on the one hand, and marriage and exchange, on the other.8 The economy revolved around subsistence agriculture, hunting, and the trade of non-
agricultural products: axe stone, salt, black-palm wood, strings of bark fiber, foodstuffs, plumes, shells, and cosmetic oil. Pigs played a secondary role in economy and society. Luxury items such as shells, plumes, and cosmetic oil were readily borrowed and lent to be worn by all on ceremonial occasions; the presence of such goods did not signal the onset of social inequalities. A trade alliance for the export of salt and the import of axe stone originated among the southeastern neighbors of the Enga and ran through the Saka Valley of eastern Enga to central Enga, where the renowned salt springs were located (fig. 2).

From the very early generations Enga appears to have been an open society of travelers, traders, and experi-
menters. Mobility was high as people sought trade oppor-
tunities, alliances, and spouses, attended rituals, har-
vested products of the high forest, or took refuge after warfare or severe frost.9 New ideas were introduced on long-distance voyages and internal ones, for example, sessions for dream interpretation that rattled existing representations of reality and opened new possibilities. A broad repertoire of cults was practiced in all areas of Enga to promote fertility, prosperity, and solidarity. Pur-
chase of cult rites, sacred objects, incantations, and the services of ritual experts from other groups who appeared more prosperous was commonplace (Strathern 1994, Wiessner and Tumu 1999).

A sense of isolation pervades early historical tradi-
tions—houses were widely distributed over the land-
scape, spouses difficult to find, new group members wel-
comed, and public events attended joyously. Throughout Enga two spheres of kinship structured networks of mu-
tual support and reduced the transaction costs of many forms of exchange. Patrilineally inherited clan member-
ship furnished a pool of people who cooperated in agri-
cultural enterprises, defense, procurement of spouses, and communication with the spirit world. Equality of all male clan members ensured that each family held rights over land, labor, and distribution of household pro-
duce and received due assistance from group members. Residence was ideally patrilocal, though in practice new members were frequently recruited through maternal or affinal ties. Affinal and maternal ties established by exogamous marriage and maintained by reciprocal ex-
change provided access to resources and assistance out-
side the clan. Equality was the ground rule that fostered cooperation and trust in these external relations (Feil 1984) and facilitated residential mobility. That is, im-
migrants who were given land on the basis of affinal or maternal ties were welcomed and treated as equals; their children became full-fledged clan members. Conceptually and in practice these two spheres of kinship and economics (corporate and network-based strategies, in the terms of Blanton et al. 1996) were tightly integrated. The Enga describe this integration by a metaphor of birds that roost in the same tree, fly out in different directions in the morning seemingly pursuing their own interests, and return with what they have gleaned to the same nest in the evening.

A strong ethic of equality prevailed within the sexes for married men and women. Though it took some years to build reputation, there was no pronounced age hier-
archy. Equality of men was asserted by coalitions of al-
lied clan members who ensured that their brothers re-
ceived equal rights to land, spouses, and assistance from the clan. Relatives of married women, particularly male relatives, enforced equality of women by demanding that their “daughters” receive as much land, assistance in labor, and wealth for exchanges as did other women, particularly co-wives. Nonetheless, a certain degree of competition was permitted. The tone of some early nar-
ratives suggests that equality was maintained both by striving to do as well as others (or somewhat better) and by leveling those who got out of line. Women most likely competed against potential co-wives and sought to channel family wealth to their natal kin as they did in later generations, though their early exploits are rarely de-
tailed. Men competed with other men in warfare, hunt-
ing, and trade; men of influence are occasionally named in early historical traditions.10 “Name” was gained from distribution, not retention and accumulation.

Some insight into sources of influence in the past can be derived from metaphorical accounts of “legacies” passed on by tribal founders to their sons. For central and eastern Enga these include the spear (warfare), the pig rope and pig club (ability to raise pigs and pay war reparations), the digging stick (agriculture), the bamboo knife (oratory), the stick for planting taro (the staple crop prior to the sweet potato and an essential food for cer-
emonial events), and the bundle of charms for attracting wealth of all kinds. Important in the heritage of western groups are hunting ability and meat distribution. In no traditions are objects representing ritual power or ability to attract multiple wives passed on from mythical tribal founders to sons. Finally, genealogies for the early gener-
ations indicate that the most gifted men were poly-
ygynous, an inequality accepted by clan members because

8. Hunting groups had access to the rich resources of the high forest, including marsupials, pandanus nuts, a variety of edible greens, berries, acorns, mushrooms, seeds, and possibly wild tubers [i.e., Pteraria lobata] [Watson 1968]. That they engaged in food exchange with horticulturalists is well recorded in oral tradition, but their degree of dependence is uncertain. Archaeological excavations at Kutepa Rock Shelter in the Porgera Valley carried out by Jo Mangi have revealed at least 10,000 years of periodic occupation at 3,300 m.

9. Watson’s [1985] description of Tairora mobility, its reasons, and its role in “defining people by where they go” is reminiscent of descriptions in early Enga historical traditions.

ature has been significantly shaped by interaction with colonial regimes [Gordon and Meggitt 1985], and [3] it is difficult to ascertain at what point in Enga history influential men can be called big-
men.
polygyny increased external ties and numbers of offspring born to the clan. All in all, social inequalities are portrayed as slight and ephemeral—early Enga history is a history without heroes.11

The segmentary lineage system of Enga divided the population by descent into tribes, clans, subclans, and lineages, each with their own leaders of achieved status. As equals, parallel units competed and cooperated, struggling to maintain a balance of power and autonomy. Intragroup disputes set off by meat sharing, work sharing, or gossip often led to the departure of one party, suggesting that leveling pressures were operative. Intergroup conflict over hunting rights, theft, or insult frequently escalated into wars supported by allies on both sides. Wars solved problems by spacing groups—the losers were displaced or disbanded and absorbed by allied groups where they had close kin. There are no accounts in the historical traditions in which groups were subsumed or subordinated by victors. At no time in Enga history is land shortage presented as a serious concern; it was largely labor that limited production.12

By contrast to equality within the sexes, differences and corresponding moral evaluations between the sexes were pronounced and cosmologically stipulated (see Kelly 1993). Gender inequality was founded in “contamination” beliefs that relegated the influence of women to the private sphere, from where they worked to attune the plans and decisions of men to their own interests (Kyakas and Wiessner 1992). Beliefs that separated men and women had as much to do with male-male as with male-female relations and minimized competition between the sexes. Amongst other things, gender inequality protected household wealth and the ties on which men’s careers were founded: women, as removed from

11. The division of influence between hunters, warriors, gardeners, traders, and others described in historical traditions and the ways in which their power was curbed recall some of the ethnographic descriptions by Godelier (1982) for the Anga of the eastern Highlands. It is not possible to determine the relative roles of warfare and exchange for building reputation for the earlier generations. In later generations young men displayed skill and willingness to take risks for group benefit through warfare, but brilliance in exchange was far more important for building prestige.

12. To say that there is no land shortage per se is not to say that Enga have little concern with land and its defense (Meggitt 1977; 183). Land is critical to a household’s sustenance, pride, and independence.
politics, were generally immune to violence and fled in
times of conflict with their possessions, children, and
pigs, thereby safeguarding the family wealth and bonds
for future exchanges.

Ritual life among the Enga of earlier generations, as of
later ones, stressed equal participation of all men in com-
municating with the spirit world. Cults underwrote
equality in that all able-bodied men participated in the
communal hunt prior to the ceremonies and all families
made roughly equal contributions to preparing and pro-
visioning cults. Clans of a tribe provided material for the
cult house and one or more peripheral posts that signified
their contribution to the whole. Elders or ritual experts
presided over certain ceremonies owing to greater knowl-
edge or experience, but such participation did not result
in hierarchies based on ritual knowledge or power, nor
did ritual expertise spill over into secular affairs. Antag-
onisms were expressed in verbal or physical aggression;
witchcraft, practiced only by some fringe Enga, was used
never to preserve equality nor to create inequality.

Thus, at the starting point for this study, Enga “egal-
itarianism” had one or more characteristics which
steered the choices of enterprise men. First, mild com-
petition to become “first among equals” was permitted
and even encouraged if it brought benefits to the clan.
Second, coalitions of men ensured equal access to re-
sources, support, and communication with the spirit
world for adult clansmen of all ages. Third, exchange
partners in different clans were treated as equals—a re-
lationship that was staunchly defended regardless of age.
Fourth, it was largely men who participated in enforcing
equality to protect their interests; women had to work
through male agnatic kin to secure their rights. At higher
levels of organization, coalitions of allied subclans or
clans ensured equality of parallel social units. Such fea-
tures depart significantly from configurations of equality
in other known egalitarian societies such as the !Kung
San, who are often used as an egalitarian prototype (Lee
1993). Among the !Kung overt competition is stringently
constrained, men and women play similar roles in en-
forcing equality within and between the sexes, there are
no mechanisms to defend the equality of social units,
and individuals who gain access to the spirit world
through trance hold influential positions in the group.

Post–Sweet-Potato Developments

EASTERN ENGA

The sweet potato slipped into the garden regime of east-
ern Enga without note in historical traditions. Initially
its impact was only an indirect one: an influx of non-
Enga immigrants from higher regions seeking good gar-
den land. Some of these immigrants came from key
groups in the salt and axe trade to the south and east
(fig. 2, 1). Once established, they challenged the position
of Enga from the Saka Valley in controlling the well-
developed alliance for the salt and axe trade. In response,
Saka Valley Enga constructed a new system through
whch to raise wealth, which they invested in alliances
to block the plans of their rivals from immigrant groups.
As the legend goes, they sent messages and initiatory
gifts to partners along well-established trade routes, ask-
ing them to provide wealth in the form of pigs on credit
rather than by traditional barter. When wealth arriving
along these chains of finance reached the Saka Valley,
influential men used it to contract marriages or other
alliances. These were investments in the sense that they
promised long-term exchange and mutual support. Re-
turns from marriage exchanges or other newly contracted
alliances together with wealth from home production
were used to repay partners in a public festival. Thus,
through the concatenation of former trade partnerships,
chains of finance were constructed to make up the skel-
eton of what was to become the Tee ceremonial exchange
cycle (fig. 3). The spread of this system of finance and
display, called tee lenge (to ask for), is recorded in the
historical traditions of other groups along the major trade
routes around the seventh generation before the present

The Tee cycle opened many opportunities and reduced
the transaction costs associated with long-distance ex-
change. Through Tee it became possible to elicit fi-
nance on credit from people who were beyond the usual
bounds of kinship reckoning—finance through Tee
chains thus partially decoupled economies from kinship,
its protocols and etiquette. Formal public wealth distri-
butions conferred “name” on managers of wealth and
fostered trust in their competence. Finally, skillful ma-
nipulation of chains of finance maximized the amount
of wealth arriving in one place at one point in time,
giving recipients the financial clout to engage in larger
projects without having to feed large herds of pigs while
they slowly amassed wealth for distribution.13 The Tee
cycle, in contrast to the Melpa Moka (Strathern 1971),
involved no competition between partners. Partners
were defined as equals, and though a man might strive
to give generously to please his partner, such small in-
crements were never given in the spirit of competition.
Competition in the early Tee existed only between men
in different clans striving to control the trade.

During the first two to three generations after the Tee
cycle was initiated, it was performed on a very small
scale. Few people in a clan participated, even though it
was open to all. Oral records indicate that the most suc-
cessful distributed no more than five to ten pigs in one
Tee festival and that the number of clans involved was
limited to some 10–20. As a network that clung to clans
along trade routes, it did not attract much attention, and
its potential remained unrealized. Why? First of all, the
average person who was not a regular participant in the

13. Interestingly, pigs, which had previously circulated for local
feasts, were the only forms of currency produced in Enga that could
be rapidly intensified to meet the needs of increasing political and
economic complexity at the time. As a result, they began to be
exchanged over great distances, even though the transport of rec-
calcitrant animals could be taxing. See Lemmonier (1996) and Kelly
(1988) for interesting discussions of the pig as a currency of
exchange.
trade had little incentive to join and lacked the appropriate ties to do so. Second, the early Tee cycle revolved around pig exchange, but the economy was not geared to pig production. Agricultural production levels were set to meet household subsistence needs, hunting supplied meat for many events, allies in warfare were often compensated with land gained, and bridewealth payments were furnished to a significant extent by trade goods. The few pigs that were raised for wedding, cult, or funeral feasts derived much of their sustenance from foraging. Only men and women with broader designs saw the potential of the pig as a currency that could be intensively raised and invested to promote individual and clan interests. Some historical testimonies directly report the efforts of influential men to encourage pig production to increase clan wealth but state that most people were not interested—pig husbandry is drudgery, and its benefits had not yet been established. There were few places to spend hard-earned pigs.

This situation changed in approximately the fifth generation when a new dilemma arose—circumscription. Up until this time, population growth was portrayed as advantageous, providing more eligible spouses nearby and more exchange opportunities as well as increasing the size and strength of groups. Thereafter narratives begin to reflect some of the problems caused by growth [see also Modjeska 1982]. As land filled up and intraclan wars led to fissioning, sufficient room for spacing hostile subclans within tribal land was no longer available, and migration of one party to an outlying area was undesirable. The clans divided were often “brother” clans, tightly linked by ties of kinship and exchange. Warfare ruptured their essential interactions and potential to form alliances against major enemies. Consequently, clan leaders sought to institute peacemaking procedures so that they could split into two or more groups but then stay put. The few accounts that describe early attempts at peacemaking tell of ambiguous feelings toward “brother” groups turned enemy, confusion, and the exploratory efforts of men who stepped forward to reestablish peace. The solution, compensatory words and payments, was composed of the sum total of gifts offered by fellow clansmen to bereaved relatives in the victim’s clan coordinated into a formal clanwide distribution. Piglets were then earmarked for a series of reciprocal exchanges to take place over the next two to three years. During the protracted period of piglet growth, hostilities were discouraged by the promise of wealth to come and the healing hands of time set to work.

Peacemaking through the exchange of war reparations had a number of profound effects on Enga economy and
politics. First, it provided an institutional framework which made it possible to reestablish trust and resume social and economic exchange that had been severely disrupted by warfare. Second, it furnished a new role for men, one that had import for every clan member. Third, it established a forum in which all clan members could create new ties with families in opposing groups and thereby reduce the possibility of recurrent conflict. Fourth, it opened a new arena for men to gain influence—negotiation and coordination of war reparations required men with outstanding knowledge and political skills. Fifth, the possibility of peacemaking allowed for warfare to be contained and used surgically for a wide range of purposes from establishing a balance of power to fostering exchange and providing a forum in which leaders could make their names [Sillitoe 1978]. Thereafter, some wars were fought briefly for the exchange that would ensue. Finally, war reparations broadened the role of the Tee cycle from an institution of finance for strategies in the trade to an institution of finance for war reparations. When people of eastern Enga realized the potential of the Tee cycle, clans of eastern Enga joined one by one. Around this time a new locus of competition entered the Tee cycle: competition between fellow clansmen to assemble and distribute wealth as one means to gain influence.

CENTRAL ENGA

Though historical traditions do not tell of the introduction of the sweet potato to central Enga, they do tell of experiments with the new crop, followed by the extensive reorganization and consolidation of groups inhabiting the high country. The names and designs of the men who achieved tribal integration are not detailed, however, it is clear that the invention and circulation of cults played an important role in the process. Ancestral cults were imported from the west, given local names, and refitted to local needs of coordinating tribal segments for collective action. Even more significant was the institution of communal bachelors’ cults [Sangai] to supplement former individual rites of growth. Here young men were brought into retreat in the seclusion of a forest hut, where they joined in a group marriage with a spirit woman who was believed to transform the handsome and the ugly alike into physically and socially competent young adults. Praise poetry for the accomplishments of the spirit woman laid down the ideals for men and molded the protagonists of upcoming generations. The Sangai did much to structure relations between men—it produced cohorts with shared values and strong bonds of loyalty to one another and placed the education of youth firmly in the hands of elders. It appears that communal bachelors’ cults originated in central Enga around the seventh generation before the present. Shortly afterward they were imported by clans in the Lagai Valley to the west, homogenizing ideas and values among peoples of different valley systems.

The upshot of the reorganization of groups in the high country of central Enga was a number of major offensives launched as groups from the high country, where agriculture was precarious, sought to take the frost-free fertile land of the Ambum Valley [fig. 2.2]. The original inhabitants were driven out to the northeast, where they established new residences and prospered. The victors, hard-pressed to fill the land they had taken, welcomed immigrants from other tribes. In the course of the Ambum wars much was gained in addition to land—the proliferation of exchange ties, excitement, and opportunities for aspiring leaders. While formerly wars had been fought at the level of subclans or clans, for the Ambum wars much larger units—“brother” tribes and their allies—cooperated.

Out of efforts to perpetuate the positive aspects of the Ambum wars without the negative ones, high death tolls and loss of land, the Great Ceremonial Wars were born [Wiessner and Tumu 1998]. The heroes of the initial episodes of the Great Wars are not named, nor are their goals and organizational tactics detailed; narratives describing later episodes eclipse the earliest ones. All that is remembered is that, drawing on coalitions formed in the Ambum wars and other struggles, “tournament wars” were organized in which emphasis was placed on display rather than defeat and festivities rather than fighting.15 It was said that the Great Wars were “planted like a garden for the harvest that would follow” during the subsequent exchanges. Allied tribes, who provided the “owners of the fight” with housing, food, water, and allied warriors, hosted the Great Wars. Combat took place on designated battlefields belonging to the hosts, where no land could be gained or lost. When the appointed time for battle approached, Great War leaders, who were selected from among the ranks of prominent men, assembled their tribes, hosts, and allies near the battle site. Their battle plans were drawn and a fighting spirit was brewed during a week or more of song and dance.

According to historical traditions and eyewitness accounts, when the formal beginning to the tournament was called, Great War leaders (watenge) challenged their counterparts from the opposing side in spectacular displays. Watenge were to be captured or otherwise humiliated but not killed, for they would be the ones to organize ensuing exchanges of wealth. By day the men fought in full ceremonial dress in front of hundreds or thousands of spectators and rows of dancing women who cheered on their heroes. By night they ate and drank with hosts and courted women. But the Great Wars were by no means mock wars. For example, during the last Great War, fought in the late 1930s, many were wounded and three on one side, four on the other were killed. However, casualties remained relatively low owing to the structure

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14. See Lemonnier (1990) for a comprehensive and insightful overview of compensation and war reparations in the highlands of New Guinea.

15. There are some vague suggestions in early historical traditions that western Enga might have had semiritualized wars prior to the introduction of the sweet potato. More we do not know.
of the battles, which involved the exchange of volleys of arrows fired from a distance between extended lines of warriors. High-casualty tactics such as ambushes and night raids were avoided. As in smaller wars, battles continued for weeks or months until war leaders announced the end, broke their weapons in half, and cast them into the river. The wars were said to be without victors and without anger—deaths were not avenged. The breaking of spears initiated a series of exchanges that would continue for two to four years in which hosts and allies were compensated for their efforts and relationships that had formed between them during battle were transformed into exchange partnerships. Marriages contracted during the Great Wars created new pathways of interaction.

Four Great Wars were fought recurrently in central Enga from approximately the sixth generation before the present until the second (fig. 3) (Wiessner and Tumu 1998:273–88). Virtually everybody except those maimed or killed in battle benefited. The competition signaled strength of alliances, established a balance of power, and furnished a formal context in which to fight out local grudges ensuing from smaller wars. People spanning four valley systems were drawn together for a common purpose and had weeks or months to assess the attributes of potential exchange partners and establish trust. The festive exchanges and marriages following the wars turned new friendships into formalized relationships of exchange for all, though Great War leaders and other managers of wealth attracted more wealth than ordinary men. Pigs, whose production could be readily intensified to meet the needs of Great War exchanges, became a currency with widely accepted value. In the years that followed Great War episodes, small, vicious wars were fought as they had been throughout Enga history. When the momentum generated by a Great War episode wore off after some ten years, a new episode was launched.

It would be difficult to imagine a context more amenable to initiatives on the part of enterprising men to build power without treading on the toes of others. The Great Wars furnished a forum for rallying large groups of followers and provided benefits for participants without placing disproportionate demands on the household production of leaders. The spirit of competition, together with the flamboyant performances of Great War leaders to challenge and humiliate their opponents in the name of their “team,” made people eager to invest in their representatives. Very important, Great War leaders were chosen not only by their own sides but by the enemy, who called on desired opponents to step forward, organize their men, and represent their side. In the context of popular demand from both sides and public desire for continuity of leadership to reduce disruptive internal competition, within a generation after the wars were initiated the position was inherited. Historical traditions describe how the public called on the sons or nephews of Great War leaders to “replace” their fathers (Wiessner and Tumu 1998:appendix 2), but genealogies suggest that only those who displayed competence actually did so. Achievement still played a role.16

In the era of the Great Wars, shifts in values were expressed in poetry and proverbs. While early bachelors’ cult poetry centered on physical transformation, in the generations of the Great Wars new verses citing the names of prominent men as role models were added to highlight accomplishments in production and exchange. The proverb “You need a man,” lauding the value of all men, was modified by a parallel one, “Good and healthy trees produce good fruits, and poor trees produce poor fruits.” The rules of the game were changing.

WESTERN ENGA

In western Enga, the sweet potato arrived during a time of famine and was adopted immediately. Its role as a famine-relief food is recalled in both oral tradition and ritual. Population shifts then occurred as former “hunter-gatherers” moved into the Lagaip Valley in response to the reliable subsistence base provided by the sweet potato (fig. 2, 3). There they procured land from affinal and maternal kin in horticultural groups in exchange for various forms of support. Economic and social adjustments were complex—population redistribution afforded new economic opportunities but also incited tension as people of different lifestyles meshed. This is evident in a history replete with small, vicious wars that caused many subclans to migrate into outlying areas far from the central valleys in search of a better life (Wohlt 1978). Drawing on the long-standing tradition of complex ritual life in western Enga, responses to conflict were largely ritual ones, particularly in the early generations. Cults circulated widely out of efforts to solve new problems and achieve new means of integration.

Of circulating cults, the most impressive was the Kepele ancestral cult. The Kepele had its roots in the former ritual of high-country hunting groups. After the introduction of the sweet potato, when horticultural and “hunting” groups settled side by side, the Kepele was elaborated into an institution that assembled hundreds and in later generations thousands of participants and spectators for five days of feasting, ritual, and exchange. During the five-day Kepele celebrations tribes were united, boys initiated, communication with the ancestors restored, and visitors entertained. Equality of male tribal members was expressed by the expectation that each man furnish one pig and one pig only for the ceremony and through the immediate and equitable distribution of food. On these festive occasions, pigs took on ritual significance and became standard currency, orientations favoring small circles of close kin were expanded to encompass the brotherhood of all tribal members, and vicious cycles of runaway aggression between

16. The role of such tournament events in establishing and perpetuating institutionalized leadership is reminiscent of the ball games, prehistoric and historic, in Mesoamerica (Fox 1996, Hill, Blake, and Clark 1998).
clans of a tribe were halted. Kepele cults of over 50 western Enga tribes were woven into a network held together by circulating ritual experts, sharing of rites and innovations, and attendance by relatives from other tribes in the network [fig. 3].

If one considers the Kepele cult network as a whole, its sphere of influence is equal to that of the Great Wars and the Tee cycle. The atmosphere of cooperation and trust generated in the Kepele, the gathering of people from far and wide, and the cessation of hostilities for celebration paved the way for inter- and intragroup exchange while reducing associated risks. From organizing these great events, men earned prestige that allowed them to elicit cooperation and license. However, in contrast to the situation in the Great Wars and the Tee cycle, opportunities for investment in relationships and ensuing profits were few [Wiessner 2001].

During the fourth generation men of the west, like those in other parts of Enga, found a new way of gaining influence with the institution of peacemaking procedures. As a result of efforts in many areas of life, over the generations they brought about a shift from a hierarchy of power [Ehrenreich, Crumley, and Levy 1995] distributed amongst ritual experts, renowned cassowary hunters, traders, mediators, and warriors to a hierarchy topped by managers of wealth and political relations. But because of their starting point in hunting and gathering or shifting agriculture and the poorer agricultural conditions of western Enga, they never gained wealth or regional influence comparable to that of their counterparts in eastern or central Enga.

The Merging of the Great Wars and the Tee Cycle

By the fourth generation before the present (table 1) the popularity of the Great Wars was mounting and placing heavy demands on the “owners of the fight” and their hosts. Seeking new ways to finance their tournament wars, Great War leaders of central Enga, whose clans spanned the Tee cycle and Great Wars, traveled to eastern Enga. Drawing on their fund of influence from high-profile performance in the Great Wars and inherited position, they effectively campaigned to lengthen Tee chains and time Tee cycles to deliver wealth for Great War exchanges. Of particular note in such efforts was the Great War leader and Tee organizer Pendaine of Lenge, in central Enga [born ca. 1870], a modest monogamous man of few words but a spectacular performer in the context of the Great Wars. Once the two networks were connected, some phases of the Tee cycle were used to bring wealth from eastern to central Enga to fuel the Great War exchanges and others to channel wealth from the Great War exchanges back to eastern Enga to repay creditors. Both networks flourished. Historical testimonies and genealogies indicate that families at the top of both networks intermarried in order to combine information and establish ties crucial to the coordination of the two networks within a circle of emerging elites. Meanwhile, at the eastern end of the Tee cycle, Tee managers sought to consolidate power by investing in pearl shells, valuables which could not be produced by all, did not have limited life spans or voracious appetites, and were most accessible to those with well-established long-distance ties.

It was with the development of complex regional politics to link the two exchange systems that the nature of leadership began to change, as is recorded in the history of the family of Pendaine, the man who first coordinated the Great Wars and Tee cycle [Wiessner and Tumu 1998:330–31, quoting Kopio Toya Lambu, Yakani Timali clan, Lenge]:

It is said that my great-grandfather Kepa [Pendaine’s father] did not wear a headdress of bird-of-paradise feathers, nor did he boast. Kepa did not sing any songs about how wealthy he was. He wanted to be friends with everybody and was very cautious not to create bad feelings among his people and especially with his Tee partners. It was in the time of Kepa that strong leaders began to emerge. Towards the end of his lifetime, when Kepa was an old man, competition began to appear in the Tee cycle and along with it Tee politics. The Tee and strong leadership grew together and reinforced each other. This did not happen overnight.

Kopio goes on to mention that as the Tee grew, a new counting system was introduced, replacing a former system based on body parts that reached 27. In the new system, people counted by twos up to 40 and then continued with one bundle of 40 and 2, 4, 6, up to two bundles of 40, and so on up into the hundreds. Of the new system Kopio remarks: “All of these things happened following one important event: the institution of the counting system. Before its introduction nobody really knew for sure who was the real kamongo [leader]. When the counting system was introduced, people were able to tell who was the real kamongo.” Apparently, with increasing regional competition, there was interest in comparing achievements of kamongo between groups and between different Tee cycles.

Ritual developments were transacted hand-in-hand with exchange. Notable among these were initiatives of eastern clans to import bachelors’ cults that were seen as responsible for producing the magnificent cohorts of men displayed in the Great Wars. An unintended consequence of this bachelors’ cult transmission was the standardization of ideals for young men and ideas on relations between the sexes so essential for facilitating the interarea marriages on which exchange networks depended. Women of eastern Enga had input in the third generation before the present when they added a phase of disruptive courtship to bachelors’ cult emergence ceremonies in which girls publicly expressed marriage preferences.

The merging of the Great Wars and the Tee cycle posed problems of coordination, cooperation, and timing that
threatened to foil the efforts of even the most astute Tee cycle managers. It was in this context that a version of the Kepele ancestral cult, which had been imported from western Enga at an earlier date and practiced on a small scale, was expanded and molded into quite a different institution in the name of furthering prosperity. And prosperity it brought by facilitating the coordination of the burgeoning exchange cycles. The names of the men who shaped the cult and their political intent are not detailed in historical traditions. What we do know is that the Kepele was renamed Aeatee, its western “praise name,” and crafted into an elaborate six-phase cult spread out over a period of some five to ten years (table 2). The Aeatee, like other cults of the time, departed from the male-dominated ideology of past ancestral cults and emphasized essential cooperation between the sexes.

Like the Kepele, the Aeatee assembled entire tribes, articulated relations between clans, restored communication with the ancestors, and evoked confidence and prosperity. Unlike the Kepele, the Aeatee was directly geared to the needs of secular exchange networks, though such connections were masked. During the initial phases, Tee managers from the east were invited to attend, and in the shadow of this lavish cult the Tee was organized. Each of the later stages of the Aeatee was then attuned carefully to the timing of the three-phase Tee cycle—that is, when Aeatee festivities were complete and celebrants had returned home, the appropriate phase of the Tee cycle would be launched. In this process, relations of equality and inequality were juxtaposed. Equality of all men and group interest were first expressed in cult rites and then individuals were challenged to break with the same through entrepreneurial tactics in Tee exchange.

In a sense the Tee cycle can be seen as an institution crafted from three exchange networks: the early Tee cycle of eastern Enga, the Great Wars of central Enga, and the Kepele cult network of western Enga. Some Enga say that it was the Aeatee that made the Tee possible (Lacey 1975). At a time when organizing the Tee cycle involved coordinating some 100–200 widely dispersed clans, Aeatee celebrations did much to reduce costs of communication and coalescence. They demonstrated the unity, prosperity, and readiness of tribes for the Tee cycle, gathered key managers from the entire network in one place at one time, and focused the energy necessary to launch a new phase of the Tee cycle. Years of footwork in the rugged Enga landscape could not accomplish what the Aeatee achieved in a week of celebrations.17

17. Other clans in the Tee followed suit by importing cults to demonstrate prosperity and gather crowds to plan the Tee (Wiessner
For some decades, managers spanning the Tee cycle and the Great Wars were able to use their information advantage to keep the two systems apart and profit by being major players in each. Despite such efforts, more and more participants in the Great Wars became aware of the advantages of the Tee cycle, and, feeling that the Tee might bring them more wealth at lower cost than the Great Wars, they joined. Around 1939 the last of the Great Wars was fought; thereafter Great War exchange networks were subsumed by the Tee cycle. Many new branches were added to the Tee cycle over the next decades, facilitated by the colonial administration’s ban on warfare, to constitute a network of some 375 clans (fig. 3).

According to historical traditions, the motivation of Great War leaders for replacing the Great Wars with the Tee cycle was to reduce the immense organizational burden of the Great Wars, increase relative individual gains, and avoid senseless deaths. But in opting for the Tee cycle Great War leaders made a fatal error for the institutionalization of leadership. In contrast to leadership in the Great Wars, leadership in the Tee cycle was not inherited, though some elders say that it was difficult for men outside of a Tee manager’s patrilineage, “people of one blood,” to rise to the top. The persistence of egalitarian exchange institutions at lower levels such as bridewealth, child growth payments, and funerary pretensions that fed wealth into the Tee cycle allowed ambitious men to challenge those on top. Whereas a single chain of collaborators had ushered wealth from one end of the Tee network to another in preceding generations, after the Great Wars were discontinued ambitious individuals who could not break into the central chain of elite formed parallel competing chains [Feil 1984], introducing a new dimension of competition into the Tee. Competing leaders in a single clan could belong to different chains, each with its own designs for the timing and course of the Tee. Nonetheless, prior to the colonial period, once one chain had launched a potentially successful Tee cycle, clan interest took precedence over internal competition and clan “brothers” joined forces and put on a good show for clan “name.”20

But between the 1940s and 1970s what had been a streamlined system gave way to shifting factionalism and ruthless competition (Feil 1984) as new wealth and status positions were introduced by Europeans. Elders mention four influences of European contact that made powerful Tee managers lose their grip on the Tee: (1) Any able-bodied man could work for Europeans, obtain wealth through wages or looting during administration patrols, and participate in the Tee cycle, bypassing traditional channels for building wealth and reputation. (2) European goods (axes, bush knives, and shovels) could be taken to newly contacted areas by patrol members and, as rare and highly desired goods, be exchanged for large pigs to be given in the Tee cycle. (3) Men hired as go-betweens for the administration and Tee managers built direct exchange ties with leading Tee managers, ties that were otherwise closed to those who did not marry into leading lineages. (4) Owing to patrols, marriages were contracted far outside the sphere of the Tee cycle, and as distant affinal kin were integrated into the Tee its boundaries were extended.21 Thus, a man of the fourth generation like Pendaine had kept the allegiance of a huge following through his role as Great War leader and Tee cycle organizer, commanding an extensive network with the help of a single wife, two children, servants, and loyal followers. His son Lambu, who received recognition and support from the colonial administration, married 20 wives to try to accomplish the same and had between 14 and 30 servants (kendemane, literally “rope men”), handicapped or dispossessed people recruited from outside his clan. The sons of prominent Tee cycle managers were still in good positions to replace their fathers, but they had to fight constantly to hold their ground.

What Changed?

Over a period of some 250–400 years after the introduction of the sweet potato, significant changes took place in Enga. Population growth offered many new opportunities and was a contributing factor to the settlement of fringe areas of Enga.22 The economy was transformed from one based on shifting taro horticulture and hunting and gathering to a surplus economy based on sweet potato cultivation and intensive pig husbandry. A hierarchy of power distributed over hunters, traders, warriors, ritual experts, and managers gave way to hierarchy as leaders steered an economy with the potential for

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20. Testimonies of Kyakas Sapu, Kamboi Lambu, Ambone Mati, Lete Aiyaka, and Sowelya Kanopato, July 2001. Interestingly, none of these elders mentioned that the cessation of warfare was a central factor in the expansion of the Tee cycle, though when asked they said it probably was a contributing factor.

21. We have estimated growth to be about 1.1% per annum (see Wiessner and Tumu 1998:116–17). Though this may seem high for a precontact population, most areas of Enga are free of tropical diseases, water sources are clean, the climate is temperate, and food is plentiful. Enga elders name population growth as the cause of such developments as clan fission, emigration, and the need for better means of communication.
rapid growth. Within the sphere of the Tee cycle and the Great Wars a two-tiered system of leadership emerged (Pupu 1988). At the top were Tee managers and Great War leaders who mastered the large exchange networks. Beneath them were local leaders who managed internal clan affairs. Enterprising men of the sixth generation before the present who participated in the Tee cycle were able to distribute some 10 pigs; by the second generation some were able to assemble and give away 250 pigs or more together with numerous goods and valuables. Character descriptions in historical traditions reflect a tendency toward the formalization of leadership. While those from earlier generations describe personal traits or actions, those of later generations dwell on blackened faces, stance, grandeur, formal apparel, and eloquent oratory, substituting the details of person with a more anonymous cultural ideal. Over a period of some five to six generations hierarchy had developed, inequality was inherited in the context of the Great Wars, and Tee cycle managers and Great War leaders had achieved control over institutions that stretched far beyond the boundaries of their clans. Their names were known far and wide. How did this situation come to be?

Agents and Egalitarian Institutions

Let us return to the first question: What was the role of individual maximizing strategies within existing institutions in bringing about incremental change that led to institutionalized inequality? Throughout the course of history the enterprising did gain some economic advantage by interpreting rules to their advantage or pushing them to their limits. There is no reason to believe they had not done so long before the introduction of the sweet potato. They farmed out pigs to others who were repaid in piglets born to profit from the land and labor of others, married more wives, attracted more unattached individuals to their labor forces, and enticed support from a wider sphere of kin. Social competence, together with license conferred by prestige, allowed them to get away with more than the average person. They invested their gains in attracting supporters and in constructing new institutions.

How far did such efforts bring them on the road to inequality? Comparison of the distribution of rights and resources depicted in the sixth to eighth generations with that in the second to third generation produces a surprising answer. Except in western areas where former "hunters and gatherers" abandoned their lifestyle to become horticulturalists, basic institutions and ideologies described in early oral traditions persisted. Land continued to be passed on in the family or lineage. When family land was plentiful, as it was in many areas throughout Enga history, men could give land to affinal kin if they joined the clan. However, strong opposition on the part of subclan members prevented them from releasing land to outsiders or taking the land of "brothers." By the colonial era, "big-men" did not have significantly larger landholdings per household member than their fellow clansmen, though they had larger households and more of their family land under cultivation (Meggitt 1974:191 n. 43). The same applies to labor. At no point in Enga history did men appropriate the labor of other households in their clans; strong ethics of equality saw to that. The greatest managers were able to attract more dispossessed or handicapped individuals from other clans into their labor forces, but these servants never lost their right to come, go, and shift allegiances. Equal access to the means of production left its mark on the landscape—the basic structure and spacing of household compounds was not significantly altered with the expansion of exchange networks.

Throughout the time span considered, all men retained the right to bridewealth support from fellow clanspeople. Clansmen avenged every member, right or wrong, for harm inflicted upon them. Poverty barred no young man from marrying, and no man was forced into contractual debt to procure a spouse. Genealogies indicate that polygamy was practiced from the earliest generations on, though marriage to more than two or three spouses was rare in all generations (see also Meggitt 1965, Waddell 1972, Wohl 1978). Group members, who welcomed brides to produce sons and daughters for the clan, did not discourage polygyny. Rather, protest against multiple polygamous marriages came from wives and coalitions of in-laws. If a second or third wife received less than other wives in terms of attention, land to cultivate, and, most important, wealth to give to her relatives, they encouraged divorce and remarriage into a more economically promising union. Only the most capable of men could manage polygyny.

In external exchange, each household received financing for its enterprises from maternal and affinal kin outside the clan, and all households "held onto their own pig ropes" in ceremonial exchanges. That is to say, wealth was not pooled and distributed by managers during clan presentations; rather, each household gave its contributions to its own partners in public and reaped the returns. This right was enforced not only by clan members but also by maternal kin and in-laws, who sought to keep tabs on their gifts in order to be assured of reciprocation.

There is only one area in which serious inroads were made into the equal distribution of resources—access to information critical to managing the flow of wealth and ideas in the great exchange networks. Of course, we know little about the distribution of information in Enga for the early generations; however, the new techniques of information management detailed in historical traditions do suggest significant developments. For example, most elders say that symbolic speech was elab-

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23. This practice was not new—the few individuals who contributed little to the clan and could not establish households had always been held in ridicule and considered fair game for exploitation. In the colonial period, when leaders were given fixed official status and greater access to wealth, some men engaged in hyperpolygyny. For instance, Lambu, the son of Pendaine, married 13 wives; his domestic life was fraught with conflicts extending even to homicide between co-wives.

24. In the colonial period, when leaders were given fixed official status and greater access to wealth, some men engaged in hyperpolygyny. For instance, Lambu, the son of Pendaine, married 13 wives; his domestic life was fraught with conflicts extending even to homicide between co-wives.
orated over generations to transmit messages in public oratory that would be understood only by a select few. Men and women from leading families in the Tee cycle and the Great Wars intermarried as part of their efforts to restrict the flow of information essential to playing the exchange networks in their favor. Managers spanning the Tee cycle and Great Wars used deceit and rumor to keep the two systems apart for one to two generations. Finally, leading families began to pass on family histories which detailed the strategies, failures, and accomplishments of their forebears so that younger members could find inspiration and legitimation in the actions of those who had gone before. The knowledge differential between men interviewed was impressive—some men knew the history of vast exchange networks, others could hardly see beyond their garden fences. Nonetheless, the information advantage did not go uncontested. Continual efforts were made by rivals to prevent others from managing information by circulating disruptive rumors along the Enga telegraph: words shouted from ridge to ridge and interpreted according to the designs of the receivers.

New Institutions

The construction of new institutions was a task to which managers devoted considerable effort and which in turn gave them their greatest advantages—regional influence, information control, and access to new ideas. By building new economic institutions such as the Tee cycle and the Great Wars to reduce transaction costs and thereby make large-scale regional exchange profitable, managers gained access to the resources of a much broader population without draining the wealth of their own followers. It is the material goods procured on regional voyages that remain in the archaeological record; however, the less visible ideas brought home from journeys had a greater impact on economy and society. Because new institutions ventured into unclaimed social and economic territory, new rules could be constructed without threatening existing relationships.

In constructing the early Tee cycle, men appear to have entertained visions no broader than the pursuit of immediate personal interests. However, the majority of the institutions that arose in the course of Enga history were not a product of individual aggrandizement leading to institutional change. Rather, they originated when leaders recognized potential in spontaneous events, discussed them with fellow clanspeople, and attempted to alter, formalize, and perpetuate them in such a way as to address current problems confronting their groups. We are fortunate to have two well-documented cases of how spontaneous events affected institutional change. The first occurred in the early 20th century when the Great War leader Pendaine mistakenly slew a beloved kinsman during one of the Great War battles. Thereafter he is said to have weighed the value of the Great Wars against the Tee cycle together with his fellow Yakani clansmen. They decided that discontinuing the Great Wars and weaving their exchange networks into the Tee cycle would produce greater prosperity while avoiding senseless deaths. In this case, one institution was actively selected over another. Other groups followed their lead, expanding the Tee cycle to unwieldy proportions. The second incident occurred between 1915 and 1920 in the context of a bachelors’ cult festival. Two women of eastern Enga, overcome by jealousy, broke the solemnity of an emergence festival, pulling a man out of the dance line and fighting over him ferociously. So amused was the crowd that clan leaders did not intervene. The word spread, and women from other clans followed suit. After some consideration, men accepted their actions with “grudging tolerance” because they drew the desired crowds to witness the upcoming generation of men and then linger to plan upcoming exchange events. Within two decades, aggressive female competition had become a regular and regulated highlight of bachelors’ cults [Wiessner and Tumu 1998:241–43].

The acquisition of existing institutions from other groups involved an even greater degree of intentionality. Cults and exchanges of other groups that were seen as potentially beneficial were introduced to clan members by leading men of a clan and their dimensions explored. If they were deemed promising, wealth was raised for their purchase or, in the case of the Tee, plans were made to phase wealth distributions into the Tee cycle. Here again, the strongest selection pressure for their adoption was group interest, even though those who promoted new institutions were keenly aware of how they might play them to their own advantage as well.

Once acquired, new institutions went through a trial period in which most clansmen were involved. From historical traditions it is possible to identify at least six factors that gave new institutions appeal. The first was their utility in dealing with major perturbations, such as problems ensuing from population shifts after the introduction of the sweet potato, population growth, and scalar stress generated by the large exchange networks. A second appeal was the potential of new institutions for financing existing exchanges which were essential to reproducing individual and clan autonomy—bride-wealth, compensation to allies, child growth payments, and funeral feasts. The new was summoned to support the old. A third appeal was factional competition [Brumfiel 1994], as groups sought innovations which were perceived to enhance the prosperity of rivals. A fourth was the charisma of the men who backed innovations and the ability of influential men to demonstrate that they worked positively and produced what Meggitt [1967] has called the “gravy train.” A fifth appeal was that in principle all men had an equal chance to gain wealth and prestige through new institutions which regulated social and economic exchange, though in practice some men were in a better position to do so than others. Finally, new institutions appear to have been valued for their anticipated strength and prosperity. Forward-looking attitudes are expressed in narratives describing the entrance of groups into the Tee cycle and the adoption of bachelors’ cults, ancestral cults, and war reparations to
the enemy. Historical traditions present change as positive and to be anticipated in the future. In view of these selection processes, it is questionable whether “the individualistic aggrandizer” is a meaningful unit of analysis for societies in which personal welfare is so deeply embedded in cooperative egalitarian coalitions [M. Strathern 1988, Strathern and Stewart 2000].

Ideology, Institutions, and Change

Ideologies were altered along with institutions as managers and their fellow clansmen imported cults and put new ideas into practice. Most ideological change concerned the parameters governing cooperation and competition—whether competition could exist at all, with whom, when, over what, and for what rewards. It was changes to these rules of the game that allowed new institutions and social alliances to unfold. Spheres of cooperation were expanded along paths paved by circulating cults, which standardized norms and values. As geographical horizons broadened, so did ideas concerning the limits of the world and how it worked, giving Enga the impression of rapidly increasing social complexity that is so often mentioned in historical traditions. Tolerance for moderate competition was expanded and eventually superseded by admiration for overt and flamboyant competition in the context of managing the great exchange networks, as bachelors’ poetry molded ideas for wealthy men. Meanwhile, the growing body of historical narratives softened the guidelines of “tradition”—they presented growth, innovation, and outstanding performance by some as the expected course of events and primed young men to anticipate a lifetime filled with changes.

Who could compete with whom changed little throughout the course of history. All adult clansmen remained potential equals in competition. Men and women were defined as different and not potential competitors. Kinsmen and exchange partners outside the clan remained cooperators and strict equals, by contrast to Melpa Moka, in which partners competed and engaged in alternating inequality [Strathern 1971]. The primary contexts for competition and cooperation also persisted: men competed in oratory, self-presentation, warfare, and, above all, exchange. They cooperated in agricultural enterprises, procuring of brides, clan defense, and communication with the spirit world. Nonetheless, some changes did take place. The position of Great War leader became inherited and was thus removed from the sphere of intragroup competition. Moreover, as the dependency of men on women in exchange increased, families became Tee-making units. The theme of the essential complementarity of men and women was placed at the center of bachelors’, ancestral, and female-spirit cults, contributing to the relaxation of relations between the sexes. In the 1930s and 1940s a number of widows participated in the Tee in their own right, competing directly with men. One woman, Takime, even became a prominent Tee cycle manager [Kyakas and Wiessner 1992].

The import, export, and performance of cults constantly altered definitions of value. Gifts and commodities, particularly pigs and pearl shells, were given new worth and meaning through their association with the sacred in ancestral cults [Wiessner 2001]. Verses added to bachelors’ cult poetry that updated the ideals for men placed increasing emphasis on success in ceremonial exchange. The stakes in competition also took on new dimensions. In the earlier generations those who excelled became mediators in internal relations and in relations with neighboring clans, managed polygynous marriages, and produced more wealth than others at home but left few privileges to their sons. By the first half of the 20th century, those at the top held names known throughout Enga and had widespread influence, several wives, servants, and control over the vast amounts of wealth flowing in exchange networks. The ethos of equality had been eroded to the point where leadership was inherited in the context of the Great Wars and the sons of Tee managers stood a much greater chance than their peers of “replacing” their fathers [see also Strathern 1971:208–12].

While the aspects of competition and cooperation that did change made a difference, two that did not change may have made all the difference in the course of Enga history. The first was that equal access to the reproduction of relations with the spirit world was guarded as a fundamental right of all group members and never became an arena for competition. For many of the smaller cults, there were no ritual experts—older men of experience jointly directed proceedings. For larger cults, particularly those of western Enga, there was a strict separation of sacred and secular power. Ritual experts from within the group were classified as eccentric, fearsome specialists and noncompetitors in secular affairs. Their authority was further curbed by relegating them to specific aspects of cult performance and summoning ritual experts from other groups, even different linguistic groups, to co-preserve over ceremonies. Conversely, managers of wealth were barred from the role of ritual expert by the stigma of eccentricity and by a wandering lifestyle that precluded building a power base at home. All families of a clan were, in principle, equal sponsors of cults. The enterprising could manage ritual life only indirectly by supporting the import or export of certain cults, participating heavily in the organization of cult performances, or inviting desired external ritual experts from elsewhere. Thus managers could never take hold of the forces considered responsible for the reproduction of fertility and prosperity.

The second aspect that did not change concerned the nature of competition—that the road to success was one of distribution, not retention and accumulation. To win was to furnish benefits for group members or manage...
Old and New Institutions Juxtaposed

Throughout Enga history new institutions were constructed or imported and added to the cultural repertoire to coexist with former ones. Enga history might be described as additive. Most Enga narrators find points of articulation between the old and new but do not expect a coherent cultural repertoire (Barth 1981:49; Rodseth 1998). New institutions allowed people to pursue opportunities with reduced transaction costs; old ones based on egalitarian principles continued to reduce transaction costs in everyday social and economic exchange. As long as former institutions persisted, the enterprising did not have to renounce traditional roles and obligations in order to engage in new ones. The simultaneous operation of both the old and the new provided continuity and security at the local level that lowered the risks associated with experimentation. When the new faltered, people fell back on the old, allowing the society to cycle between different phases of complexity (David and Sterner 1999, Leach 1954). An interesting parallel case of the juxtaposition of institutions can be found in the work of Tuzin (1976, 1997, 2001) on the Ilahita Arapesh. In the last quarter of the 19th century, the village of Ilahita adopted the Abelam Tambaran cult in response to the need to maintain village cohesion in the face of Abelam military advancement. The Tambaran became an overarching hierarchically organized institution that regulated social life and social cohesion on principles of dual organization. In Tuzin’s [2001:127] words, it “relieved, but was also a product of, the stresses engendered by egalitarianism under conditions where disputants could not longer go their own ways.” The Tambaran introduced values dramatically opposed to former egalitarian ones, such as degradation of women, but these.

were subscribed to in the ritual setting only (see also Harrison 1985). In secular life, the former egalitarian ethos persisted, and so with the demise of the Tambaran people reverted to their former ethos and went their own ways in a rapidly changing world (Tuzin 1997).

The growing popularity of and participation in new institutions introduced dimensions to change that were out of the hands of individual agents and with which they strove to keep abreast. For example, the circulation of goods in the Tee cycle eclipsed the trade in central areas but made it more profitable at the margins from where valuables were imported to fuel exchange cycles, putting some traders out of business [Mangi 1988, Meggitt 1956]. Bridewealth, child growth payments, funerary prestations, and compensation to allies became greatly inflated, as they were used to channel wealth into the Tee cycle and were fueled by wealth flowing out of it. Like it or not, everybody had to step up production. Over time the Great Wars drew so many participants that their organization eventually defeated Great War leaders.

The upshot of preserving older institutions based on egalitarian ideals side by side with newer ones rather than replacing them was that older exchanges provided a ladder on which enterprise men could climb to challenge those at the top. The valuation of the pig, a good that could be produced locally by all households (Lemonnier 1996), further aggravated competition. By the time of first contact with Europeans, the major exchange networks of Enga were headed for a fall because of their uncontained growth and popularity. The Great Wars collapsed one by one as they became unmanageable; the last was fought in 1939, and its networks were subsumed by the Tee cycle. The Tee cycle continued to expand and thrive for some decades under the Pax Britannica and with the injection of new wealth brought by Europeans. It foundered in the 1970s and has not been performed since, as influential men have turned their sights toward provincial and national elections. Today smaller exchanges such as bridewealth, child growth payments, funerary exchanges, and war reparations fill the gap left by the Tee cycle. Older men who walked from one end of Enga to the other to organize the Tee cycle between the 1930s and the 1960s feel that the Tee cycle might eventually have fragmented without European interference. They argue that the Tee cycle had simply grown too large and competitive for managers to control the information essential to its organization and to persuade such a large following to comply with their plans.

Broader Implications

Returning to the question of structure and agency, certainly individual agency left its mark in the testimonies of Enga history. However, there is little evidence that the initial steps to the institutionalization of hierarchical inequality were the products of influential agents’ appropriating the resources of fellow group members or that they sought to do so. Individual success was too heavily embedded in group ideals and group welfare, and
egalitarian coalitions were too strong. Where agents made their biggest gains was by helping develop or import new institutions to tap hitherto undeveloped realms of the economy and to alter norms and ideals. New institutions arose not as a by-product of aggrandizement but when individuals, usually clan leaders, recognized the potential in spontaneous events, discussed these with fellow clanspeople, and attempted to frame them into more formal institutions to address group problems. The innovations promoted were ones that leaders felt could be played to their own advantage; the innovations that stuck were those that worked for the individual and the group. Additional selection pressures favoring new institutions arose with perturbations to the system, lending some support to adaptationist approaches. A final force of change that cannot be attributed to the direct action of individual agents brought unintended consequences—the juxtaposing of new and old institutions and their interactive effect.

But the main thrust of my argument concerns the structure of egalitarian societies. As the Enga case illustrates, egalitarianism is not the product of simplicity; its structures may be as varied and complex as hierarchical structures of power. Egalitarian structures have important consequences for reducing the high transaction costs of social and economic exchange and are maintained by social coalitions within a society. All known egalitarian societies are partitioned by socially defined distinctions drawn along the lines of age, gender, ability, or kinship roles; equal rights to status positions and resources within these partitions may be maintained by different social coalitions. The strength and configuration of these coalitions, together with ideologies of what constitutes a transgression of the norms of equality, produce a wide range of variation in so-called egalitarian societies as well as in pathways to inequality. In closing I would like to briefly explore such variation by comparing Enga with other societies, particularly African societies for which material from ethnography, oral history, archaeology, and historical or comparative linguistics is available.

For Enga it is possible to identify a number of features of egalitarian ethos and egalitarian coalitions which influenced the options of the enterprising. Very important in this context is that the Enga ethos did not exclude competition; rather, all men were encouraged to strive to do well, and the successful were rewarded with prestige if their efforts benefited the group. This is in sharp contrast to the situation of foragers in Africa such as the San or the Hadza, where competition is avoided in childhood by the absence of competitive games (Konner 1972, Marshall 1976, Sbrezny 1976) and suppressed in adulthood by both cultural institutions and leveling action (Lee 1993, Marshall 1976). When the ethos of egalitarianism nips competition in the bud, there are formidable barriers to the emergence of leadership and institutionalized social inequalities.

For Enga, three axes of egalitarianism and their accompanying coalitions were prominent. The first was the potential equality of all clansmen that guaranteed equal access to land, labor, and exchange relationships and clan support in procuring spouses for all men. Under these conditions the most gifted young men could become “emergent big-men” (Strathern 1982) shortly after marriage. Such equality of access to the means of production and reproduction inhibited the exploitation of the labor of juniors in the process of competition for wives, what Illife (1995:95) calls “one of the most dynamic and enduring forces in African history.” Moreover, all mature men held equal rights in the reproduction of relations with the ancestors as soon as their households could produce pigs for ancestral cults. Through ancestral cults the ethos of social equality that cemented groups was preserved over generations despite the disruptive forces. Consequently, the rise of leaders who could manage both meaning and material wealth and link their success to supernatural power was impeded.26 Such privileged access to the spirit world has been proposed to be a key factor in the emergence of inequality (Asombang 1999; David and Sterner 1999; Godelier 1978, 1980; McIntosh 1999; Netting 1972; Ploeg 2001; Schoenbrun 1999; Southall 1999; Robertshaw 1999; Vansina 1990, 1999), even in the most fiercely egalitarian societies (Kinahan 1991, 1999).

A second powerful axis of equality was maintained with exchange partners outside the clan, usually kin, who were maternal or affinal relatives. Such equality, based on lifelong two-way exchanges of wealth, fostered cooperation and trust with relatives outside the group by removing competition and exploitation from the picture. External relations were regarded as fragile strands of a spider web, for they afforded economic advantage that could not be attained through home production. Moreover, they provided alternative residences in times of hardship and potential hosts for war refugees. Enga managers took full advantage of external relationships to secure “wealth in social ties,” the foundation for inequality. However, the very equality that facilitated the maintenance of such broad ties precluded centralizing labor and building “wealth in people” (Guyer 1995, Guyer and Belinga 1995, Miers and Kopytoff 1977). For example, had bridewealth been a one-time payment, ambitious men would have been able to convert “wealth in pigs” to “wealth in people” through high levels of polynymy (Illife 1995; Richards 1950; Vansina 1990:227; Uchendu 1965). But as it was, affinal kin insisted that their daughters receive as much land, labor, and wealth for lifelong exchanges from their husband’s kin as would women in monogamous marriages. Consequently, prior to the colonial period, only the most gifted men could support two or three wives. Moreover, the principle of

26. A salient example of the separation between the sacred and the secular comes from the life history of Yakani Lambu, one of Enga’s most powerful Tee managers from 1930 to 1960. Prior to a Tee cycle, sacred vegetation on the Yakani ancestral site was felled by a rival in an attempt to bring the wrath of the ancestors upon Lambu and the Yakani clan. Upon hearing the news, Lambu went with his men to inspect the damage and found blood dripping from the defiled tree. His response was a rather unheroic: “Let’s get out of here!”
equality of affines held for new immigrants. Immigrants were given land by the host lineage on the basis of affinal ties (Wohlt 1978) with the assurance that their children would become full-fledged clan members. Hosts hoped for support from their relatives but in the face of equality could not establish relationships such as “the primacy of the first comer” so critical to the formation of internal group hierarchy in Central African societies (Kopytoff 1999:89). Very significant in relations of equality between clansmen and with affines was the fact that coalitions to enforce equality were composed largely of men. Women who wanted to exert their rights had to do so indirectly by influencing their husbands, turning to their respective kinsmen for support, or resorting to violent protest (M. Strathern 1972, Kyakas and Wiessner 1992). Women can be powerful watchdogs of inequality (Boehm 1999a), and in societies where men and women have roughly equal roles in enforcement inequalities are likely to have a much more difficult time taking root. Among the !Kung (Ju/’hoansi) of today, it is women rather than men who are making the most significant efforts to maintain networks of exchange (lxaro) and thereby ensuring the redistribution of wealth in the face of unequal access to wealth from male wage labor (Wiessner 2000). In the fascinating Iroquois case presented by Trigger (1990), it appears that the equality of women and their role in enforcing social norms together with a noncompetitive ethos may have led to quite a different complex political structure from that found among the otherwise somewhat similar Enga.

A third powerful constellation of equality existed in the segmentary lineage system to maintain egalitarian relations among parallel social units. Whether large or small, clans were equal to all other clans in a tribe, subclans to other subclans in a clan, and so on. If their autonomy was challenged, allies often offered support. Equality of social units facilitated cooperation of brother groups in larger enterprises, it was defended to the very end. When wars erupted between parallel social units, the defeated either conceded a parcel of land or were displaced to reestablish themselves in a new territory or disbanded but never conceded to being subordinated to or subsumed by the victor’s clan. These dynamics, amongst others, inhibited the centralization of power (Lederman 1986, Roscoe 1993, Spencer 1990, Wright 1977) or the formation of a vertical hierarchy of social units (Friedman and Rowlands 1978). Continual jockeying for wealth and influence on the part of parallel clans in the segmentary lineage system produced a pattern of rapid, uniform, and widespread land clearance that would be very distinct from the patterns of land use produced by centralization.

These are but a few examples of how diverse ideologies and coalitions within egalitarian societies, played out under certain environmental conditions, will produce very different obstacles to the emergence of institutionalized inequality setting egalitarian societies off on trajectories that depart from what David and Sterner (1999:99) have called the “state-jacket sequence” of neoevolutionary theory for political evolution [Ehrenreich, Crumley, and Levy 1995; McIntosh 1999; Paynter 1989; Vansina 1990, 1999; Yoffee 1993]. Exploring egalitarian structures as complex institutions that arose historically to reduce the transaction costs of exchange makes it possible to depart from neoevolutionary models without abandoning a more encompassing theoretical framework. By facilitating intercultural comparison, this framework should increase our understanding of the different courses taken by the enterprising and the diverse forms of social complexity emerging from the process. Despite the restrictions that egalitarian coalitions placed on developments in Enga society, by first contact with Europeans Enga had taken important steps toward institutionalized inequality. A booming surplus economy had been generated, norms governing competition had been unleashed, the “elite” had a strong information advantage, and some families had much greater “wealth in social ties” than others. Precedents for inequality had been set in ideology and practical action. The potential equality of clansmen and affines was still a widely held ethos, but the real differences were great. Although the large exchange networks were foundering by the time of first contact, it is unlikely that their collapse would have been the end of the story. Up until contact, population growth had provided more opportunities than obstacles, but several decades down the road pressure on land would begin to felt. The independence, equality, and autonomy of social units from clans to households depended heavily on the availability of land. With limits on land, the options of social units to maintain autonomy might have been severely compromised (David and Sterner 1999). Alternatively, predictions from an influential Huli cult to the southwest (Ballard 1995, Frankel 1986, Wiessner and Tumu 2001), grounded in cosmological beliefs unfamiliar to central and eastern Enga, were spreading rumors that the world would end in a few generations. Had managers taken the portending doom from a foreign cult into their hands, they might have secured a more direct line to the supernatural. Circumstance had long provided Enga with opportunities to build new institutions. Managers in future generations would have these new ideologies and institutions as starting points from which to go farther.

Comments

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In this interesting and timely paper, Wiessner argues that egalitarian institutions in “small-scale” societies are designed to lower the transaction costs of making and keeping agreements in the exchange of goods and services among political players. She disputes North’s (1990) as-
assertion that transaction costs are lower in traditional societies, suggesting that they are in fact high because of the uncertainties created by exchanges among close kin. I disagree. Transaction costs are generally low when communities have (1) “stability of relations,” (2) “multiplex relations,” or repeated interactions across various social and economic spheres, (3) “direct relations” (e.g., without state intervention) and, most important, (4) “shared beliefs and preferences” [Taylor and Singleton 1993:199]. Case studies from around the world show that nepotism and kin-related altruism via resource pooling, sharing, and cooperative territorial behavior are important among close kin who share high coefficients of relatedness and live near each other [e.g., Allen 1998, Gurven et al. 2001]. Therefore, it is likely that communities sharing linguistic, cultural, social, and kinship affinities can more effectively reduce the negotiation, monitoring, and enforcement costs of exchange agreements than communities whose members are more socially and spatially dispersed and less likely to be socioculturally homogeneous.

Because transaction costs are low in small-scale societies, it seems unlikely that egalitarian institutions would emerge to lower them. In fact, the contrary could be argued. An effective response to collective-action problems such as those outlined by Wiessner requires cooperation among political players and the development of coercive measures to punish potential free riders. Political players may allow free riding when resources are abundant or not perceived as scarce, but increasing environmental demands caused by changes in consumption and population variables—such as the changes recorded by oral history and archaeology for a number of Highland groups prior to European contact and well before the Great Wars and Tee cycles emerged—would encourage the development of coercive measures to curtail it. The hegemonic rise of “aggrandizers” and their followers and the concomitant establishment of sociopolitical hierarchies best achieve this. Thus, the lowering of transaction costs would best be accomplished under a hierarchical political system. Why, then, would complex and costly egalitarian institutions arise among the Enga? Alternative hypotheses to explain the existence of egalitarian institutions in pre-European contact times are necessary.

Another problem is that, because oral accounts cover only a short period of Enga history, it is hard to determine what came before the period covered by Wiessner without archaeological evidence. Political hierarchies and institutionalized inequality could have developed in the region well before the “Great Wars” and the institutionalization of the Tee cycle. Highland Papua New Guinea archaeology suggests that agriculture developed in the region around 9,000 B.P. and that the consequences of agricultural expansion included a population explosion and radical shifts in settlement patterns well before the sweet-potato revolution (e.g., Bayliss-Smith and Golson 1992). Large populations and multifarious economic and political opportunities for achieving status and power would have scrambled assurances of cooperation among different social players, thus encouraging the rise of political hierarchies. The Enga egalitarian ethos encountered by ethnographers may have lingered in a context in which the occurrence of formal hierarchical institutions or parallel semiegalitarian ones followed a cyclical process, their rise and decline synchronous with the ever-rearranging political landscape and the social, historical, and economic context of the times. Studies of the archaeology and oral history of New Georgia suggest that not only was the rise of institutionalized hierarchies among the most conspicuous responses to changes in patterns of settlement and demographic parameters [e.g., Aswani 2000, Sheppard, Walter, and Nagaoka 2000] but also their degree of formalization varied across space and time and was cyclical in nature.

The ethnohistory of this paper is rich and interesting. Readers may criticize Wiessner for using only ethnohistory to reconstruct the Enga’s past, pointing to the importance [and pliability] of contemporary narratives in creating shared social identities or in supporting claims to political legitimacy and autonomy from colonial and postcolonial orders. My problem, however, is not with Wiessner’s use of ethnohistory as history or her use of Enga genealogy to estimate the chronological sequence of events. Rather, I would criticize her failure to draw upon archaeological evidence [or even mention it] to complement the oral history she employs. The rich literature on Highland Papua New Guinea archaeology could help her substantiate her claims. This void is a weakness in her analysis and leaves her conclusions open to question.

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Wiessner’s collaborative research project with her Enga colleagues Akii Tumu, Alome Kyakas, and Nitze Pupu has provided us with one of the first detailed accounts of historical transformations in a New Guinea Highlands society. This represents a considerable advance on previous strategies, which sought to reconstruct the past by juxtaposing contrasting social formations from ethnographic observations amongst different societies. The resulting trajectories for social evolution tended to betray the theoretical proclivities or narrowly regional perspectives of their authors rather than offer any insight into actual processes of transformation from one putative formation to the next. Oral history has been a sadly neglected avenue of research in the Highlands, and this is all the more regrettable because so many older Highlands women and men have experienced the transition from autonomous communities to colonial rule and then to independence within the span of a single lifetime.

The thumbnail account of Enga oral history offered here only hints at the impressive and convincing detail of this team’s major monograph (Wiessner and Tumu
so commonly described in systemic and synchronic theory of oral cultures. Perhaps the most salutary lesson directed at attempts to reconstruct the precontact history of oral cultures. The Enga see exchanges are a case in point, as the oral histories now suggest that no two see exchange cycles were alike. Rather, the sees, along with most other “institutions,” experienced continuous transformation as new materials, ideas, and networks of exchange were brought into its orbit.

Perhaps it is the subtlety of her oral historical work that raises some doubt about the value of Wiessner’s choice of theoretical framework in this paper, however admirable her intention to engage with wider debates on political transformation. The focus on institutions, transaction costs, and the role of individual agents may reflect Wiessner’s parallel research project among Kung San communities but is curiously at odds with the latent critique of “institution”-based ethnography contained in the Enga oral histories. Certainly, the “road to inequality” which Wiessner describes for Enga is not so clear-cut amongst their neighbours the Huli, on the southwestern margins of Enga territory.

Huli oral history describes a pre–sweet-potato system of hereditary leadership culminating, amongst those clans that owned key ritual sites, in closely knit and heavily intermarried families of ritual experts who wielded remarkable power over the entire Huli language community and even beyond the boundaries of Huli territory (Strathern 1993) signals the former importance of ritual leadership for the Highlands region more generally. The past two to three centuries of Huli history, during which there was an explosion in human and pig numbers similar to that described here for the Enga, witnessed a gradual “democratization” of leadership roles. Ceremonies were increasingly sponsored and ministered by a much wider range of players, who assumed a bewildering array of minor ceremonial offices in rituals such as the tege. Similarly, the high degree of control over land and resources formerly exercised by hereditary clan and subclan leaders appears to have waned as individuals, irrespective of their descent status, established claims to land founded primarily on the principle of labour investment and on their individual managerial capacity to marshal that labour. Crucially, the situation of increasing monopolization by leaders of flows of information that Wiessner describes for post–sweet-potato Enga society was also reversed amongst Huli as ritual knowledge, along with the capacity to monopolize regional networks of trade in material items such as salt and stone axe blades, ceased to be the preserve of the hereditary ritual families (Ballard 1994). One might even characterize this historical trend in Huli leadership as a shift from hierarchy to heterarchy, in a direction precisely opposite to that indicated for the Enga by Wiessner.

This is not to say that forms of “inequality” similar to those amongst Enga have not developed in post–sweet-potato Huli society, which has seen the emergence of “rich men” (agali homogo) and occasionally rich women (wali homogo) as the pre-eminent brokers of social transactions. Yet “inequality” in Huli society has more often taken the form of competition between social groups within which a strongly egalitarian ethos guarantees a degree of solidarity, at least with respect to particular projects such as wars or major trading or gardening ventures. The Enga may not represent land shortage as a serious problem and rarely identify land as a proximate cause for wars, but oral histories of the Enga and Huli alike are replete with serial displacements of clans from their territories. It is on this larger scale of intergroup competition that an analysis of “inequality” in the New Guinea highlands might more productively be focused.

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This article sets a new standard for the ethnohistorical treatment of political and economic processes in non-literate egalitarian societies, and it addresses one of the great mysteries in political anthropology: How did egalitarian bands or (more probably) tribes evolve into chiefdoms with stratification and stable hierarchies? We lack a full, ethnographically documented processual sequence, but in the middle—between egalitarian societies and chiefdoms with hereditary leadership—lies a fascinating intermediate-seeming type, the great-man or big-man society. Wiessner has provided us with a richly detailed case history that shows how such a society can change, before contact, toward more hierarchy.

Normally archaeologists deal in environmental and demographic factors and grave goods provide a rough index to social stratification, but recently the disposition of power has become a focus (Earle 1977; see also Boehm 1999b) and social and economic organization are obviously relevant. Wiessner emphasizes all of these variables, along with religion and secular ideology. The underlying question is, How do we get from a vigilantly egalitarian group, one which sharply curbs individual political ascendance, to a group which tolerates and appreciates strong leaders and, by making leadership hereditary, creates the basis for hierarchy among family lines? Tikopia (Firth 1936) can be taken as an instance in which egalitarian society has definitively transformed itself into a hierarchical society, and the Enga have become a weak chiefdom by the end of Wiessner’s story. But she offers us some importance clues about how things might have started in this direction.

Her suggestive processual analysis is both detailed and well grounded ethnographically, but I have a concern about her views on whether egalitarianism came down from the Upper Paleolithic. This political approach involves the curbing of those who are prone to self-aggrandizement, and this is not mainly a matter of economic accumulation or of possession of raw power.
There is a phobia about one individual's treating another dominantly, as an essential nonequal, and I believe it to be ancient. Wiessner does not agree about the equivalence of today's mobile foragers with yesterday's, but I believe that the debate over this has been oversimplified. We know now that the Upper Paleolithic was accompanied by a great deal of environmental fluctuation. Mobile hunter-gatherers were variegated 40,000 years ago just as they are today, and if in the face of all this variation we can find universal features or strong central tendencies today, it makes sense that they could be rather confidently projected back into the Upper Paleolithic (see Boehm 1999a, 2000).

On this basis, some baseline features of past egalitarianism would include an egalitarian ethos, an intention to prevent interpersonal domination at least among adult males of a band, cooperative division of favored large game, and the use of social sanctions by group members to prevent dominators or would-be dominators from gaining control of their groups over the long term. Going with this is a decision process based on group consensus, and much of this syndrome—the political side of it but not the hunting or nomadic side—seems to have continued after domestication in very much the same form among tribal people.

What is interesting about big-man societies is that the same ethos can be flexibly applied to men who control great wealth, albeit ephemerally. One must keep in mind, as Wiessner and other students of New Guinea tribal life have made clear, that such control is gained in a cultural context of intergroup competition and that a big-man's prestigious displays of wealth bring prestige to the entire group. Thus, individualistic self-aggrandizement is accepted because of the common benefits it brings. There is still a vigilant group that is interested in the essential political parity of males, as is evidenced by the fact that big-men who become abusive are executed (Boehm 1993).

Much more could be said, for this article is full of riches. The case made for transaction costs is interesting, and this adds an important variable to the search for the origins of hierarchy. In addition, the data are excellent and are published elsewhere in detail. This effort takes us one step closer to developing sounder hypotheses about how humans began to centralize everything, for it suggests a way in which the processes that led to state formation could have gotten started.

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The most appropriate response to Wiessner's superb essay should be to bend the knee and retire in silence—but this would defy all academic licensing requirements. As the only extant description for all the world's cultures of a pristine development from egalitarian to rank society taken from the narratives of the participants themselves rather than mythology, her article deserves to become an instant classic. That it is theoretically and analytically sophisticated is an added joy. Recovery of oral histories for the breadth and depth of Enga territories and their potato and piglet politics allows for a reconstruction of institutional changes and their linkages to motivated individual and group actions and the creation of new social values both for objects and for persons. Wiessner's analysis also demonstrates the utility of new institutional economics (Ensminger 1992, North 1990) theory and analytical categories and procedures; her analysis of egalitarian societies also fills a void in this theory's conceptualizations of this stage of societal development (cf. North 1990).

Most current explanations for the origins of social inequalities and privilege have failed to free themselves from the centuries of ironic and imaginative speculation that now shroud this issue. Wiessner sheds this philosophical dead weight by addressing the irony of “egalitarianism,” perhaps the most infamous malapropism in anthropology. The word conveys the impression that societies so designated operate on principles of equality rather than the inequalities rampant in all the rest. All societies, however, are riven with inequalities of various sorts, and society and family life would be impossible without them. Egalitarian societies are those that invest substantial resources and talk in pretending that inequalities are ephemeral and inconsequential. As Wiessner demonstrates here and elsewhere (1996, 2001), not all egalitarian societies are created equal, and their differences are structurally significant. Egalitarian societies are neither simple nor the same; each requires tremendous energetic resources to maintain the social convention that each member be accorded equal treatment and access to critical resources. Relying on the concepts of the new institutional economics, Wiessner asserts that egalitarian institutions exist to lower transaction costs in exchange and are a measure of the efficiency and complexity of these societies. The theory has further ironic implications for her analysis and for current conceptions of the origins of ascriptive inequalities.

The knee-jerk equation of egalitarianism with simplicity derives from Enlightenment speculations concerning human nature and man in the original State of Nature. As mental constructs, pristine man and savage society were imaginary inversions and negations of civilized existence, and these images served as a mirror for gauging civilization's comparative progress. The savage in the mirror, however, has always been a false reflection of a negated present. Egalitarian societies are not civilized societies stripped of all accessories; rather, they are viable social organizations with deep histories and prescribed practices of group cooperation in which individual agents act to reproduce traditional ways of life. At the level of agents and the prerequisites of personhood, all societies have interactional asymmetries and inequalities, and all are equally complex. The notion of “complexity” in anthropology makes sense only in making typological distinctions of scale and hierarchies of decision making, not with regard to the number of in-
teractions or relationships among constituent agents or
groups in a society. From the perspective of New Institu-
tional Economics, societies designated as “complex”
represent dramatic simplifications over their egalitarian
predecessors. The chaotic complexity of single-order sys-
tems is a mathematical property of the potential number
of relationships among individual members, which will
increase by an additional factorial for each new member.
With social systems based on ascriptive leadership and
hierarchy, however, higher-order institutions for gather-
ing and processing information and for enforcing in-
formal and formal rules come into play. Hierarchical or-
ganization and decision making greatly reduce the
transaction costs of social intercourse for the multitude
and result in a rationalized, efficient system. As it turns
out, complex societies are those that promote simplicity
and simplifying institutions [see Yoffee 2001]. Wiessner
makes a strong case for the efficiencies of egalitarian
institutions and the costs involved in maintaining them.
The power of her analysis would be enhanced were she
to do the same for the new Enga institutions that pro-
moted inequalities.

Wiessner objects to most of the current models for the
origins of social complexity on good theoretical grounds,
and her detailed analyses of the Enga add weight to her
views. Her historical reconstruction of the principal
agents, their motivations, and the key institutions pro-
vides a compelling method for future analyses. The basic
message is that all systems have a significant history
which cannot be ignored. One should expect, therefore,
that individual cases around the globe of the transition
from egalitarian to rank societies will vary in significant
ways from the one she presents. Rather than create imag-
ined predecessors, our interpretive challenge will be to
deal with the complexity of institutions, practices, be-
liefs, and incentives for real egalitarian societies and
their changes through time. Achievement and social es-
teem from one’s fellows are the road to renown, and from
there nepotism is the road to rank and the true begin-
nings of social simplicity. As Wiessner’s work demon-
strates, an excellent way to evaluate these changes is
through an analysis that emphasizes property, institu-
tions, ideologies, agency, and the structure of incentives.

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Wiessner’s analysis of the origins of inequality in New
Guinea is fascinating and provocative. I agree that hi-
erarchy is deeply rooted in human behavior. I also agree
that examining transaction costs may be a useful way of
understanding social institutions, although Wiessner’s
discussion of this is largely programmatic and lacks any
real detailed application in her ethnographic cases. I also
agree that aggrandizers must initially persuade other
community members to support schemes that seemingly
will benefit everyone and have argued that this leads to
broadly based, heterarchical social structures used to cre-
However, that aggrandizers must pretend to treat ev-
everyone equally does not mean [contra Wiessner] that they
were not the main agents of the emergence of new in-
sstitutions which clearly benefited them and led to
socioeconomic inequalities. As Wiessner herself notes,
“the enterprising did gain some economic advantage by
interpreting rules to their advantage.” This is a key issue,
and she seems to be contradicting herself on it. Indeed,
it is strange to find inequality portrayed as an inherent
characteristic of humans but also as a product of com-
munity dynamics in which self-interested agents
play little or no role. Wiessner’s two examples of insti-
tutional change resulting from spontaneous events are
hardly convincing arguments for aggrandizers’ not being
essential elements in any or even most institutional
changes. Given the arguments about the differential
costs of the Great Wars, Wiessner indicates that these
would probably have been abandoned eventually in any
case, and spontaneous ritual female competition over
men seems an almost insignificant part of a much
broad institutional change [the adoption of bachelor
cults]. While I agree that egalitarian forces are major
hurdles in attempts to create socioeconomic power, Wiess-
ner goes too far in negating the role of aggrandizers.
Initially everyone participating in the various schemes pro-
moted by aggrandizers must perhaps be treated equally,
but for such schemes to have significant effects universal
participation is not required. Wiessner notes that the Tee
was initially endorsed by only a handful of people. Such
differential participation entails inequalities in the so-
ciety at large, especially where participants obtain
advantages.

By “inequality” Wiessner seems to mean “institution-
alized inequality” such as is found in chiefdoms. In re-
ality, major inequalities exist well before the chiefdom
level of complexity. She also defines “equality” in Fried’s
(1960) terms of adequate availability of prestige positions
and equal access to resources [at least in theory]. This
contrasts significantly with the more archaeological def-
initions that focus not on the availability of prestige po-
sitions, egalitarian ethos, or lip service to egalitarian
ideals but on behavior and the ownership and distribu-
tion of prestige goods and/or debts within a society.
While Wiessner portrays Enga society as egalitarian [at
least within cooperating kin groups], there is and was
private [individual or family] use of land, private own-
ership of products, private raising of domestic animals
[representing surplus], differential access to exotic goods
[shells, feathers, axes], competition over economic re-
sources, and warfare for access to goods, land, wives, and
prestige. None of these are common in real egalitarian
societies. One must also wonder to what extent the
sparse accounts of greater “egalitarianism” in remote
times have suffered in transmittal or been remodeled to
suit utopian or other political agendas.

The traits listed above are aspects of what I and others
have called transegalitarian societies. In the initial
stages, transegalitarian societies are characterized by lip
service to egalitarian ethics and public behavior to ob-
scure real inequalities in power and wealth. Ambitious individuals lure their supporters into schemes that must ultimately be rewarding for supporters at least some of the time. Thus, groups maintain egalitarian cooperative internal relations and heterarchical rather than hierar-
chical sociopolitical structures. Not all kinship heads are aggrandizers, but those who are create major changes in the direction of inequalitarian institutions. Ultimately, of course, these institutions do benefit productive clans and households that adopt them, but they also create in-
equalities between groups and managerial positions that make it possible for aggrandizers to obtain more wives, more debts, and more influence. These institutions are devised to cater in some way to aggrandizer self-interests (albeit channeled through a group of supporters).

While Wiessner uses traditional anthropological notions of egalitarianism to claim that there are many va-
rieties of egalitarian societies, I think it is clear that Enga society is a transegalitarian one. This may boil down to a matter of semantics, for we seem to be making somewhat similar distinctions, but if Enga do not qualify as a transegalitarian society one wonders if any society would. Wiessner suggests that “Enga-type egalitarian” societies may have characterized much of the Paleo-
lithic, but, given the lower resource-extractive potential due to the simpler technology of the past (as well as the lack of prestige objects or any indication of wealth com-
petition before the Upper Paleolithic), it seems that the Central Australian egalitarian model is a much more appropriate baseline. The idea of various structurally dif-
ferent types of egalitarian societies is an intriguing one, especially in explaining short-term historical changes, and I would like to see it developed further. In the long run, however, it has yet to be demonstrated that such details of history matter, especially given cases like the Enga, where, as Wiessner demonstrates, egalitarian con-
straints were eventually almost totally circumvented af-
ter the introduction of the sweet potato and powerful aggrandizers with chiefly characteristics did emerge.

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Wiessner shows us again how rewarding historical re-
constructions in societies without a written history can be. Her reference to the model of new institutional eco-
nomics demonstrates that this model helps to elucidate not only common-property management but also evolu-
tionary processes of political change, but she does not exhaust its explanatory potential. She refers to institu-
tions, ideology, and actors, but local groups are organi-
sations with their own power and status structure, groups of individuals united to pursue common interests more successfully under given institutional conditions or to change those institutional conditions (Ensminger 1992:6). All organizations have to solve the problem of collective goods. The emergence of Tee exchange and
hierarchy within local groups can be more convincingly explained with the help of the concepts of organization and collective goods.

Unoccupied land was still widely available in the 18th century, and population densities were low. War usually ended with the expulsion of the defeated group, and, ac-
cordingly, neighbouring groups were mostly allied groups. Allies were compensated for their losses and their support with land and meat. Trade in stone axes, salt, shells, etc., already played a certain role. The rela-
tionships between men were egalitarian, although Wiess-
ner reports a heterarchy of ritual experts, cassowary
hunters, warriors, and managers. As population growth and settlement densities increased, it became increasingly difficult to expel enemies after a war, alliances had to be enforced by compensating allies more lavishly, and later a postwar modus vivendi had to be found even with enemies. Tee exchange emerged not directly with in-
creased competition for allies but with control of trade. It probably did not operate at lower transaction costs than alternative exchange modalities, but it definitely made more goods available at a given time and place. It was, after all, as Wiessner clearly states, a new way of financing affinal and matrilateral payments as well as compensating allies. Its expansion was due to the mili-
tary advantage it gave the groups which adopted it; or-
ganizations (local clans) were selected for the new in-
stitution (Tee) by a warlike environment.

Organizations in warlike competition have to improve their chances of survival by forming alliances, but in recruiting allies they incur high costs in pigs. The pigs provided as alliance goods can be interpreted as collect-
tive goods, and therefore each group has to solve the problem of free riding in order to avoid a military dis-
advantage. According to Peoples (1982), the collective-
goods problem is solved in Maring society by “privati-
zation”: families pay marriage gifts to their affines and are in turn supported by them in wars. Among the Enga, however, local groups are exogamous patriclans. Most marriages are contracted between families of adjacent
patriclans, but most wars are also between adjacent groups. Because the Enga “marry their enemies,” a di-
vergence between individual and group interests emerges; allies cannot be recruited in the same way as among the Maring. This collective-goods problem can only be solved if men with power and high status take over. Meggitt (1974) has shown that a large proportion of the Tee pigs goes to the big-man, who gives them to the big-man of another clan to distribute. It is the pat-
riclan which decides about war, peace, and alliance, and the big-man plays a central role in the “foreign policy” of his local group. Group members with loyalty conflicts (i.e., with affinal relatives in the enemy group) cannot prevent a war but can only avoid clashing with their affines on the battlefield. Big-men are political entrepre-
neurs with widespread regional networks and a following of “servants” and agnates within their groups. Because they take care of the provision of collective goods (pigs), contribute more to the recruitment of allies, and organize their compensation after a war in the interest of their
local groups, they are rewarded individually with positional goods such as power and status. Although each man maintains exchange relationships with men in other groups, the big-man makes them exchange their pigs in accordance with the alliance politics of the clan. As Wiessner shows, egalitarian ideology (between men) remains plausible even after powerful big-men have emerged because all men have the right to become big-men and to invest pigs in political relations. One result of this competition between politically ambitious men is an increase in the total production of pigs as alliance goods. Another is the selection of the most suitable man for the job. The competition for positional goods within the local group is, thus, individual selection, which, however, depends on group selection by war.

That Tee exchange considerably increased the quantity of alliance goods available is corroborated by the fact that it was widely adopted only when competition for allies increased. It was only when big-men (and inequalities between men) emerged that the problem of free riding and the divergence between individual and group interests was solved and thus transaction costs were reduced. Ensminger and Knight (1977) have presented a model for analysing the complex relations between actors, institutions, and organizations: (1) Self-interested actors propose new institutional solutions for new problems. (2) Bargaining takes place as institutional change is connected with changes in the political structure of organizations. (3) Finally, selective advantage in the competition between organizations gives the new institution an edge.

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Most studies on the emergence of hierarchical societies focus mainly on the conditions for institutional development; few have empirically shown how inequality developed from an egalitarian society. Wiessner’s study is an important contribution, since it describes how institutional inequality emerged from the interaction between “agents” and “structure” in a particular historical and ethnographical context. According to her, some of the competing individuals in the Enga society introduced and promoted, by forming group consensus and satisfying group interests, institutions for exchange such as the Tee cycle and thereby established themselves as leaders. While I am not in a position to discuss the validity of her analysis in the ethnographic context of the New Guinea Highlands, I will comment on the idea of egalitarian societies on which her argument is based.

Wiessner’s argument has two premises: that egalitarian structures are not a “slate of simplicity” but “complex institutions which . . . have arisen to reduce the transaction costs of exchange in small-scale societies” and that “egalitarian coalitions vary . . . in configuration, composition, scope, and nature . . . producing a wide variety of paths to . . . inequality in different societies.” I support the first half of the first point. Anthropologists have often characterized egalitarian societies in terms of “minimal politics” [Woodburn 1979] or the absence of institutions [Ingold 1999], but this feature is often the result of efforts to prevent the development of a hierarchical social order through institutional means that may be rather elaborate. African hunter-gatherers, for example, use a variety of means to achieve egalitarian social relationships. One of these is the frequent exchange, or lending and borrowing, of hunting tools. Since the owner of the kill is the owner of the tool with which the prey was immobilized, this exchange helps to spread out the ownership of kills, which would otherwise be concentrated in a few skillful hunters. The equality is maintained largely by an institution of ownership that distinguishes the owner from the hunter who actually kills the animal [Ichikawa 1991, 2001].

I am reluctant, however, to support the idea that egalitarian institutions reduce transaction costs. While in a hominin-evolutionary context extensive food sharing (an important aspect of egalitarianism) probably had an adaptive value in reducing the risk of an uncertain food supply, food sharing in modern egalitarian societies seems to be motivated by other social factors, which explains why it persists even after they have acquired other means, such as storage and credit, of coping with uncertainty. Moreover, detailed studies of food sharing [Kitanishi 2000] show that food is also frequently shared with nonrelatives, on whom people have less information, thus increasing transaction costs. While the Enga may have succeeded in reducing the transaction costs of extensive exchange networks by strengthening their leadership, egalitarianism among hunter-gatherers does not always reduce costs because “sharing is not a form of exchange” [Woodburn 1998].

As for the second point, Wiessner distinguishes strict (or “prototype”) egalitarian societies like those of African hunter-gatherers from societies like the Enga that permit a certain degree of competition and takes the latter as “a starting point” for examining the development of institutional inequality. In fact, a “prototype” egalitarian society may be seen as “polar type” any divergence from which faces a strong reaction in terms of the existing egalitarian norms. Incremental changes toward inequality are usually difficult in such a society. Nevertheless, there are always some individuals who work, procure, and give more than others do. Such variation in individual competence and personality naturally occurs in any human society, whether egalitarian or not. In contrast to the situation among the Nambikura [Lévi-Strauss 1955], in an egalitarian society there is no “consensus” among group members to assign leadership to such a person. Germs of inequality are always present, but they are negated, sometimes by elaborate means such as the distinction of the owner from the hunter just described. While African hunter-gatherers use this means to achieve egalitarianism, in other situations it may facilitate institutional inequality. In fact, Central African farmers often lend guns to Aka hunter-gatherers and con-
trol the ownership of the kill. Thus the institution developed in the first situation may be used for quite opposite purposes in the second. There is therefore a possibility that inequality may emerge even from “prototype” egalitarian societies through the interaction of agents, egalitarian structure, and exogenous events, though it may take a different path.

Wiessner and Tumu’s (1998) book *Historical Vines* significantly advanced our knowledge of the recent prehistory of the New Guinea Highlands. Therefore it is fortunate that Wiessner now addresses some of the broader issues raised by the splendid body of data on which that book is based. Reviewing the past 250–400 years of the Enga past, she concludes that the Enga had taken important steps towards the institutionalization of inequality by the time European intruders arrived, despite the pervasive egalitarianism of their way of life. The period covered was one of far-reaching sociocultural change prompted in part by the introduction of the sweet potato.

In my view the trend towards institutionalization of inequality was less clear-cut than Wiessner makes out. Major institutions such as the Great Wars and the Tee emerged and blossomed in the period covered, and Wiessner makes it clear that they offered scope for social advancement and the consolidation of inequality. However, the Wars were discontinued, and the Tee had become unwieldy and seemed on the verge of breaking up. As far as the Great Wars are concerned, Wiessner points out that “in opting for the Tee cycle Great War leaders made a fatal error for the institutionalization of leadership.” In the Tee some men had far better access to information about exchange opportunities than others, but the breakup of the cycle may well have reduced the access differential and so have inhibited the consolidation of inequality.

Wiessner’s idea that social inequality is deeply rooted in human behaviour—given the hierarchy prevailing among non-human primates—and the corollary that what she describes is the re-emergence of inequality seem useful to me. Here too I would qualify her statement, pointing out that the ethnography of tribal societies shows the ubiquity of arrangements by means of which the great majority of men can marry and/or have legitimate offspring. Is there reason to suppose that these arrangements are recent in the evolution of human societies?

Her main point, that egalitarianism is not the product of simplicity, seems unexceptional to me. It is the notion of “egalitarian society” that seems questionable. It sets up a category of societies seemingly contrasting with inegalitarian ones, but, as she points out, none of the so-called egalitarian societies is undifferentiated, and she includes among “egalitarian” societies those harbouring inequalities based on age, sex, and ability. The transformation of such societies towards more inequality may in part be based on those pre-existing differentiations. I am therefore inclined to analyse the institutionalization of inequality in terms of transformations of inequalities rather than as a shift from one category of society to another.

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Wiessner is quite right that recent theoretical developments concerning the emergence of inequality have paid insufficient attention to the recursive interaction of structure and agency. Perhaps, as she suggests, egalitarian society has been taken to constitute a “slate of simplicity,” but the poverty of detailed, long-term data on the subject is surely also to blame. Archaeology furnishes data that embrace long periods of time but are notoriously crude for gauging the intricacies and consequences of political action. Ethnographic fieldwork can provide the fine detail of these processes but seldom for more than a decade or two and never entirely “uncontaminated” by recent colonial and global processes. Wiessner’s project is important because it uses a remarkable, almost unique ethnohistoric data set to probe in considerable ethnographic detail more than two centuries of precontact Enga political process.

What Wiessner achieves is impressive. My main reservation concerns aspects of long-term political process that she leaves largely unconsidered. In depicting egalitarian and hierarchical institutions and ideologies as instruments for reducing transaction costs—as economic structures, in effect—she sidelines the political nature of the practices that generate inequality and overlooks a more fundamental process that underlies “surface” processes such as the appearance of the Tee and the Great Wars.

Wiessner’s principal focus is the managerial (or “voluntaristic”) aspects of the emergence of political hierarchy. Applauding the managerial model for its thesis that inequality can take root only when a population stands to gain real benefits from stronger leadership, she describes, for example, how Enga managers established their ascendancy by hitching their political wagons to institutions like the Tee and the Great Wars that reduced transaction costs to the benefit of all. Nothing to quarrel with there: any astute political entrepreneur will promote a socially beneficial innovation if it can be played to his or her advantage. It must be emphasized, though, that would-be leaders will seize on any resource that allows them to build power relations (inequality), including, to the extent that they can get away with it, innovations that do not advance—indeed, may disadvantage—public benefit. To the east of the Enga, contact-era Chimbu big-men had established cadres of henchmen...
that they could deploy to advance their agendas through fear (Bergmann 1971:195). Throughout New Guinea, big-men also created information-gathering and disseminating networks that allowed them superior control of semantic frameworks and permitted them to distort information to their advantage. By judicious dissemination (or outright concoction) of tales of enemy infamy, for instance, they might fan wars that advanced their interests over others (see also Sillitoe 1978:253–54).

It is unclear whether Wiessner would disagree. To give the complexity of political-evolutionary processes its due, though, it follows that we must attend to the locus of this power creation—leaders, followers, and the interactions among them. Would-be leaders are drawn from one end of a human bell curve. Through idiosyncrasies in their biology or their enculturation, they have strong ambitions to be leaders, and to become such they must be more astute than their fellows in comprehending the structure of their society and how to make it work for them. Making use of these qualities, they attempt to build power relations by manipulating this structure—the material, social, and symbolic capital available to them. To be sure, all followers manipulate leaders just as all leaders manipulate followers, but leaders become the leaders because they are better at the game.

The crucial point is that this manipulation necessarily involves interaction. In pre-European societies like the Enga, all interaction is face-to-face, all locomotion by foot. Under these circumstances, increases in population density become vital in facilitating interaction and permitting the politically gifted to augment their power and consolidate it over time in institutional structurers (Roscoe 1993). The reason the !Kung are so egalitarian, I think, has less to do with an egalitarian ethos or their capacity for egalitarian rebellions than with the unavoidable fact that there are simply not enough hours in the day for a would-be leader to build a significant power base when to do so necessarily involves interacting with and manipulating people who are scattered across a desert at no more than 1 person/km². When the emergence of leadership is so constrained, ethoses are going to be egalitarian and rebellion easy.

Contrast the !Kung situation with events among the Enga: Partly in response to the introduction of the sweet potato, Enga population rose dramatically: Wiessner and Tumu (1998:55–56, 387–88) estimate a growth from 10,000–20,000 around 1770 to 150,000 in 1980. The concomitant increase in density must have greatly reduced leaders’ transaction-travel costs in building inequality. Underlying the “surface” processes by which Enga leaders institutionalized inequality, in other words, was a “deep” process rooted in a phenomenal enhancement of the potential for interaction and political manipulation as population densities rose in the wake of the sweet potato.

As Wiessner notes, theories of political change are weak in describing and explaining the endogenous processes that caused the transition from egalitarian to hierarchical societies. The problem is acute for our understanding of the cultural evolution of political institutions, which cannot advance very far without behavioural analysis. Wiessner’s paper helps change that. In particular, it lends support to and demands a modification of one approach to understanding political evolution, social technology theory. According to this theory, social forms, including institutions, are constructed from the innate human behavioural repertoire in a limited number of combinations according to the species’s evolved “biogrammar.” The engines of growth in social technologies have been population growth following the Neolithic Revolution, humankind’s “polytechnic intelligence” (Caton 1988), and cultural evolution under economic and social selection. While drawing on the full gamut of behavioural disciplines, the theory has its origins in anthropology (Reynolds 1973, Fox 1971), sociology (Tiger and Fox 1989 [1971]), political science (Caton 1988, Geiger 1988), and, most fundamental, human ethology, the subdiscipline dedicated to documenting the species’s behavioural repertoire and working out combinatory rules (Eibl-Eibesfeldt 1972, 1989, 2001; Fox and Fleising 1976). Social technology theory has been applied to such phenomena as legitimation (Geiger 1988), the political history of the commercial republic (Caton 1988), indoctrination (Eibl-Eibesfeldt 2001, Salter 2001), and command hierarchy (Salter 1995), but despite its anthropological and ethological origins it is ethnographically underdeveloped. Wiessner’s paper makes a strong start toward filling this empirical gap.

Wiessner addresses a vexed problem of biogrammar, one not of parsing but of the technicalities of writing paragraphs: how did hierarchical societies emerge from egalitarian ones? She documents the role of human social designs, their unintended consequences, and the accumulation of the resulting institutions across generations in one culture, the Enga of Papua New Guinea. One social technology described by Wiessner, the trade in cults, is particularly instructive. Acceptable means for introducing a cult to a clan were a necessary condition for the cult to cause change. Cults were purchased from other groups by leaders and introduced on a trial basis. This exemplifies the broader point made by Wiessner that whatever institutions were introduced to this assertively egalitarian society must have been acceptable to group members. The description of the diffusion and modification of cults among the Enga deals with the choice of cults based on perceived efficacy in changing behaviour, their sometimes unintended consequences, the process by which new cults were imported and tested by a clan, accompanying training by religious experts, asymmetries in information, and sometimes a rudimen-
tary division and inheritance of the tasks involved in social control. Viewed as a stage in political evolution, one can see how these factors could lead to hierarchy.

Wiessner’s description of the processes and motives of “managers” adds vital behavioural detail concerning cultural group strategies (Soltis, Boyd, and Richerson 1995). The group strategies represented by new institutions were not purely self-promoting strategies installed by self-aggrandizers but largely intended to benefit the group. “New institutions arose . . . when individuals, usually clan leaders, recognized the potential in spontaneous events, discussed these with fellow clanspeople, and attempted to frame them into more formal institutions to address group problems.” Wiessner describes grades of punishment used to control free riders and self-aggrandizers, which are critical to any theory of group strategizing (Eibl-Eibesfeldt 1982, Boyd and Richerson 1992).

Wiessner makes the important point that egalitarian societies are governed by institutions that act to maintain equality: “Egalitarianism is the outcome of complex institutions and ideologies created and maintained by cultural means which empower a coalition of the weaker to curb the strong.” However, she presents no evidence to support her contention that “egalitarian coalitions vary as greatly in configuration, composition, scope, and nature as hierarchical power structures.” Providing such evidence would entail a survey of political technologies in hierarchical and egalitarian societies, which, as far as I am aware, has not been attempted.

Social technology theory has not paid sufficient attention to issues of agency and unintended outcomes. Wiessner offers findings, theory, and methods for advancing our understanding of the behavioural dimension of political evolution.

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Wiessner’s paper is a new contribution to the anthropological effort to solve the enigma of egalitarianism. It is surprising that an anthropologist can so thoroughly reconstruct 250 years of the economic-political history of a nonliterate society by analyzing oral tradition. In this respect, this paper demonstrates the power of historical ethnography. Wiessner’s most ambitious goal is to “grasp the tension between agency and structure.” However, the detailed comparisons among the eastern, central, and western Enga do not succeed in depicting a clear image of this tension. I would like to point out four interrelated problems:

1. Egalitarianism is a complex system which integrates different layers of social life—politics, economy, social organization, values, and ethics. Each layer is ultimately realized and negotiated through everyday face-to-face interactions. “Agency” needs to be examined primarily at this level. A bird’s-eye view of the major changes in the economy is apt to miss the indigenous reality in which the Enga experienced “cooperation,” “competition,” “coalition,” and so on (all of which are Western interpretive terms). Although Wiessner claims that actors’ choices are often not “rational,” she describes the acts and choices of the Enga mostly in transactional terms as if they were “dispassionate agents.” In order to understand the nature of competition, it is indispensible to complement transactional interpretation with more detailed analysis of the “spontaneous events” that shed light on the dynamic aspects of emotional life in egalitarian societies, for example, ambivalence between envy of and respect for the leader.

2. Wiessner chooses a society that tolerates some competition and “moderate” inequality as a more appropriate starting point than a “prototypic” egalitarian society such as the !Kung San. This choice, supported by the assumption that “most humans, past and present, inhabited richer environments” than the Kalahari, leads to the theoretical marginalization of the San societies. But what does she mean by a “rich” or a “high-risk” environment? There is no independent criterion for judging any ecological setting “rich” or “poor.” One can only evaluate the balance between the carrying capacity of the environment and the growth rate of the human (or animal) population inhabiting it. More curiously, Wiessner fails to refer to many works on the African Pygmies, another prototype of radical egalitarianism in a contrastive environment. Her argument implies that the “prototypy” of egalitarian societies had been compelled to negate competition by environmental pressure. If some innovation in subsistence allows the surplus to be used for exchange, then an irreversible process begins through which the disposition to competition is released from repression. In other words, Wiessner’s formulation of the emergence of inequality is achieved at the expense of elucidating the origin of prototypic egalitarianism.

3. On this point the theory proposed by Junichiro Itani (1988) deserves to be considered. Itani admits that most primate societies are based on fundamental inequality, but he also pays special attention to signs of “conditioned equality” embodied in various types of primate social interaction, for example, play, greeting, and food sharing. He argues that a profound fear of “civil inequality” is prevalent not only among hunter-gatherers but also among various African pastoralists and slash-and-burn agriculturists. Agreeing with Itani’s insight that the orientation toward equality is deeply rooted in human evolutionary history, I doubt that “moderate” inequality is the most appropriate starting point for the elucidation of egalitarianism.

4. North’s definition of institutions as “the rules of the game” is the most unintelligible aspect of Wiessner’s theoretical framework. In what respects do the rules of the game differ from mere rules? According to Searle’s speech-act theory, which distinguishes constitutive rules from regulative rules, the game is the most representative activity governed by the former. However, the rules governing the Great Wars, the Tee cycle, spirit cults, and
so on, cannot be regarded as constitutive rules, in which tautological definitions of all possible acts must be embedded. It is more likely that North’s theory is a version of game theory, as Wiessner quotes his argument about players’ trying to maximize wealth. But the validity of game theory is usually based on the assumption that players adopt the optimal strategy within the constraints of preestablished rules. The possibility of changing the rules cannot be derived from this strategy, because it requires a higher logical type. Thus, when Wiessner writes, “The rules of the game were changing,” it sounds like empty rhetoric. The plausibility of her historical analysis would not be damaged if the metaphor of the “game” were eliminated.

Reply

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I thank all of the commentators; some substantive issues have been raised, and certainly my future work has been cut out for me. I will begin my reply with a few points about terms and categories. Ploeg and Hayden question my definition of egalitarian societies. No wonder, for, as Clark aptly remarks, “egalitarianism” is perhaps the most infamous malapropism in anthropology—all societies sport some inequalities. I include as egalitarian societies with age and sex differences because I know of no societies without such distinctions. People of different ages or sexes in all societies pursue different social, economic, and reproductive interests; what constitutes inequality and what constitutes different interests can be difficult to distinguish. I agree with Ploeg that the “transformation” of inequalities in a society is influenced by preexisting differentiation by age and sex—coalitions which enforce equality are often formed along the lines of age and sex. Ploeg queries my conceptual separation of achieved inequalities and institutionalized inequalities—whether the two are distinguished by more than degree. I feel that there is a significant qualitative difference between the two. Once inequality is institutionalized, the enormous amount of energy expended on scheming, putting down rivals, leveling, or deciding whom to support is reduced. Institutionalized inequality should also curb the competition that fuels runaway surplus production.

In response to Hayden, I chose Fried’s concept of egalitarianism because the arguments I am advancing require no further categorization. Assurance of equal access to resources and status positions and the repression of interpersonal dominance is achieved by institutions that reduce the transaction costs of social and economic exchange in small-scale societies. Whether some individuals do better than others within these institutions and receive recognition for their achievements does not alter this role of egalitarian institutions. I did not use the term “transegalitarian” because in their original formulation Clark and Blake (1994:18) equated transegalitarian societies with “emergent chiefdoms.” To use “transegalitarian” would be to subscribe to the neorevolutionary sequence and to write an end to a story—that Enga would be transformed from an egalitarian society into a chiefdom—before the story ended.

Boehm’s suggestion that humans have an ancient phobia against one treating another dominantly is fundamental. Actually, he misreads me here—I too suggest deep roots for egalitarianism in the introduction, as does the evidence of the primatologist Itani summarized in Sugawara’s comment. Boehm’s proposal is further supported by Salter’s (1995) ethological analysis of the distribution of emotional expression across seven organizational types in Australia. His results indicate that institutional hierarchy is constrained by the human behavioral repertoire because humans have an aversion to subordination. Thus, with the formation of hierarchy, superiors usually soften their commands or pose them as suggestions or requests. Such measures lower resistance to command, leaving the hierarchy intact at the level of policy formation. The deeply rooted aversion to dominance pointed to by Boehm (1999a), Salter, and others (see Eibl-Eibesfeldt 1989) is a disposition that would greatly facilitate the evolution of egalitarian institutions to foster cooperation. Moreover, Salter’s urban ethology suggests that hunter-gatherer societies are not the only research sites for exploring such questions and that anthropologists have much to gain by applying their methods to the study of the full gamut of modern populations.

Aswani disagrees that transaction costs are high in small-scale societies on the grounds that such societies have stable relations, repeated interactions, direct relations, and shared beliefs and practices. But I would argue that these features of small-scale societies flourish precisely because they are facilitated by egalitarian institutions. Many shared beliefs and practices are the product of egalitarian institutions and ideologies; equality avoids the offense of dominance discussed above, which would lead to unstable relations; direct and repeated relations are facilitated when dominance does not threaten “face”; and interactions are more likely to be repeated when relations of dominance and submission do not threaten or offend. I would agree with Aswani that kin-related altruism plays an important role in cooperation (Wiessner 2002), but cooperation in human societies extends far beyond the bounds of relatedness which would have significant genetic payoffs. My response to Ichikawa is similar—that information on nonrelatives is standardized by egalitarian institutions, lowering the costs of social and economic exchange. I appreciate the insights presented at the end of Ichikawa’s comments.

Aswani argues that “it is hard to determine what came before the period covered by Wiessner without archaeological evidence,” but perhaps it is even harder to determine what came before given the available archaeological evidence! The three major archaeological excavations in Enga indicate that the area was inhabited for more than 10,000 years (Bulmer 1975, Kobayashi and
Hayakawa 1971, and the unpublished excavations by Jo Mangi at Kutepa Rock Shelter). Sites are located at altitudes ranging from 1,300 to 2,300 m. None of these sites has yielded information relevant to pre–sweet-potato land use, settlement patterns, or social inequalities. Pollen evidence from Birip in the mid-Lai Valley collected by Walker and Flennery [1979] has been interpreted by Golson [1977, 1982] as indicating that forest clearance began around 4,000 B.P., most likely as a result of taro-based agriculture. Recovery of forest taxa from around 2,000–2,500 B.P. may indicate more intensive agricultural practices; an increase in casuarina pollen at 1,200 B.P. may suggest tree fallowing. More we do not know. Oral traditions suggest that pre–sweet-potato agriculture was intensive in eastern and central Enga but that intensive pig production in the pursuit of economic or social advantage did not begin until well after the introduction of the sweet potato.

If one moves away from Enga to the rather different environments of the Kuk site near Mt. Hagen, excavated by Golson [1977, 1981, 1982; Golson and Gardner 1990], or the Haepagua Swamp, near Tari [Ballard 1995, 2001], excavations and pollen analysis have revealed changing patterns of land use which are very difficult to interpret in terms of changing social and political factors. Inferred social and political conditions behind changing patterns of land use for Kuk have been rewritten over the past three decades to fit ethnographic evidence or in response to changing theoretical perspectives in ethnography [Ballard 1995:appendix A1]. To use interpretations based on the 20th-century ethnographic situation in the Kuk area to establish a pre–sweet-potato baseline for Enga would involve circular reasoning. Only when more archaeological evidence is available will we have some idea of what went before the period covered by historical traditions. Aswani’s own work in New Georgia is impressive and enviable for its use of oral and archaeological sources. It provides a fascinating basis for interregional comparison.

Sugawara makes the excellent point that a bird’s-eye view of major changes is apt to miss the reality of Enga experiences. For this reason, in Historical Vines we did include substantial appendices with translations of original texts. It is indeed a priority to go on to carry out fine-grained analysis of audiotapes and examine these in light of the social technology theory outlined in Saltner’s comment. However, before transactional interpretation is undertaken, the strengths and weaknesses of using historical testimony and traditions for this purpose must be evaluated. Historical testimonies, couched in symbolic speech, often do not portray a given situation from both sides, and this means that they are less amenable to transactional analysis than records of live events.

Ballard presents an intriguing contrast of trajectories of change between the Huli and their Enga neighbors, and the Enga-Huli difference summarized by Ballard is not a construct emerging from different theoretical “takes” of researchers—Ballard and I have actively exchanged and compared material since 1990. The Enga themselves recognize that ritual power increases as one moves westward, with the few powerful ritual experts who exist in Enga living along the Enga-Huli border. The displacement of ritual authority by political and economic entrepreneurs after the introduction of the sweet potato does not appear to be unique to the Huli [Strathern 1993, Modjeska 1991]. What I would question in Ballard’s summary, however, is that there existed a tight relationship between ritual and economic power to the extent that Ballard claims—that hereditary ritual families monopolized regional networks of trade. In a very stimulating article, Ballard [1994] shows that through the Dindi Gamu cult, Huli ritual experts managed to enshrine the central position of the Huli, who are otherwise poor in trade goods, in the regional circulation of ideas and materials; ritual roads were trade routes. But he does not provide any evidence to support the claim that certain families of ritual experts held a monopoly over the trade or that they were wealthier than others. Nothing in early Enga historical traditions concerning Huli traders or the work of Mangi [1988b] on Huli trade suggests that long-distance trade could not be undertaken by anybody who chose to do so. Much remains to be worked out regarding the relationship between ritual and economic power in highland New Guinea prior to first contact with Europeans. As Harrison has demonstrated for the Avatip in Sepik, practice in ritual hierarchy and everyday life may not be closely linked; the two may be alternative forms of social action.

Roscoe feels that I sideline more fundamental processes of agency on the part of political entrepreneurs. I do not intend to underestimate the efforts of gifted managers in bringing about change, but I wonder if it can be assumed that would-be leaders in kin-based societies want to seize on any resource that allows them to build inequality even if their actions bring disadvantage to kin. Support of kin is one of the highest values in highland New Guinea societies and one of the pressures that leads to misappropriation of government funds today. Nasty moves and motives are directed at threatening rivals or competing groups, not clan “brothers.” Although leaders are indeed drawn from one end of the bell curve, people do not have to be at the high end to recognize when their rights as equals are being violated. A threat to the rights of one group member is often perceived as a threat to all—leveling coalitions form rapidly.

I am sympathetic to Roscoe’s arguments about density, except for his ideas about the !Kung. !Kung engage in daily exercises to maintain equality within villages [Lee 1993, Marshall 1976, Wiessner 1996]. Enga elders cite population increase as a significant force behind change on two accounts. First, an expanding population brought new opportunities for exchange. Second, institutions like the egalitarian clan meeting, in which individual interest is evaluated in terms of clan goals [Sackschewsky, Gruenhagen, and Ingebritson 1970], were too cumbersome to organize complex exchange networks. More hierarchically organized institutions were required as the economy grew in scale. Enga openly state that the rise of the great kamongo (big-men or managers) and new forms of symbolic communication went hand in hand with the development of more hierarchical institutions.
What is interesting, however, is that as population density increased, managers had to go farther afield to form ties that would allow them to assemble more wealth at one place and at a given time. Just prior to contact, Tee-cycle managers walked the paths of Enga for a year or more to organize a Tee cycle because the labor of those in nearby clans could not be exploited to fulfill the managers’ ambitions. Relationships of equality would have to be ruptured before aspiring men could make the most out of density.

Both Clark and Helbling bring up the very legitimate criticism that my analysis would be enhanced by further use of the new institutional economics to elucidate the construction of hierarchical institutions as the economy grew in scale. I must admit that even though I find concepts from institutional economics very productive for understanding institutions, I have had difficulty in applying its models to account for the complexities of the Enga case. I am still working on it. Helbling lays out a very stimulating scenario in which he accounts for the emergence of Enga inequality in terms of individual selection of big-men dependent on group selection by war.

Intergroup competition via warfare did play a crucial role in Enga history. It set off the population movements that spurred the development of the Tee, Kepele, and Great Wars; it motivated the import of cults; it eventually required the extension of war reparations to the enemy; and it provided one force behind the growth of the Tee cycle. All of these developments gave managers opportunities to gain influence. But I have reservations about attributing the development of institutionalized inequalities solely to intergroup competition via warfare. First, there is no evidence that Enga warfare was driven by scarce resources essential to clan survival. Second, motivations of warriors often did not conform to group projects. Some individuals fought in response to the triggering offense, some for the entertainment, some to settle old grudges or take revenge, some to make a name in battle, some to make a name or forge new ties in peace settlements. Intergroup competition was often brewed in the interest of individual goals [Sillitoe 1978]. Third, ties with maternal kin and, to a lesser degree, affinal kin were sometimes as strong as clan ties—cooperative “organizations” crosscut clan boundaries. Fourth, Enga historical records do not portray warfare as the singular driving force in history, and the content of Enga bachelors’ cults, ancestral cults, and other rituals do not revolve around achieving advantage in warfare. Finally, selection for the highest tier of managers—Tee-cycle organizers and Great War leaders—was as dependent on external as on internal support. For example, to launch a successful Tee, managers had to elicit confidence and cooperation from men in some 200–300 other clans. Great War leaders were not only approved by their own sides but also summoned by their opponents to come forward and organize intergroup competition between pairs of tribes. In the Great Wars, neither of the opposing sides gained resources vis-à-vis the other by winning or losing. The bulk of the wealth acquired by managers was not applied to clan needs but passed on to key partners in other clans or tribes, particularly to maternal and affinal kin. In short, group selection via warfare was far less important for the rise of the great kamongo who managed regional affairs than for local leaders. And it was for the great kamongo that leadership began to be institutionalized.

Certainly every author has wondered “Did I really say that?” in reaction to statements processed by commentators. Here I would like to clear up two points that I do not intend to make. First, I am not suggesting that inequality is a product of communitarian dynamics in which self-interested agents play no role as Hayden proposes. I am merely arguing that those who pursue self-interest with no communitarian considerations often have a quick, brutal demise. Second, I did not intend to portray Enga as a weak chiefdom, as Boehm suggests in passing, or to describe the institutionalization of inequality as being clear-cut as Ploeg and Ballard imply. As Clark and Blake have noted [1994:19], “Any transition to a non-egalitarian system requires the emergence of new practices as a necessary prelude to structural change. And these must be maintained and financed long enough to make practices habitual.” Owing to accelerating competition and a wealth of natural resources, new institutions were changing too rapidly or were not practiced long enough for the inequalities they generated to become habitual and truly institutionalized. Though Enga had taken important steps toward institutionalized inequality by first contact with Europeans, it is by no means certain that in the long run they would have developed into a society with stable, institutionalized hierarchical inequalities.

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