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PIGS AS ORDINARY WEALTH

Technical logic, exchange and leadership in New Guinea

Pierre Lemonnier

Everywhere you look, in villages or the wilds of New Guinea, you see pigs *(Sus scrofa papuensis)*.1 Alive, they clean up village garbage, work the soil of abandoned gardens and constitute a "food reserve on the hoof" (Vayda et al. 1961). They are exchanged by families or groups to acquire wives, dependants and prestige, but also to compensate for a death or to vie in peaceful gift-giving contests. Once killed, their meat becomes the ceremonial meal par excellence. Far from being a mere source of food, then, pigs are a universal, highly charged symbolic object that stands at the heart of a complex web of social relations.

In many of the tribes that inhabit the big island – and more particularly the Highlands – life is punctuated by regular large-scale exchanges of pork (or live pigs). In these cases the husbandry is intensive and requires a no less intensive practice of agriculture: sometimes over half of the tubers cultivated are grown to feed the pigs (Lederman 1986: 272 n. 11; Rappaport 1968: 60; Waddell 1972: 62). This has led anthropologists to build models in which large-scale exchange ceremonies – and especially the specific forms of socio-economic organization they engender – are linked in a nearly mechanical way to the development of pig-raising and horticulture. And yet if the existing counter-examples are taken into consideration, they make short work of these artificially rigid logics.

First, we will see that New Guinea does have large-scale intergroup ceremonial exchanges in which pigs play no part whatsoever. Next, that some tribes keep pig husbandry and agricultural production at a level lower than what would be logically dictated by the environment and available techniques. Conversely, other groups have developed sophisticated agricultural techniques in particularly unfavorable environments and wholly unrelated to the raising of pigs.

The wide variety of situations found in New Guinea cannot be accounted for by any simplistic brand of technical determinism. Rather, what I shall be trying to show here is the complexity of the conditions in which the pig is

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conceptualized as an item of ordinary wealth suitable for ceremonial exchange.

PIGS AND BIG MEN: NECESSITY AND ROOM FOR CHOICE

Looking at the New Guinea Highlands in isolation, its societies appear to form a kind of continuum – theoretical but often geographic as well – which, in simplified terms, seems to run from "egalitarian," so-called Great-Men societies (Godelier 1986) to what are often called Big-Men societies (e.g. Strathern 1971), which show the beginnings of the exploitation of the labor of others. The first, typified by the Baruya-Anga group, are characterised by a tightly interlocking system of warfare, male initiations and male-female antagonism. There is no ceremonial giving between groups, and exchanges (of women, goods, hostilities) are kept in strict balance. Great Men are singled out by their hereditary functions (as ritual masters) or their skills (as great warriors, hunters or shamans) as being superior to other men, at least in the exercise of these functions.

In the second group, Big-Men societies, warfare is of less concern, and male initiations do not exist at all. The eminent figure – the Big Man of the literature – rises above other men because of his ability to collect and manipulate wealth (pigs, shells) with an eye to large intergroup exchanges. In their most elaborate form (the Enga *tee*, the Melpa *moka*), thousands of living or slaughtered pigs are exchanged in the course of ceremonies at which first one group, then another, vies to give the most animals and wealth. The Big Man manages a whole network of people (some of whom are affines) to whom he farms out pigs (this is called "agisting") that his own family group is unable to raise. He attracts these dependants, who entrust him with their own animals as well, for him to give on their behalf, by helping them gather the wealth they need for various ceremonial prestations2 (marriage and funeral compensations, etc.).

In most cases, when a sow farrows, the person to whom she has been entrusted retains a piglet. The Big Man thus compensates his dependants for their labor by leaving them a portion of the product and by sharing with them some of his own prestige. Such painless generosity, which shows the first signs of exploitation, is a salient feature of Big-Men societies. But Big Men also play skillfully upon the timing of the various ongoing exchanges, for example by negotiating the date of an intergroup exchange for the time when he himself will have recovered wealth from his various debtors.

A. Strathern's term (1969, 1978) "financing" has been adopted to designate the strategic manipulation of investment procedures used by a Big Man to increase his livestock and his overall wealth in general. Now, as soon as the practice of exchange becomes based on a logic of escalation, the act of financing accelerates the process. In the first place it is the only way to

exceed the carrying capacity of a given piece of land or the labor capacity of a family; but also, because gifts promised do not coincide in time with gifts actually given, financing makes it possible to enter into many more exchange partnerships than would be possible with the number of animals actually available. Finally it optimizes husbandry conditions, which results in the birth of a greater number of piglets. In this context, large-scale exchanges appear to be technically necessary in order to limit from time to time the animal population which would otherwise overrun the community (Rappaport 1968; Vayda *et al.* 1961).[3] In other words, the more developed they are, the more the process of financing and large ceremonial pig exchanges depend on each other.

Parallel to an increase in the use of financing, we observe that the more highly developed the pig exchanges the more intensive the agriculture and the more elaborate the pig-raising practices (Brown and Podolefski 1976; Feil 1985; Modjeska 1982: 52; Morren 1977). Hand tillage, mound cultivation, the use of compost and animal manure are found, on the whole – and necessarily as soon as the pig concentration reaches a certain density – where Big Men or like figures found their reputation on their ability to collect wealth. In these same societies, the feeding and breeding of animals come increasingly under human control. Instead of allowing pigs for the most part to wander freely about, foraging for themselves, they are watched over by a pig-herd so that they will not get into people's gardens, or are shut up entirely, which implies providing all their food; similarly, domesticated sows are no longer covered by wandering wild males, but by closely supervised domesticated boars.[4]

Nevertheless, if this combined intensity of agriculture and animal husbandry is a *necessary* condition for intergroup ceremonies at which hundreds or thousands of animals are slaughtered or exchanged,[5] we will see that it is in no way a *sufficient* condition for this type of event to come into existence. The only aspect of husbandry that seems technically necessary to the existence of large exchanges was established by Kelly (1988): the circulation of live animals implies that they receive a large portion of their food from humans so that they will not revert to a wild state at the first opportunity upon changing masters; as soon as *foraging* is not the only source of food, the animal sees the hand that feeds him as the right one, and will not run away. And yet, in South New Guinea we find animals that are fed over and above their needs but which are not, or not often, used in ceremonial exchanges.[6] Kelly's observation must be reformulated then: in order for live animals to be exchanged, they must be hand-fed a large portion of their food *and* the pig-density per surface unit of land (and not only the number of pigs per capita) must attain a certain threshold, say 100 pigs/km^2.

No doubt this threshold corresponds to the need to have a minimum number of animals on hand at any one time in order for exchanges to be held regularly; but it also means that the animals represent a high labor-value, and

notably in terms of female labor (Feil 1985: 98; Lemonnier 1990: 139-43). For, in using more efficient agricultural techniques and a more complete animal care, not only does the amount of labor invested increase, so does its productivity.

These are all reasons why pig-raising is a crucial element of Big-Men societies, so crucial in fact that it would be easy to believe that it is necessary to the existence of any form of authority founded on the organization of large-scale ceremonial exchanges; or that the presence of highly domesticated pigs inexorably leads to the establishment of these exchanges. And indeed, several models have been put forward which attempt to reconstruct the logical and historical processes leading to the appearance of Big Men.

The "ipomoean revolution" and the usage-sphere of wealth

According to Watson (1965a, 1965b, 1977), the introduction and spread of the sweet potato (after the sixteenth century?) caused an ever-greater amount of primary forest to be cleared, resulting in the reduction of the habitat of various kinds of game and with it an important source of protein. The outcome, so the theory goes, was the "need" to raise pigs, reinforced by the nutritional qualities of the sweet potato. These new food sources paved the way for an increase in the population which in turn created demographic pressures which engendered belligerent conflicts, themselves fanned by competition for the new rare commodity, pigs. Watson postulates that, because pigs could be used in such a wide variety of exchanges, they became an essential item of wealth; the demand for pigs plus their nutritional value (protein) further accelerated the development of sweet potato-growing and pig-raising. In the end, the "Jones effect" sparked a spiral of competition between pig-raisers and pig-manipulators, that is between Big Men (Watson 1965a: 444–7, 1977: 62–5).

Others have attributed similar chain reactions, not to the sweet potato, but to the taro, which, they maintain, made it possible to raise pigs in the western Highlands as far back as prehistoric times (several millenniums ago) (Feil 1985, 1987; Golson 1982; Modjeska 1982).

From an "ecological" point of view, these models are vague not only about the initial state of the ecosystems which were subjected to intensified agriculture, but also about the rate and extent of deforestation, the carrying capacity of forests for game or pigs, or the habits of the wild pigs. Sociologically speaking, the assumption that populations perceived a protein deficiency, the conditions under which population growth might lead to an increase in the frequency of conflict or an "expansion of the social sphere" remain as vague as the reasons for adopting pigs as the instrument for mediating these conflicts (Lemonnier 1990: 53–63). Lastly, how local pig production might give rise to a Big-Men society remains every bit as mysterious. Yet this is precisely what needs explaining.

Other models consider the conditions necessary for and the implications of the use of pigs (and other commodities) as exchangeable wealth.' They specify the social logics that characterize Great-Men and Big-Men societies, respectively, and examine the theoretical transformations that could have made possible the transition from one to the other. The Big Man's world turns out to be characterized by the simultaneous presence of generalized exchange of women and of wealth, both of which are mutually exchangeable within a given set of partners. Conversely, marriage by sister exchange unaccompanied by the payment of brideprice, or separate exchange circuits for women and wealth, are typical of Great-Men societies. The very form of the exchanges differentiates the two types of society: the goods exchanged in Great-Men societies are of different natures and quantities in Big-Men groups. Instead of giving a woman for a woman in marriage, or answering murder with murder, a marriage compensation is paid or items of wealth are received to compensate the loss of a life.

As Godelier writes: "The fundamental principle underlying the workings of the big men societies is the exchange and/or sacrifice of wealth to reproduce life and society" (1986: 171). Among these forms of wealth, pigs have pride of place, either directly or because they can be exchanged for other precious commodities (feathers, shells). For Modjeska, "the 'inner secret' of the pig in such a system lies in its mediative capacity, its exchangeability both against more purely economic commodities and against those values of human life which we subsume under the notion of 'kinship'." (1982: 51-2).

Finally, in Big-Men groups, the affinal circle – preferred exchange partners, it must be remembered – tends to be more open. In the first place, "it is clear that there are elaborate rules against marrying kin, against repeating marriages between small groups, and against direct sister exchange" (A. Strathern (1982: 127-8); but see Feil (1984b), which relativizes this view). But there is also the fact that enemies are potential marriage partners. Big Men themselves have more distant partners, which is a fundamental piece of their strategy for financing exchanges. Elsewhere I have tried to show that the openness of the exchange sphere could be a consequence of the peace ceremonies (Lemonnier 1990: 91-157, 1991b).

It is evident, then, that it is the presence of pigs as precious re-exchangeable objects that articulates the economic-ecological and the sociological models. However, the only established connection between agriculture and animal husbandry, on the one hand, and large-scale ceremonial exchanges and the leaders' role, on the other, has to do with how societies in which pig exchanges play a de *facto* central role ***work,*** but most certainly not how these forms of political and economic organization ***came about.***

One way of better assessing the preponderance of these practices, and especially of identifying the eventual technical components necessary and/or sufficient for the emergence of a particular form of exchange, is to look for

examples that contradict the models that have just been mentioned. Are there any forms of exchange and leadership that approximate those characteristics of Big Men in which pigs do not play a role? Conversely, do the items of wealth used for marriage or funeral prestations or following a murder necessarily appear in competitive ceremonial exchanges? Does the presence of highly domesticated pigs imply using them as wealth? As a rule, under what conditions do pigs leave or not leave the category of food to become exchangeable or re-exchangeable wealth?

HEADHUNTING, SEMEN, DIRECT EXCHANGE AND "WILD" PIGS IN SOUTH NEW GUINEA

The societies of the southern coast of Irian Jaya and the Fly River estuary occupy a special place in New Guinea.8 In the first place, they share a number of institutions that set them apart as a group having its own coherence and, in the second place, features of their economic and social organization make them like both certain Great-Men societies and Highland groups known for their outstanding Big Men. With the first, they share the omnipresence of warfare, the use of semen in male initiations and the stress laid on equivalence, especially in the exchange of women, which is the dominant form of marriage. But they also feature such traits of Big-Men societies as intergroup ceremonial exchanges, the organization and success of which enhance leader prestige and authority, with one important difference, however, since the role played by pigs and wealth is negligible.

In this respect, these societies raise two series of theoretical questions. The first concerns the place of pigs and wealth in South New Guinea societies, and the nature of these ceremonial exchanges in which neither plays a part. The second revolves around the need to re-examine the logics thought to underpin Great-Men and Big-Men societies in the light of groups that seem to have a foot in both camps.

These are societies in which warfare takes the form of raids with a view to capturing enemy heads (men, women or children). The head-trophies are souvenirs not only of the bravura of the warriors who took them, but also and often, of the action that avenged the members of the group killed in some previous attack. The Asmat (Zegwaard 1959: 1022), the Keraki (Williams 1936: 177) and the Marind-Anim (van Baal 1966: 676) give the name of decapitated victims to their children as a first or second name. Among the Marind-Anim, who sometimes travel up to 200 kilometers to stage their attacks, it is even the need to renew the pool of names, rather than any desire for vengeance, that is the prime motivation for making war.9 In various places the taking of a head is a prerequisite for marriage (Boelaars 1981: 172; Landtman 1927: 248; Zegwaard 1959: 1041).

Several authors emphasize the fact that no power resides in the skull itself (Boelaars 1981: 67; van Baal 1966: 788; Williams 1936: 284). But, with the

exception of the Keraki, severed (male) heads occupy an essential place, alongside other objects or substances, in male initiations or in the rites that mark events of the life cycle. Their importance is manifested in two ways: by the ingestion of their various components – brains, eyes, flesh, blood (Boelaars 1981: 167; Landtman 1927: 161; Serpenti 1984: 314-15; Williams 1936: 281; Zegwaard 1959: 1027), but also by the more or less direct association of headhunting with male initiations, or with a cult of the dead (Boelaars 1981: 171; Serpenti 1984: 314; Williams 1936: 375; Zegwaard 1959: 1028), or more generally with the idea that life is born from death. The last view is illustrated in particular by two often co-existing practices: that of erecting "head trees," which identify the human body with a tree and the coconut (or the fruit of the sago palm) with a human head; and that of germinating a deceased person's coconuts on his own grave before transplanting them here and there (Boelaars 1981: 121, 169; Serpenti 1968: 136, 1977: 212; van Baal 1966: e.g. 601, 753-4; Williams 1936: 282, 371; Zegwaard 1959: 1039).[10]

Male initiations, then, are connected by their very essence with war. Not only do they play a part in "manufacturing" warriors at the same time as male individuals, but, as we have just seen, their performance depends strongly on the hunting of heads. And yet other ingredients are necessary to the symbolic manufacture of male individuals. Of these, semen occupies a prominent place in the rites of growth, of which the male initiations are the final stage.[11] I would like to point out in passing that, unlike the Anga (the prototype of Great-Men societies), for whom the use of semen is essentially restricted to coitus and fellatio, the groups under study have a vast array of utilizations. Besides sodomy, which ensures the boys' growth, its properties extend to making plants grow and ensuring the fertility of women, who, among the Kimam and the Marind-Anim, participate closely (and frequently) in the collective "production" of semen, and consequently in male growth.[12]

The exchange of real or classificatory sisters is considered the ideal form of marriage in these South New Guinea societies. There are a few arrangements, however, that have a twofold deleterious effect on the perfect equilibrium (of nature and quantity) which might be expected to result from this type of marriage. In particular, with the exception of the Marind-Marind, these societies combine the principle of giving a woman for a woman with the equating – sometimes only temporarily or indirectly – of a woman with wealth.

And so the Keraki and the Jaqaj give precious goods in order to procure a "sister" when there is none to exchange for a wife. Among the Keraki, where the classificatory sisters available for exchange are, in nearly half of the cases, Ego's cross-cousins, we also find "innumerable cases in which the sisterless bachelor buys, not a wife outright, but a 'sister' to exchange for a wife" (Williams 1936: 128, 139). The wealth used in the "purchase of a sister,"

whose traditional aspect Williams does not question, includes axes, knives, seed necklaces, tobacco, etc. The process by which the Jaqaj exchange women for wealth is even more roundabout. For example, when a man wants to obtain a widow in marriage, he compensates her kin for the deceased husband. The new husband presents them with (unspecified) "goods" because he indirectly benefits from the "sister" the others previously gave (Boelaars 1981: 36–7).

It is striking here that, notwithstanding the practice of exchanging women for wealth, there exists no direct form of this exchange. In no way is a wife bought; what is obtained is a sister-substitute for exchange. When Williams once suggested to the Keraki the idea of buying women directly "[the] informants only showed amusement" (Williams 1936: 140). Moreover, the Jaqaj practice just described is only one way of obtaining the right to marry a widow. This is acquired automatically if the woman formerly given in exchange for the one who has just lost her husband was a classificatory sister of the new suitor. But he can also, at some later date, simply "give back" one of his own "sisters" as a wife to a brother of the deceased.

Or again, a Jaqaj man who has no "sister" to exchange may give an item of wealth to those who give him a wife. Although this practice seems to come even closer to the payment of a marriage compensation, it is fundamentally different. The wealth is only a kind of surety until a woman can be given in return, at which time the wealth is given back (Boelaars 1981: 37). Traditionally, marriage compensation among the Kimam was an exception, paid specifically when, for one reason or another, the woman originally expected in exchange was not forthcoming; here the wealth is perhaps regarded more as an indemnity for "breaking the contract" than as the expression of a direct equivalence between a woman and wealth (Serpenti 1977: 129–30).

To summarize: as far as marriage is concerned, the South New Guinea societies examined here are characterized by an emphasis on the exchange of women as the ideal and dominant practice, and by the indirect use of wealth in marriage-related procedures.

Finally, it is by their use (or non-use) of pigs that these societies should retain our attention. In most cases these are wild animals that have been caught and tamed.[13] The raising of pigs in captivity – in this case of young born of domestic females covered by wild males – is limited or non-existent. Williams (1936: 224) did not see any litters at all, and van Baal (1966: 406–7) states that, without exception, all domestic pigs are wild males that have been captured. But the human control is no less intense for all that; they are castrated and so well fed that they become enormous, "big and fat" (van Baal 1966: 406–7), and even "grow to a really gigantic size" (Serpenti 1977: 230). Williams (1936: 224–5) uses the term "monster" to qualify the animal he saw penned up in a tiny enclosure where it could hardly move about, at least insofar as it was not too heavy to stand up!

The size of the herds, obviously smaller than those in the Highlands, is unfortunately never specified. Van Baal is the only one who gives any indications, reporting that a woman raises one or two animals, and that pig feasts can involve up to thirty or fifty animals, but part of these come from large hunting expeditions (van Baal 1966: 170, 408); van Amelsvoort (1964: 37) indicates that the number of pigs involved in these feasts is incommensurate with the Highland pig feasts. For the rest, we must be content with observing that the authors did not see fit to expand on the subject more than to state that the animals were captured in the wild. At any rate, their numbers are necessarily restricted by the mode of domestication in which husbandry is almost entirely absent. Another limiting factor is the local forms of agriculture.

Nearly unknown among the Asmat and the Jaqaj, who exploit sago-palms, and fish and hunt for their subsistence (Boelaars 1981: 50-5; van Amelsvoort 1964: 37; Zegwaard 1959: 1033), agriculture is practiced intensively only by the Keraki and, especially, by the Kiman, who restrict their cultivation to man-made islands constructed in inundated zones. As with the Marind-Anim and the Kiwai, yams are the main crop, followed by taro.[14] Only Boelaars (1981: 56) tells us what the pigs actually eat (the product of their foraging supplemented by sago), but it must be said that yams and taro are, generally speaking, ill-suited for pig fodder. The first because it is a ceremonial food in New Guinea (and, with the exception of the peelings, rarely mentioned as a pig food), and the second because it contains oxalates, which make it unfit to be consumed raw. Finally, whatever may be its role in feeding humans on a day-to-day basis, agriculture in this region is aimed largely at intergroup exchanges, for which people go to considerable additional effort (Landtman 1927: 383; Serpenti 1977: 247; van Baal 1966: 713; Williams 1936: 232–3).

From a technical viewpoint as well as in local symbolic representations, the pig is seen, in these societies, as a semi-domesticated wild animal; and its frequent role in New Guinea as mediator between nature and culture – however trite this observation may be – is of special importance to the matter at hand. It should also be noted that, whatever the size of the herd or the intensity of control exercised over the animals, the "domestication" of pigs is basically a women's affair, as opposed to the cultivation of yams, which is the job of men (Landtman 1927: 444; Serpenti 1977: 231; van Baal 1966: 407; Williams 1936: 148).

The most highly developed mythic conception of the pig – that I have found – is held by the Marind-Anim; it has been analyzed at length by van Baal. This view illustrates perfectly the animal's ambiguous status, since it credits the animal with two mythic ancestors (demo), one of which, Sapi, is a wild pig, while the other, Nazr, is associated with the domestic pig, which does not keep him from also appearing as the dema of headhunting or as "a wild figure" (van Baal 1966: e.g. 66, 421, 427).

Likewise, although pigs undergo indisputable domestication, everyone emphasizes their wild origins when they are used in a ritual context. And whenever the "domestication" is extended to females born in the wild, these are excluded from the ceremonies related to male rites of passage. It is also striking that it is primarily when ceremonial exchanges coincide with the celebration of rites marking stages in the boys' – that is, the future warriors* – growth, that they involve the giving of pigs. Not only are the animals that are slaughtered at these times all males chosen for their long tusks, or recently captured wild males (Boelaars 1981: 176), they are sometimes wild males captured especially for the occasion (Landtman 1927: 13–15, 356–9; Williams 1936: 189, 193-6).

Here, the stress falls on the identification of the warrior with a wild boar. This takes many forms. The wild male is a symbol of combat and bravery (Landtman 1927: 359; van Baal 1966: 408), and the men are given its attributes as insignia of their promotions in the hierarchy of warriors. The Marind-Anim call their greatest fighters "pig-tusk men"; they ornament themselves successively with armbands made of scrotums, a tusk through their nose and finally a pig-tusk bracelet (van Baal 1966: 66, 146, 149, 157). Among the Kiman only the veteran headhunter may wear a pig-bone through his septum (Serpenti 1977: 158); among the Jaqaj, where cassowary feathers mark the warrior's exploits, indicating the number of heads captured, only those who have brought back fifteen or more receive a simple pig-tusk necklace (Boelaars 1981: 67, 174–5). The Kiwai use pigs' eyes to replace human ones in their skull-trophies (Landtman 1927: 359, 361). Lastly, mythology closely associates the wild boar with headhunting, and more generally with war (Landtman 1927: 365-6; van Baal 1966: 212; Zegwaard 1959: 1021).

In sum, we would be justified in considering that, along with the importance in these societies of hunting, fishing and gathering, the special status of pigs also reflects either the limited or the exchange-oriented character of a type of agriculture in which the sweet potato plays a negligible part. Does this then confirm the theses of Fell and the other advocates of the primacy of agriculture in the "establishment" of ceremonial exchanges and Big Men? For this to be so, it would mean that, because of the lack of developed pig-raising, these South New Guinea societies were unfamiliar with large ceremonial exchanges or at least with competitive exchanges. Nothing could be further from the truth, however.

Ceremonial exchanges sans pigs or wealth

Not only do these societies practice ceremonial exchanges between groups, the exchanges often express pronounced rivalry. As in other parts of New Guinea, such events may celebrate several rituals or prestations for the children's growth, male initiations, death or war.[15] This is the case especially

when a number of individual ceremonies are held simultaneously by several members of the same local group, which gives the enterprise a collective dimension. But unlike Highland practice, these ceremonial exchanges never involve gifts of wealth intended to balance the loss of an individual, that is a compensation, even in the case of funeral rites. Of course a ceremonial moiety is compensated for services rendered[16] – preparing the body, burial, second funeral rites – (Serpenti: 1977: 205–7; Williams 1936: 114-16); the dead are commemorated reciprocally between affines (van Baal 1966: 800-1); or a widow may thank the mourners for their presence with a gift of a pig (Boelaars 1981: 122). But no form of compensation whatsoever is paid to the family or the group of the deceased individual(s).[17] In short, here we find no prestations to affines or maternal kin, no payments to enemies or war allies as in other groups where these constitute the nucleus of intergroup ceremonial exchanges (Lemonnier 1990: 96-1 04; 1991: 8-1 3).

A second fundamental difference with Highland ceremonial exchanges is the *total absence of wealth – by which I mean items that can be re-exchanged in another context – and particularly pigs, among the "things" given at competitive intergroup events*. The only thing given here is food (yams, sago, coconuts, game, grubs), and when pig meat is given out to the participants, it always comes from animals slaughtered in conjunction with a rite of passage, independently of the rivalry expressed in the ceremony to which the rite belongs. The only time domestic pigs are present is when the intergroup exchange is also the occasion for a boy's growth rite. In this case an animal is sacrificed, and the small hero of the day is often stood upon it.[18]

But alongside and *in spite of* these differences – the non-existence of death payments and the absence of wealth at intergroup prestations – the exchanges practiced by the groups of South New Guinea share two important features with those of Highland societies: they play a central role in the maintenance of peaceful relations, and the leaders tend to derive prestige and power from organizing them.

In the competitive version (Asmat, Keraki, Kimam, Kiwai) as well as its co-operative counterpart (Jaqaj, Marind-Anim), the exchanges that rally several local groups are indispensable to keeping the peace, either because they bring together allies who never fight each other or because they are seen as an overt alternative to warfare in cases where relations with nearby groups are potentially hostile.

Jaqaj and Marind-Anim feasts are as non-competitive as such events can be, and imply that the hosts and guests work together. Both entertain friendly relations with their closest neighbors, and the Marind-Anim even maintain a state of internal peace among their own tribes, something exceptional in New Guinea. The Jaqaj take turns holding growth feasts for the children and ceremonies to ensure the women's fertility, in conjunction with celebrations for their great warriors.[19] The guests buy and slaughter the pigs needed for the feast; everyone shares the meat, and the bodies of the women

and children are rubbed with the fat (Boelaars 1981: 173–94). The Marind-Anim – whose attacks, it will be remembered, are directed against tribes located outside their territory, far enough away to avoid the threat of retaliation – include their fighting allies in a vast array of cults (all representing the mythic life of the *dema)* whose complexity and unity have been shown by van Baal (e.g. 1966: 938–9). I should point out, though, that however peaceable and friendly these intergroup exchanges may be, they have no connection with any peace ceremonies and are in no way an extension of these. When such ceremonies do exist, they are kept separate from the co-operative events that have just been discussed (Boelaars 1981: 126, 134; Vertenten 1923: 48–9).

The competitive exchanges of the Kiwai, the Keraki and the Kimam are more closely linked with war.[20] Here, when tension between two villages mounts and threatens to explode into intra-tribal warfare, a challenge can be explicitly presented as an alternative to violence. A quarrel between two Kiwai leaders may, in this case, drive one of them to enlist the help of his whole village in organizing a *gaéra* ceremony, in which each group attempts to display and distribute so much food that the other community will be (often temporarily) unable to equal it (Landtman 1927: 382–97).

The Keraki express rivalry in ways that are compatible with their emphasis on the equivalence of exchanges. This occurs, for instance, when affines present each other with food on the occasion of the rituals performed by the mother's brother on his nephew: "The gifts must be equal in quantity and any shortcoming will provide opportunity for the other side to crow" (Williams 1936: 116). In this case the challenge is not openly expressed, but on other occasions it is clearly stated. For instance, when a man's wife has been unfaithful to him, he (and his immediate kin) can challenge his wife's lover to a contest of food exchange; but he can also lay a severed head at his rival's feet and declare: "There! You had my wife. Now pay me back a head for this!" (Williams 1936: 118-62). As a general rule, there is no lack of opportunity to challenge an individual or a whole village to a competitive feast in order to right some wrong. In passing, I would point out that observers tell of competitive ostentation that leaves nothing to be desired with respect to intergroup events in Big-Men societies: the "fences" on which the enormous quantities ("probably millions"!) of yams are displayed can be measured in hundreds of yards (Williams 1936: 230–5). When the competition takes the form of a simultaneous exchange of food, the losers seek a "rematch" at which "[they] are supposed to make good the deficiency" (Williams 1936: 234). For Keraki society is pervaded by a principle of reciprocity and balanced exchanges. But the ideal of reciprocity does not prevent them, as we see, vying with others at every turn. For the Keraki, equality and hostility go hand in hand, and the fact that they have only one word *(wende)* to designate both "revenge" and "marriage exchange"

perfectly illustrates the ambivalence inherent in both individual and intergroup relations. Which goes to show that, in this instance as elsewhere (Lemonnier 1990: 116-19; 1991: 16–17), the rivalry present in exchanges has less to do with the amounts exchanged than with the presence of a challenge. To hold oneself and others to exact reciprocity is not always a sign of a noncompetitive society: at the first hint of provocation, the rivalry surfaces.

Finally, the Kimam rely to an even greater extent on competition through exchange to defuse potential or actual armed conflicts, so much so that "between some villages, headhunting expeditions and [competitive] *ndamba*-feasts succeed each other" (Serpenti 1977: 92). In this instance the rivalry involved in the exchange of food is linked to the peace procedures. A group will even take child hostages from the opposite group before going to attend the feast! But such confrontations also occur between friendly villages, and within the same village between ceremonial moieties (Serpenti 1972). Whenever a gardener's competence is questioned, for instance, he loses no time organizing a ndamba and challenging the author of the slur. In this instance, however, the other party does not always seek to best his adversary when he holds the return ndamba. On the contrary, he may arrange to be shown up, which brings the quarrel to an end. More striking yet, a Kimam leader will often insult an adversary solely to instigate a struggle for power and prestige (Serpenti 1977: 235).

All of which brings us to look at the articulations between "political" power and the two activities that, in these societies, "make" men: warfare and, in a number of cases, gardening and the exchange of food. Although it is difficult to assess these phenomena from monographs which are in no way works of political anthropology, several results come out. First of all, while the Asmat, Jaqaj and Marind-Anim accord prestige and authority to their great headhunters, for the Keraki and Kimam power is directly and primarily linked to a man's skill as a gardener and organizer of feasts. Next, the two figures (the warrior and the gardener) seem to exist side by side in Kiwai society, the first being the more widespread.[21] And finally, the power of the leaders is far from negligible, whatever its base may be.

It is in societies in which power flows from victory in combat that leaders seem to exercise the greatest control over the mass of individuals. Jaqaj war chiefs, for instance – who are often mediums as well – have more wives (and young wives) than other men, advise in matters of marriage, oversee the organization of pig feasts, and boast of their exploits at warriors' promotion ceremonies (Boelaars 1981: 42, 59, 99, 171, 270–1). Similarly, not only are Asmat great warriors polygamous (cases of seventeen wives are cited), they also receive an extra portion of the game or fish captured by their kin and do not take part in strenuous tasks; in addition, they make light of prohibitions concerning marriage or wife-lending (Zegwaard 1959: 1040; Trenkenschuh 1970: 20, 30). Finally, the Kiwai great warrior shows the same penchant for polygamy and the use of others' labor. But in his case it is made clear that it

is because he watches over the community that he can make others work his gardens or give him game or fish (Landtman 1927: 169), which, in passing, is reminiscent of the terms used by the Tairora, an eastern Highland tribe, to justify the exactions of their despot (Watson 1967: 81, 91).

Conversely, groups in which the leader's power is founded on his gardening skills make no mention of privileges of this order. The main "inequality" here appears to be his indirect access to the labor of others in the form of the prestige he derives from utilizing the products of their gardens. The Kimam are a typical example: it is in his capacity as specialist in gardening magic, from which his dependants benefit, that the Kimam leader collects and uses the product of the labor of others for exchanges, which increases his own prestige (Serpenti 1977: 218–21,238,243). Let me point out again that, in the case of both the magician-gardener and the warrior-protector-of-the-community, the inequality of their status takes the form of an exchange, since magic is indirectly given in exchange for garden produce. It is each leader's success in his own particular area that, in the long run, gives him the beginnings of power over others: the Kiwai warrior's trophies attest the might of his arm just as the quality of his gardens vouches for the efficacy of the Kimam magician-gardener's practices.

Finally, the roles played by the pairs warfare/initiations and ceremonial exchange/leader's prestige place the groups of South New Guinea simultaneously among Great-Men and Big-Men societies.[22] Notwithstanding the coexistence of warfare, initiations and intergroup exchanges, however, several features set these societies apart from both categories. Unlike Great-Men societies, inequality of status here takes the form of utilizing the labor of others. In some instances (among the Kiwai, and perhaps the Asmat and Jaqaj), the great warrior carries on like a miniature despot as he protects the group while they produce a surplus of garden products for exchange; in others, among whom intensive gardening reaches its height, the work of others helps a leader shine in the intergroup exchanges.

We see too that in the above societies that practice challenges, the management of competition is a source of prestige, as for instance, in Big-Men societies. But rather than skillful investing in pigs, feathers or shells contributing to the success of the competitive undertakings, a Kimam, Kiwai or Keraki leader attracts the esteem and assistance of the other members of his community primarily by his skills as a gardener and therefore producer. No network of partners here: it is to the members of his community that a leader addresses himself in the first instance, and there is no “managing” of affinal relations.[23] Nor is there circulation of wealth and, particularly, no strategy based on the exchange of pigs or pork.

All of which raises a new set of questions: first of all, what do we know about the exchange of pigs in these societies, about the circulation of wealth, the ways of compensating a life, a death and services rendered, or the role of kinship in intergroup exchanges? And what becomes of the respective logics

underlying Great-Men and Big-Men societies in view of what we know about the societies of South New Guinea, and do techniques of pig-husbandry exercise any detectable influence?

Compensation with women, but not for women

Since the intergroup exchanges practiced by the societies of South New Guinea differ from those of Big-Men societies by the absence of wealth among those "things" exchanged, and by the lack of any reference to compensations for life or death, the question arises of the importance these societies give precious objects in exchanges in general, and more particularly in idemnifying others for a loss, a service or a wrong.

These are first and foremost all societies that apply a strict principle of reciprocity in a wide variety of areas: a murder or war loss is avenged by a killing; an aggressor receives the same wound he has inflicted; counter-magic is paid the same price as the act of witchcraft it is supposed to cancel; a woman is exchanged for a woman; a man divorces his wife because the sister he has given in exchange for his own wife has left her husband; a man lends his wife in exchange for the wife of her lover of a night; a gift is given back in full; etc. (e.g. Boelaars 1981: 39, 71,193; Zegwaard and Boelaars 1955: 282ff; Serpenti 1977: 183, 188; van Amelsvoort 1964: 48–9; Williams 1936: 276). These are also, as we have seen in the case of the Keraki and Kimam, societies in which a challenge can replace an act of revenge. Finally, each practices, to varying degrees and in a range of often interchangeable ways, compensation: a human head, gifts of wealth, but also the sexual services of a wife.

Besides the exchange of women for marriage – which is nothing more than a form of reciprocal compensation – the gift of a human being is part of the peace-making procedures, when these exist.[24] Among the Asmat, Jaqaj and Kimam, when enough enemies have been put out of action to satisfy the need for revenge, the warring parties exchange children with a view to adoption (Boelaars 1981: 44–5; Serpenti 1968: 124-5, 1977: 92; van Amelsvoort 1964: 52). The children are both substitutes for war-dead and a pledge of more peaceful relations to come. The Kiwai have a more indirect manner of proceeding: they give a wife to the brother or a close kinsman of the dead man with the idea that the future child will replace the deceased (Landtman 1927: 165-6).

Alongside the transfers of living individuals, *the giving of wealth* – or precious objects – *is involved essentially in compensations for life* (and death). Whether it is a matter of compensating the gift of a wife (reproducer of life) or indemnifying murders, this practice is characteristic chiefly of the Kimam and the Kiwai. In particular, the rare possibility of paying direct marriage compensation is found only in those groups which also make gifts of wealth in the case of a fatal accident or men killed in combat (Landtman

1927: 182, 184; Serpenti 1977: 137, 230, 1968: 131, 133). Conversely, the absence of life and death compensations is coupled with the non-existence of direct brideprice (Marind-Anim, Keraki). In other words, whenever societies pay compensations for life, they also compensate the death of individuals (which is in no way obvious: to take an example from the Highlands, all Anga groups compensate deaths, but several are nonetheless unfamiliar with marriage compensations).

Next it becomes obvious that wealth is rarely used in compensations for what might be called services and "ordinary" wrongs (help with work, theft, etc.). Rather, these services or wrongs are often indemnified in a very special way, by supplying the debtor with a woman as a sexual partner.[25] Thus by lending his wife, a Kimam, Kiwai or Marind-Anim may compensate the victim for a theft he has committed, "pay for" the services of a killer, magician or witch, or even repay assistance with a task or the loan of a tool (Landtman 1927: 250; Serpenti 1977: 184, 1984: 315; van Baal 1966: 164, 813). It must also be pointed out that there is no correlation between the practice of compensation and the extent to which a society makes use of wealth. Thus the Marind-Anim compensate a variety of services, but not life or death.

It is as though these societies practised compensation in *two discrete spheres:* the first, in which wealth plays a part, is concerned with life and death; the second, characterized by the non-reciprocal loan of a sexual partner, is connected with all manner of services and wrongs, except marriage and murder payments. Women, in this case, are not seen as reproducers (life-givers), but as "instruments of pleasure," to be consumed and especially *re-consumed.* Furthermore, as they play a part in intergroup exchanges (marriage, peace ceremonies) as well as in the compensation of various services, they appear to be the kind of "object" endowed with the broadest array of social uses. It is therefore striking that their mode of circulation opposes them to pigs which, on the rare occasions they are exchanged for wealth, are immediately slaughtered, and eaten in the interval that follows.

In short, in the societies under discussion (Jaqaj, Kimam, Kiwai, Marind-Anim), pigs are non-re-exchangeable objects whose use is severely restricted, whereas it looks as though women – as sexual partners circulating at men's pleasure to "pay for" various services[26] – play one of the roles that, in Highland societies, fall to pigs; in fact, it is tempting to regard women, in this limited but undeniable function, as being used as items of wealth. The parallel is even more complete if it is recalled that, in the Highlands, regular ceremonial distributions of pork nearly always follow the exchanges of pigs and pork that lie at the core of peace-making ceremonies (Lemonnier 1990: 96–104; 1991: 8-13).27 In the case in question, it sometimes happens that women are exchanged as sexual partners before wives are exchanged (Landtman 1927: 165; Serpenti 1968: 176, 1977: 92). It is even sometimes the case that women-as-sexual-objects are not only re-consumable hut

re-exchangeable. If Boelaar's informants are to be believed (1981: 98), the Jaqai rid themselves of prostitutes by selling them to another group, where they are eventually killed and eaten.

To summarize: in South New Guinea, wealth is absent from exchange competition, but altogether present in compensation practices, alongside women, who are regarded, in this instance, as sexual partners and not producers of life. Furthermore, the use of wealth seems to be completely independent of the relative state of agricultural development.

These are, then, societies which pay compensation for life and death, using for this purpose mainly wealth of which pigs or pork are never a part. Furthermore, wealth and reference to compensation are equally absent from the important ceremonial prestations, which are nonetheless competitive for that. In other words – and contrary to models that reduce the logic of Big-Men societies to the presence of pigs or exchanges of wealth – we truly have here societies that utilize wealth to pay compensations, raise and circulate pigs, and practice competitive intergroup exchange, but *these three terms are never overtly linked in any way*. The question is, then, what theoretical conditions are necessary for them to combine (table 4.1)

Table 4.1 South New Guinea societies and Big-Men societies.

	South New Guinea	***Big Men***
marriage	direct exchange wealth plays no role; at best indirect equivalence woman/wealth	no direct exchange brideprice: equivalence woman/wealth
compensation	pigs play no role existing compensation concerns marriage and murder sexual services of women compensate services and ordinary wrongs	pigs play prominent role used for all kinds of compensation sexual services of women unknown
intergroup ceremonial exchanges	often an alternative to violence can be competitive vegetable products only affines are marginal	most frequently linked to death compensations (including murder) competitive domestic pigs or equivalent items of wealth only affines play essential role
any link between domestic pigs and social organizations?	compensation, pig-raising and large-scale exchanges entirely separate	links between pig-raising, compensations and large-scale exchanges basic to "Big-Man complex"

As we know, in the Highland societies that compete at peaceful exchanges, and particularly those that have Big Men, compensation payments for life and death, and relations with affines (or maternal kin) are central to the ceremonial intergroup prestations; and above all the two are closely intertwined. We must therefore look more closely at the lack of reference to compensations in the South New Guinea intergroup exchanges as well as at the role affines may or may not play in them.

The domestic pig as a life-substitute

Compensation payments do exist in the south, but we have seen that they take primarily the form of the exchange of children and wives, and only rarely (among the Kimam and Kiwai) entail gifts of wealth, of which none ever includes pigs. As far as ceremonial exchanges go, even when they are connected with peace-making (Kimam), they involve "objects" (vegetable products) that are never used as a medium of compensation.[28]

The marginal role played by wealth in peace ceremonies and the complete absence of pigs as compensation partially explains the divorce characteristic of these societies between peace-making procedures and the large-scale ceremonial exchanges. Indeed, unless they were to exchange wealth alone (no pigs, no pork, no garden produce; which for some reason does not happen in New Guinea) or to compete in the ceremonial exchange of children and women (which does not happen either), these groups would have a hard time establishing a link between the two types of exchanges. Conversely, once pigs begin to be used as a medium of compensation, they lend themselves more easily to subsequent exchanges. In short, when the principal medium of compensation is *also* the object of the exchanges, and when this object is pigs, which can be agisted and re-exchanged, the pig naturally acquires the general appeal and nature that it enjoys in the Highlands, and more particularly in Big-Men societies. And since affinal co-operation (or rivalry) in this instance centers around agricultural practices rather than strategies for provisioning the exchanges, which imply the agisting of pigs, one may well wonder whether the non-use of pigs in compensation procedures might not be the missing link which, as far as intergroup exchanges are concerned, differentiates Highland societies from those of South New Guinea. The *absence of pigs in compensation procedures* – and no longer the use of pigs or wealth in general – becomes a crucial factor in explaining the variety of forms of economic and social organization found in New Guinea. This is also where unanswered questions and speculations once more arise.

Basically, we may consider that, for the groups living in the south of the big island, marriage exchanges and homicide payments are simply replacement procedures: the giving of women or children substitutes a living being for one who has been transferred (marriage) or killed (murder). In this

matter, these South New Guinea societies differ from those in other parts of New Guinea, where the gift of domestic pigs or pork is conceptualized as a gift of some kind of "life force," of "token of life," which stands in for a human being in marriage or death compensations. As we have seen in the reference societies, the symbol of life, fertility and growth (but also of ardor and bravura) used in the growth rites or the initiations, is the wild pig. Can it be postulated, then, that the domestic pig must be attributed life-giving powers to be regarded and utilized as a medium for compensating life and death? Or to put it another way, what is needed for the pig to become a precious object, and even a life-compensating item of wealth? It is tempting to speculate in reply that the animals must be intensely socialized by labor (the case in Big-Men societies) and, as it so happens, by the labor of women, who not only look after the pigs but basically cultivate their gardens in order to feed them.

The Kimam and the Kiwai seem to tend in this direction, although rather incipiently. They have half-wild pigs "domesticated" by women's labor and credited with life-giving powers; and they practice compensation in which wealth plays a part (possibility of direct brideprice and compensation for war-dead) together with the exchange of pigs for wealth, precisely at intergroup ceremonial prestations held in the context of growth rites. These two groups do not use pigs as a direct substitute for human life, but they do acknowledge them as being equivalent to wealth. We can then imagine that once the Highland pig has shed all trace of its wild origins – in the course of "gobbling up" ever greater quantities of female labor – it can then be used as a life-substitute, accompanying or replacing living beings, both in the gifts compensating a murder and in marriage exchanges. By the same token, the pig would pass from the status of "precious object" to that of "medium of payment."[29] In this way an animal that, in its wild state, symbolizes strength and maleness is transformed into an item of wealth, and above all wealth recognized as a life-substitute, or "token of life", suitable for compensation and exchange, when domesticated by female labor – and particularly when it reproduces in captivity (Lemonnier 1993).

Affinal co-operation

It is known that, besides the constant reference to the various compensations, a second element central to large exchanges in the Highlands is the relations among affines. This is not the case in South New Guinea; however affines still occupy a place of note in intergroup exchanges, which often give them the opportunity to be of mutual assistance on the occasion of the children's growth rites, these involving pigs bought for the event.

The Marind-Anim are the clearest illustration. When a Marind-Anim man captures a wild piglet, he gives it to his sister to raise. When a rite of passage is performed for his nephew, in the framework of an intergroup exchange,

the maternal uncle "buys back" the right to kill the animal, in other words, he pays for the work his sister put into raising the pig (van Baal 1966: 419, 841). The Jaqaj's situation is slightly different: a pig is sacrificed for the boy; but the celebrant and the boy's father are not affines, they are *nakaeri*, men bound by the gift of an enemy jawbone. Their respective children may marry, however, and so they are potential affines (Boelaars 1981: 45, 189).[30]

The Kiwai, as we know, make a distinction between initiations (for which a wild pig is used) and competitive exchanges of food. But the latter still provide the families of the *gaéra* organizer and his wife with an opportunity to co-operate in supplying the foodstuffs for the feast. At the end of the ceremony, the organizer presents his affines with a pig, to which they respond with wealth (Landtman 1927: 382–3, 396). Relations among affines in the context of ceremonial exchanges are friendly and co-operative, then;[31] but unlike Big-Men societies, the Kiwai relegate them to a minor position, in fact as minor as that occupied by pigs in these exchanges that we know to be largely linked to the growth rites. And so, on the one hand, affines come together in ceremonial exchanges only because these are associated with fertility rites (which is also the case for the Keraki, even though the services rendered have nothing to do with the pigs, which are wild (Williams 1936: 114)); on the other hand, wherever these relations entail the use of a pig, the affines co-operate as partners; the same is true of the Kiwai *gaéra*, which is competitive.

Affinal ties in this case do not have the competitive or "financial" dimensions that are typical of such relations in Big-Men societies. They take the form not so much of unilateral payments made in conjunction with growth ceremonies as of services rendered, often mutually, due to the frequency of sister exchange marriages. In addition, we have seen that, however remarkable prestations between affines in the context of collective intergroup exchanges may be, they remain strictly secondary. These features of affinal relations, together with the separation observed between compensations for life and death, and intergroup exchanges, are enough to explain the differences between the large-scale exchanges of South New Guinea and those of the Highlands. The fact that pigs are not wealth conjoined with the fact that they are not used for compensation once more is a key variable running through all the groups.

Now the relations between agriculture, pig-raising and the big ceremonial exchanges appear more clearly. We have seen that the presence of half-tame pigs alone, even when raised completely in captivity, in no way accounts for the development of big intergroup exchanges and the leader's role in them. In fact, we have shown that large-scale competitive exchanges can be based on agricultural production alone (Kimam, Keraki, Kiwai), or even on the product of gathering expeditions (Asmat). We have also seen that the existence of exchange predicated on wealth – particularly that given for direct marriages or murder compensations – provides no better

"explanation" for the big exchanges. What finally seems to determine the defining of pigs as wealth and their generalized use in exchanges *is the role they play in compensations,* which may itself be bound up with the amount of (agricultural) labor the *women* invest in the animals, and particularly in their *reproduction.*

IN WHICH WE ENCOUNTER SOME UNEXPECTED TECHNICAL CHOICES: BARUYA PIGS

As they stand and despite their speculative, open-ended character, the few results obtained already sharpen our understanding of the logics underlying Big-Men and South New Guinea societies And yet, even though I have based this chapter largely on the conclusions of comparative studies of Big-Men and Great-Men societies, the latter, and particularly the Baruya, now appear in an even more original light. This would not in itself be a problem if their originality did not constitute a daunting counter-example (table 4.2).

Table 4.2 **South New Guinea societies, Big-Men societies and the Baruya.**

	South New Guinea	*Big Men*	*Great Men*
marriage	exchange of women dominates	brideprice only	exchange of women only
initiations	large-scale initiations linked with warfare	no initiations	large-scale initiations linked with warfare
ceremonial exchanges	can be competitive: based on vegetable products	competitive: based on pigs or related items of wealth	no intergroup ceremonial exchanges
political authority	held by great warrior; but organizer of exchanges gets prestige	held by organizer of exchanges, who may also be a great warrior	held by great warrior and master of the initiations

The Baruya have a sophisticated agriculture which they combine with substantial pig-raising activity,[32] itself largely based on female labor. But the pig is only a precious object, at most a "gift object" (Godelier 1971: 53); it is in no way a medium of payment. Next, and above all, the Baruya have no large-scale intergroup ceremonial exchanges. In other words, rather than the mere presence of relatively high numbers of pigs irrevocably leading to big

exchanges – as in the economic-ecological models above – here is a society that seems to have "chosen" not to further intensify its husbandry activities. In short, the Baruya pose two questions: (1) Are pigs regarded as items of wealth? (2) Why are there no big intergroup exchanges?

Is pig-wealth overshadowed by salt?

The answer to the question of whether pigs are regarded as items of wealth is yes: the Baruya (Godelier 1986: 22), but also the Sambia (Herdt 1981: 41), the Ankave, the Kapau, the Langimar and the Watchakes.[33] give their affines pig meat as one of the gifts made during the engagement period or once the couple is married. When the Baruya exchange sisters in marriage, the families give each other half a pig in order to "build the bridge," to seal the mutual alliance. Pig feasts are also held for male initiations as an alternative or in addition to meals of game. As is often the case in the Highlands, pigs are ascribed with life-giving qualities, which fits with our hypothesis, since the animal's domestication implies a large amount of female labor. For the Baruya, however, pigs are only one of a number of life-giving substances, among which vegetable salt has a prominent place.

Salt is ingested at every stage of the male initiations (Godelier 1986: 36, 90); generally speaking, it is one of the ways the Baruya, as well as other Anga groups, keep up their strength. It is used as a universal equivalent in trading, that is as a currency (Godelier 1971; Lemonnier 1981), but it is also used locally for various homicide payments (Godelier 1986: 150), as well as to compensate enemies for their war-dead (Lory, pers. com.). If we go along with Mimica's (1981: 63–5) demonstration that salt (produced in this case by the Iqwaye from whom the Baruya are descended) is conceptualized as solidified semen, we see that, as both a re-exchangeable valuable and a life-substitute, *salt here plays exactly the same role as pigs do elsewhere.* It is, then, their specificity as makers of salt and great traders – the second pole of their originality, the first being Great Men – that explains in part the relatively secondary role pigs play in Baruya exchanges, reinforced, as it were, by the lack of motivation to raise any more, due to the non-equivalence of women and wealth (Godelier 1986: 173). But there is nothing so far in all this to prevent the Baruya practicing intergroup ceremonial exchanges of salt and even making them competitive.

In fact they do hold ceremonial exchanges; they are even central to their way of life; taros, game and domestic pig meat are exchanged within the group to mark the end of the initiation ceremonies. Only, these exchanges have one peculiarity: instead of social sub-units (families, clans, hamlets) exchanging with each other, the whole group gives these products to itself. Of course each participant's contribution to the collective gardening and hunting is acknowledged, but in the end all join together to present the ceremonial food to the initiates and to take part in the feasting,

Now this is reminiscent of one of the aspects that distinguish Marind-Anim and Jaqaj exchanges from those of the Kimam, Kiwai and Keraki. In the first two groups, keeping the peace "near by" is accomplished by everyone participating in a cycle of rituals which simultaneously ensure the symbolic reproduction of a group of communities (or tribes, Marind-Anim) and celebrate military victories. During these celebrations, the members of the various local groups take turns helping each other by playing the specific roles incumbent on the hosts or guests respectively. Conversely, Kimam and Kiwai competitive exchanges are generally held separately from the ceremonies performed mainly to ensure the symbolic reproduction of the society.[34] In short, at least one tendency seems to be emerging here: in these South New Guinea groups, co-operative events tend to be associated with both the collective reproduction of the society and victory celebrations, while the competitive exchanges are kept separate from the initiations and/or post-combat rituals.

It may be, then, that maintaining peaceful relations on a large scale by the mediation of collective ritual celebrations ensuring everyone's reproduction puts a curb on intergroup exchanges, and particularly competitive ones. The Marind-Anim see all outside tribes as a pool of potential heads (or names) to take. The Baruya relations with outside tribes take the form of war or trade, which is merely "armed peace" (Godelier 1971). Peace ceremonies do exist, but as soon as the life-substitute offered in compensation for those killed (salt) leaves the territory, it becomes principally a currency, and in this case the necessary and highly valued medium of trade (Godelier 1971). Now it is the opinion of even their neighbors, and in fact of all the Anga, that the salt bars of superior quality suitable for use in rituals are made only in the Baruya valleys (Wonenara and Marawaka). Of course, non-Baruya tribes know how to make vegetable salt, but neither the quality nor the quantity can compete with the Baruya goods (Lemonnier 1984); not to mention the powers only the Baruya know how to instil. In these circumstances, how is it possible to found any kind of competition on the accumulation of objects that one party is unable locally to produce?

For these reasons, and over and above the fact that, unlike pigs, it cannot reproduce itself, *salt is a bad candidate for ceremonial exchanges* (even though it is sometimes exchanged with enemies during peace ceremonies). As far as the alternative method of making peace – the reciprocal giving of women – is concerned, Godelier has shown that it is also a way of continuing to make war, since the solidarity mutually owed by brothers-in-law often leads to conflicts of loyalty and betrayals (1989).

If there is one Baruya technical practice among the forms of intergroup relations that outweighs all others, it is not the raising of pigs, it is the making of salt. Despite the female labor embodied in pigs, despite the fact that pigs, too, are substitute life principles, the Baruya still do not use them as a medium for compensating human lives. This function is taken over by

vegetable salt because it is a precious object, but also because it is identified with semen by a society that sees this substance as a primordial source of life. But the techniques used in the production of salt and the magical practices that guarantee its symbolic efficacy (Godelier 1971) make Baruya salt an item of wealth too rare for their trading partners to use in any *regular* peaceful exchanges other than trade. Lastly, the forms taken not only by warfare, peace and intertribal trade, but also by the participation of all Baruya groups in the symbolic reproduction of their society, are in contradiction as much with the holding of intergroup ceremonial exchanges as with the forms of authority that accompany them.

In conclusion: the examples we have examined show that, in New Guinea, no simple causal relationship links agriculture, pig-raising, the nature of wealth and peaceful intergroup exchanges. In contradiction with the obvious conclusions and "necessary" relations that do not stand up to the counter-examples, we have seen that the presence of domestic pigs does not itself produce any specific social practices. Neither the intensified raising of pigs (in the Baruya case), nor, for that matter, the circulation of wealth as compensation for life and death, triggers the spiral of logics of which the Big-Man complex is the most highly evolved form; no more than sister exchange is incompatible with local intergroup rivalry based on agonistic food-giving.

Seen in the light of South New Guinea practices, the singularity of Great-Men societies is even more striking. As it does not seem to be reducible to any single social feature, I have tried to show that a bundle of mutually compatible logics seems to work against the establishment of intergroup ceremonial exchanges and, by the same token, the emergence of a Big-Man style of authority; however, pig-raising or agricultural practices have little to do with it.

Certainly there are powerful and crucial links between agriculture, pig-raising and certain forms of politico-economic organization in New Guinea. But they become inevitable only once a logical and quantitative threshold has been crossed (Lemonnier 1990: 51). Conversely, certain basic technical choices quite unexpectedly turn out to be largely independent of the material possibilities at hand: the Kimam convert their marshes into man-made garden-islands, and the Baruya curb the development of their agriculture and animal husbandry. These, like all techniques, are social productions because they are the reification of traditional thinking, they are traditional thinking made act. In addition, their development or limitation is conditioned by social logics that are not only based upon but also largely transcend them.

Translated by Nora Scott

NOTES

1 A somewhat different but complementary version of this text appears in French in Lemonnier 1993.

2 Translator's note: English has no convenient term for the French *prestation,* which indicates a thing or a quantity of things (including services) given freely or obligatorily as a gift or in exchange. I shall therefore follow what seems to be becoming a practice of using the word directly in English.

3 The limits in this case are not only material, but also strongly social: when the herds get too big, the pigs break into gardens and even attack children, resulting in endless disputes.

4 For a description of these intensive practices, see: Brown and Brookfield (1959-60: 18–21); Lederman (1986: 12); Reay (1959: 10-12); A. Strathern (1972: 58); Waddell (1972: 39-64). For more on husbandry, see e.g. Brookfield and Brown (1963: 57); Feachem (1973: 27); Heider (1970: 49-50); Lederman (1986: 256 n.10); Meggitt (1957–8: 291); Pospisil (1963: 11); Rappaport (1968: 58); Reay (1959: 12); Sorenson (1972: 56); M. Strathern (1972: 10); Waddell (1972: 62); Watson (1983: 49). Non-intensive husbandry outside the Highlands is described by Barth (1975: 34); Juillerat (1986: 212); Morren (1986: 88).

5 See Brown (1970: 99); Lederman (1986: 174); Luzbetack (1954: 108); Meggitt (1957–8: 297); Newman (1965: 68); Reay (1984: 75); Salisbury (1962: 34, 80); A. Strathern (1971: 137–56, 1978: 93).

6 The Soi, who live on the eastern coast of New Guinea, are an exception to this rule: they exchange, and even re-exchange, adult animals (barely tamed, it is said), which they transport over long distances on their backs or by means of canoe. The pigs remain(ed) tied to a pole for several days (Williams 1933).

7 See Rubel and Rosman (1978); Godelier (1986); Modjeska (1982); A. Strathern (1982) and Lemonnier (1990, 1991).

8 In this chapter they are six in number: Marind-Anim (van Baal 1966, 1984), Jaqaj (Boelaars 1981), Kimam (Serpenti 1968, 1972, 1977, 1984), Keraki (Williams 1936), Kiwai (Landtman 1927) and, as far as can be gathered from the available information, Asmat (Trenkenschuh 1970, Zegwaard and Boelaars 1955, Zegwaard 1959, van Amelsvoort 1964).

9 The "name" of the victim is considered to be the few sounds uttered between his or her demise and the decapitation (van Baal 1966: 676, 745).

10 The Kiwai do not erect "head trees." They do, however, clearly attribute on a number of occasions the renewal of fertility to the death of an elderly couple of husband-and-wife officiants (Landtman 1927: e.g. 9-10, 350ff). One cannot help making the link between the food hung, during the *gaéra* ceremony, from the branches of the "fertility tree" (particularly yams, which are subsequently re-planted in the garden of the elderly parents of the organizer of the ceremony), and the enemy heads displayed by other groups (Landtman 1927: 382–97).

11 For the Keraki, see Williams (1936: 158, 188, 194, 199, 204, 309 n. 3). For the Kimam, see Serpenti (1977, 163-6 and 1984). For the Kiwai, see Landtman 1927: 9-10, 237. For the Marind-Anim: van Baal (1966: e.g. 117, 122, 147, 479-80, 512, 543, 548, 581-2, 649), as well as van Baal (1984). Ethnographic studies of the Asmat and the Jaqaj barely allude to homosexuality and the role of semen in making boys grow (Boelaars 1981: 69; van Amelsvoort 1964: 43), but a number of elements would tend to indicate that both are certainly found. In both cases, conception is considered to be the result of, among other things, repeated intercourse. The Jaqaj tell that the first man was born from anointing a coconut with semen, and semen is ingested in case of illness. The case for homosexuality is clear if van Amelsvoort is to be believed (1964: 43): "Homosexual relationships are less institutionalized [among the Asmat] than among the neighbouring Jaqaj people." Knauft (1990) recently argued that ritualized homosexuality may not be generalized in the area. Whatever may be the case, this does not make any difference in the reasoning proposed here.

12 See Landtman (1927: 101, 352, 360); Serpenti (1977: 164–5, 188–90, 228; 1984: 314); van Baal (1966: 543–8, 581–2, 636, 817). Among most of the groups, female vaginal fluids and heterosexuality play a key role in fertility.

13 See Landtman (1927: 440); Serpenti (1977: 176); van Baal (1966: 406-7); Williams (1936: 224). I do not know the origin of Asmat and Kimam pigs.

14 See Landtman (1927: 64-110); Serpenti (1977: 20-44); Williams (1936: 16–18); van Baal (1966: 20-1).

15 See Boelaars (1981: 170-3); Landtman (1927: 344, 368); Serpenti (1977: 156, 158, 165-6, 218); van Amelsvoort (1964: 47–8); van Baal (1966: 673-4); Williams (1936: 114-16, 231); Zegwaard (1959: 1028). Alongside these multiple events, there are other ceremonies that are celebrated more or less independently, for example weddings or certain cults. But on the whole, intergroup exchanges have the composite character that we see here.

16 Several of these societies have non-localized exogamous moieties (Asmat, Keraki, Marind-Anim) or ceremonial moieties (Kimam). These moieties affect marriage prohibitions, play complementary roles in cults (Marind-Anim) and sometimes dictate exchange partners (Kimam). But I have not found them to have a (regular) decisive role in the questions that concern us here.

17 Unless I am mistaken, the only two cases that could indicate the existence of a funeral compensation are (1) the Keraki practice of making presents of the deceased's coconuts to his affines, but these are also distributed to members of his own group (Williams 1936: 327 n.1); and (2) the compensation paid by the Kiwai for a death during the *mimia* ceremony; in this situation, however, the death is accidental and in no way the principal pretext for the ceremony at which it is compensated (Landtman 1927: 368–9).

18 On the presence of pigs at these ceremonies, see Boelaars (1981: 176, 181, 189); Serpenti (1977: 157); van Baal (1966: 159); Williams (1936: 193, 195). Outside these ceremonies, which are the only ones associated with pig feasts – and unless I am mistaken – the rare gifts of pork mentioned in the literature are, among the Jaqaj (Boelaars 1981: 66, 122, 138), welcoming or thank-you gifts (to mourners, to relatives who have given assistance on the occasion of a birth, to partners in war). The Kiwai, as we have seen, slaughter wild pigs for various local rites. The only groups that seem to distribute pig meat to persons outside the group are the Keraki – although it is impossible to know if the ostentatious display of a pig can be dissociated from the growth rites – (Williams 1936: 233), and the Marind-Anim, who mix game (and therefore perhaps pork) with the dish of sago served at funerals (van Baal 1966: 799).

19 We cannot tell from Boelaars's text if the totality of the rites and promotions of great warriors each time concerns one specific community or all communities taken together. He speaks of the role of the "guests," but does not make it clear whether or not these include "foreign" children and warriors who are to be involved in the rituals.

20 Particularly the Keraki and Kimam. It seems that the Asmat, too, hold giving ceremonies at which they challenge another village to do as well, but I did not find enough information to use the case here (van Amelsvoort 1964: 47).

21 See Boelaars (1981: 58–60, 172); Landtman (1927: 168, 382–3); (Serpenti 1977: 218-19, 235-6); van Amelsvoort (1964: 42-4); van Baal (1966: 65, 171, 711, 713);

Williams (1936: 243, 289); Zegwaard (1959: 1040).

22 We know next to nothing about the organization of male initiations in these groups, except that they seem always to be collective. Among the Marind-Anim, each (multilocal) clan is responsible for one cult, but no personality seems to be head of the operations (van Baal 1966: 471-675). Only among the Keraki is the headman, whose position is to some extent hereditary, entrusted with the bull-roarers as well as a role in the initiations (Williams 1936: 243).

23 According to the information we have, when intergroup exchanges are held, Keraki, Kimam and Asmat leaders are assisted by their entire local group (Serpenti 1977: 238; Williams 1936: 232–3; van Amelsvoort 1964: 47). The Marind-Anim ceremonies also involve the whole local group, and even if each man is helped by his wife's brother, this does not imply any "financing": it is merely one brother-in-law helping out on the occasion of a growth rite (van Baal 1966: 765–862). Finally, a Kiwai man is helped by his entire group and that of his wife; it is likely that the leaders with the most wives make the best showing, but this still has nothing to do with any "financing" strategy (Landtman 1927: 168, 382–3). The Jaqaj are the only ones who might play upon the conditions in which women (and therefore gardeners) seek refuge with them, but Jaqaj intergroup exchanges are co-operative, and there seems to be no rivalry among leaders, in the first place; and in the second, it is by their bravura and their exploits that they attract more wives, not by manipulating social relations (Boelaars 1981: 41–2, 173ff).

24 Or to be more precise, when the authors mention them. Williams has nothing to say on the subject for the Keraki, and Vertenten (1923) does not even mention compensations for a death among the Marind-Anim.

25 In this case, we are talking about the non-reciprocal loan of a sexual partner, which must be distinguished from the exchange of wives for the night, widely practiced except, it seems, among the Jaqaj.

26 It is important to point out that this role as re-usable sexual object is, in practice, generally distinct from other practices in which the individual or collective access to other men's wives, besides the probable pleasure it affords the men, fulfills two other functions: a technico-symbolic function, the purpose of which is to increase the women's fertility; and a purely technical function of exciting the men in order to facilitate the emission of semen in the framework of collective semen-collecting rites. The loan of a wife to pay back a service or a wrong is never accompanied by the obligation to produce semen, and profits the husband (by increasing his wife's fertility) in only a few of the cases mentioned here. As far as the women's pleasure is concerned, it does not seem to exist: if van Baal (1966: 815) is to be believed, they experience their subjection to what can be more than a dozen partners as a necessary chore.

27 This might not be the case in the contemporary Papua New Guinea Highlands. According to D. Fell (pers. comm.), for instance, Tombema-Enga informants deny that a pig can be a substitute for life. Similarly, P. Wiessner (pers. comm.) maintains that the idea of a pig being a substitute for life is absent from the contemporary *tee*. It remains that the *tee* seems to have been linked historically with war compensations. My hypothesis is also well documented in Brown (1961; 1972: 32, 49–50; 1978: 220), Elkin (1953: 183-4, 199), Lederman (1986: 149, 162–3) and A. Strathern (1971: 94-6, 121–2, 219; 1981: 210).

28 See Boelaars (1981: 173–96); Landtman (1927: 327–97); Serpenti (1977: 203–52); Trenkenschuh (1970: 42ff); van Amelsvoort (1964: 47); van Baal (1966: 471-675, 765–862); Williams (1936: 231–5).

29 The two terms are borrowed from a problematic dealt with by both Godelier

(1971: 52–3) and Panoff (1980). The Kimam use a similar quasi-currency, exchanging necklaces of dogs' teeth and shells (Nautilus sp.) as compensations (for murder or marriage), or even using them as "deposits" on pigs (Serpenti 1977: 230).

30 It is not impossible that this payment is also a compensation for the uncle's sexual access to his maternal nephew – whom he sodomizes (van Baal 1966: 117, 122, 147) – but van Baal does not advance this explanation.

31 Moreover these relations confirm a tendency observed elsewhere (Lemonnier 1989): wherever the givers of women are on the whole superior to the takers, the affines co-operate in the exchange (Jaqaj, Kiwai, Marind-him); where the relations are strictly equivalent, rivalry prevails (Kimam, Keraki).

32 For some reason – no doubt echoing Watson's scenario for the period before the arrival of the sweet potato in the Eastern Highlands – the Anga are sometimes considered to be hunter-gatherers practicing a rudimentary sort of agriculture with a little pig-husbandry on the side (Feil 1987: 101, 141). But this is hardly the case. The Menyamya savanna, the center from which the Anga set out, still carries the scars of overpopulation and centuries of gardening. The Baruya grow tare (which calls for irrigation and nurseries) and salt canes, which certainly require practices as complex as mounding or the use of compost in the "intensive" agricultural systems of New Guinea. Pigs number 0.6 per capita, and the women who raise them (the majority) keep an average of three.

33 When no other source is given, information on the Anga comes from my own fieldwork.

34 The Keraki may compete with each other at male initiations (Williams 1936: 231), but these do not appear to be directly linked to the celebration of victories. For the Kimam, the male initiations are the event that concerns the biggest social unit, but they entail only one village at a time (Serpenti 1977: 161ff). The various Kiwai cults, as well as the *gaéra* ceremony, involve only one or a few villages from the same tribe and are dissociated from war – or the initiation ceremonies which follow – which can mobilize an entire tribe (Landtman 1927: 13–22, 149-65, 327–97).