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Chapter 1

Introduction: peer polity interaction and socio-political change
Colin Renfrew

Introduction

The concept central to this paper—peer polity inter-action—is a process in terms of which the familiar problem of the growth of socio-political systems and of the emergence of cultural complexity can be examined in a fresh and original way. Simply to name a process in itself, of course, establishes nothing. If, however, it brings new problems into clearer focus and offers an avenue towards their investigation, it can prove its usefulness. My claim is that the concept of peer polity interaction does that by bringing to the fore the question of the development of *structures* in society—political institutions, systems of specialised communication in ritual, convention-alised patterns of non-verbal language—and even of the development of ethnic groups and of languages themselves.

Peer polity interaction designates the full range of inter-changes taking place (including imitation and emulation, competition, warfare, and the exchange of material goods and of information) between autonomous (i.e. self-governing and in that sense politically independent) socio-political units which are situated beside or close to each other within a single geographical region, or in some cases more widely.

The framework of analysis has two obvious properties. It avoids laying stress upon relations of dominance and sub-ordination between societies, although such relations are indeed common enough and their discussion is, in the archaeological literature, the most frequent approach to questions of culture change. This is seen from the early days of the analysis of the 'diffusion' of culture, through the later treatment of 'primary' and 'secondary' states, to more recent investigations in terms of 'core' and 'periphery'. These are of course all terms which are valid in specific situations, but they have been applied very much more generally than the evidence sometimes warrants.

Secondly, the discussion here, by definition, does not simply consider the socio-political unit in isolation. *Die isolierte Stadt* is a concept whose examination has indeed yielded useful insights, and within which questions of the intensification of production and of the emergence of decision-making hierarchies in the face of increasing population density and other factors, can profitably be discussed. But the *form* of these control hierarchies and of the institutions by which intensification is achieved cannot so effectively be considered in isolation.

Spatial relations and power relations

The underlying principle is conceived here primarily with reference to fairly complex societies (developed chiefdoms or early states), although it no doubt applies in many other instances of both lesser and greater scale and complexity. When we consider most early states, for instance, we find that they do not exist in isolation. On the contrary, it is possible to identify in a given region several autonomous political centres which, initially at least, are not brought within a single, unified jurisdiction. It is such autonomous

territorial units, with their administrative centres which together constitute what is often termed a civilisation. They may be recognised as iterations of what I have called the *early state module* (ESM). Often the ESMs—which in any given case tend to be of approximately the same size—conform to a modular area of approximately 1,500 sq.km. In many early civilisations their number is of the order of ten, within a factor of two or so (Renfrew 1975: 12–21; Fig. 1.1).

To say this is to draw attention to the distinction, in spatial terms, between an *early state*, and a *civilisation*, seen here as a group or cluster of states sharing a number of common features. These usually include closely similar political institutions, a common system of weights and measures, the same system of writing (if any), essentially the same structure of religious beliefs (albeit with local variations, such as a special patron deity), the same spoken language, and indeed generally what the archaeologist would call the same 'culture', in whatever sense he might choose to use that term. The individual political unit—the states—are often fiercely independent and competitive (Fig. 1.2).
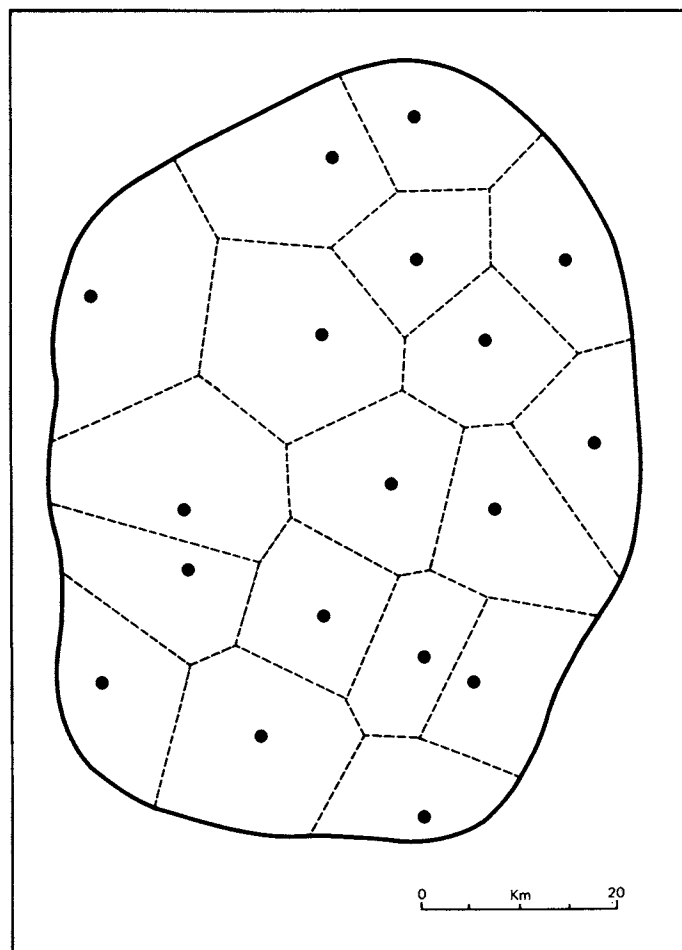

Fig. 1.1. The early state module: idealised territorial structure of early civilisations showing the territories and centres of the ESMs within the civilisation (i.e. the area of cultural homogeneity).

Indeed, not uncommonly, one of them may come to achieve political dominance over the others, ultimately uniting the cluster into a single larger unit frequently coterminous in its extent with that of the entire 'civilisation'. This is a *nation state*, sometimes even an *empire*. The individual political units at the time of their independence are the peer polities of our title, whose interactions are the subject of our study.

The same general phenomenon may be seen at other scales, or to put it another way, at other levels of socio-cultural complexity. Precisely the same configuration may be recognised in almost any case where the archaeologist or the anthropologist speaks of chiefdom societies. The separate chiefdoms are effectively autonomous in terms of their power relations (Fig. 1.3), yet they do not exist in isolation for they have a large number of neighbours, among which each has much in common with the others. That is not to say that such societies cannot exist in isolation. The case of Easter Island shows that sophisticated chiefdom society is not incompatible with remoteness (although even here the local region was usually divided territorially into a number of peer polities). It demonstrates only that such societies would be different if they did.

Nor is this configuration restricted to stratified or ranked societies. Among supposedly 'egalitarian' agricultural societies individual, politically autonomous units can usually be distinguished, whether as villages or tribal units. And at a greater territorial scale than these are those larger entities identified by many archaeologists and ethnographers where specific features or groups of features have a distribution sometimes taken to define a 'cultural' or ethnic unit. The problem of identifying such units (Clarke 1968: 367) is so acute that the utility of the archaeological concept of the 'culture' has been questioned (Renfrew 1978a: 94; Shennan 1978). Nonetheless, the adjacent small polities do share a number of features: often a common language, and generally other symbolic systems, including belief systems. Their recovery from the archaeological record undoubtedly presents many problems. The difficulties are more acute in the case of less complex societies, which generally possess a more narrow range of symbolic expression and less formalised institutions. But ethnographic experience suggests that in nearly all cases of such societies, the extent of these structured symbolic systems is greater than the power span of the individual polities.

It should be clearly understood that the term 'polity' is not in this context intended to suggest any specific scale of organisation or degree of complexity, but simply to designate an autonomous socio-political unit. One of the first questions to face the archaeologist in any context, whether he is dealing with band societies or empires, is the scale of the autonomous unit. The polity is here conceived of as the highest order socio-political unit in the region in question. In many farming societies it will simply be the village or (with a dispersed settlement pattern) the neighbourhood. In others, the various villages or neighbourhoods may be aggregated into a larger unit
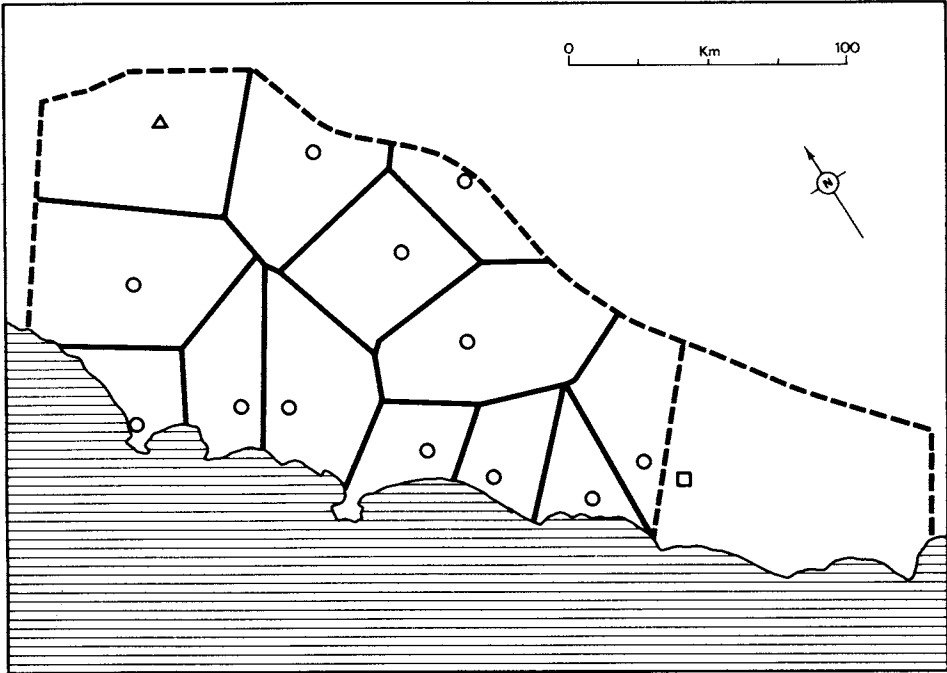
Fig. 1.2. The early state module in Etruria: the twelve cities of ancient Etruria (circles) with hypothetical territorial boundaries. Rome is indicated by a square and Fiesole by a triangle. The Etruscan cities competed and were not united under a single rule till Roman times.
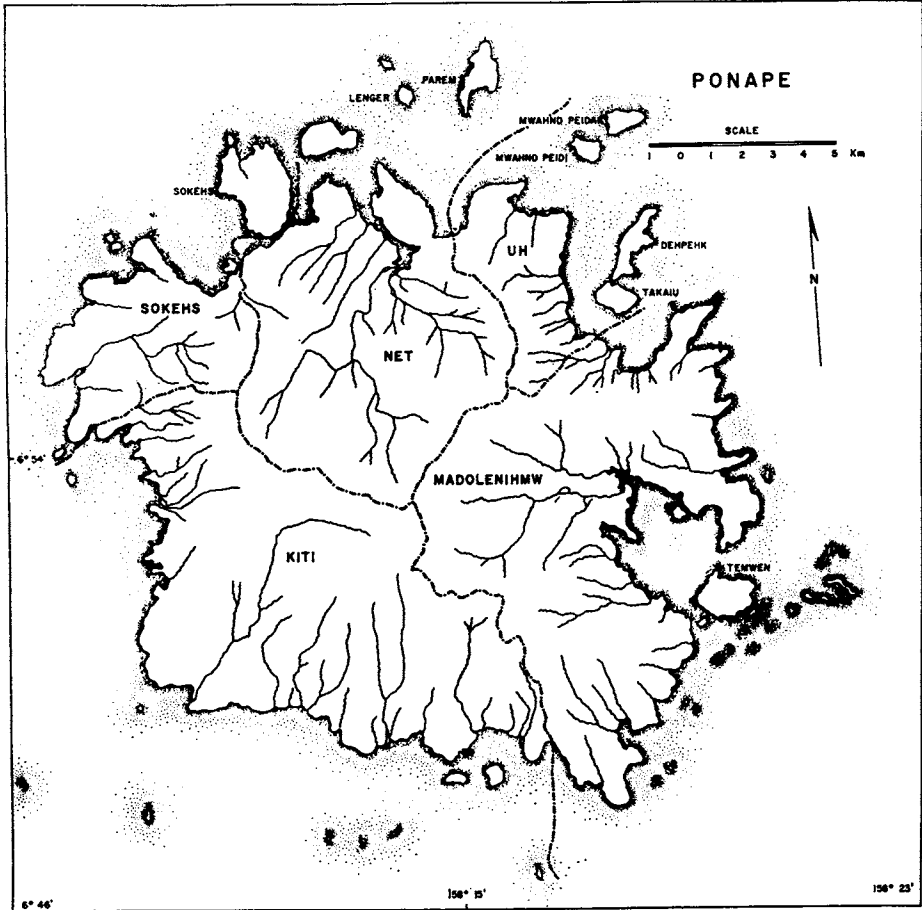

Fig. 1.3. Peer polity interactions at chiefdom level: territorial divisions between the five independent tribes of the Pacific island of Ponape in the Caroline Islands (after Riesenberg 1968:9).

with some socio-political coherence; such units are often termed 'tribes'. But it is now very clear that not all relatively egalitarian farming societies can realistically be termed 'tribal', nor do some of the loose aggregations or associations which have at times been referred to as tribes have any effective political institutions (Helm 1968). Chiefdoms, on the other hand, certainly do.

In hierarchically structured societies the term 'polity' is likewise reserved for the highest politically autonomous unit. The subordinate units, which may themselves have been independent polities at an earlier time, are often simply administrative or territorial subdivisions. Thus a nation state will normally contain several local areas or 'counties' which, at an earlier stage, may themselves have enjoyed independent status as early states, at that time ranking as polities.

It does not follow that a polity has to be territorially based or defined: many band societies and other egalitarian groups are formally defined in kinship terms. But the polity and its constituent members will nonetheless occupy a pre-ferred area of land and will often enjoy privileged access to resources within it. Nearly all human groups, and hence nearly all polities, thus show territorial behaviour even when they are not formally defined in territorial terms. Nor need a polity

display any notably developed or differentiated system of government or of administration; it is sufficient that there should exist procedures for decision-making which habitually work, and which in practice do modify or otherwise affect the behaviour of most of the members. Such a definition applies as much to a hunter–gatherer band as to an early state. It follows that a polity is not subject to the jurisdiction of a higher power.

Structural homologies

So far the general observation has been made that autonomous political units do not generally exist in isolation, but have neighbours which are analogous in scale to them. But that assertion does not in itself make the simple and evident point that these neighbouring polities display a remarkable range of structural homologies in any specific case. Although this idea may be obvious it has not often been stressed, and it may prove to be remarkably important.

To take a familiar example, a typical Maya ceremonial centre consists of a central complex which is organised around a group of plazas, courtyards and platforms, surrounded by stepped pyramids (Fig. 1.4). The pyramids are generally approximately square in plan, and each was surmounted by

Fig. 1.4. The Maya ceremonial centre: a reconstruction of the site of Copan, Honduras, in the Late Classic period. (drawn by Tatiana Proskouriakoff).

a platform. At the more important centres carved stone stelae are found, bearing recognisably similar glyphs, which show the same system of numeration and other similarities.

Now *why* should this be? Why should we find these same *structures* (in the architectural sense) repeated throughout the region of this civilisation? Why are the architectural features of the sites in some respects homologous? Why do the numeration systems display a complete structural homology? Why do the writing systems show similar homologies? These are, we may be sure, simply the material manifestation of further homologies in social organisation, and in the belief system.

There is nothing in biological evolutionary theory that says we should expect such pronounced structural homologies in behaviour among members of a species within a given region, when at the same time finding a very different set of behaviour patterns among members of the same species in a different region. Of course, it could be argued that the various communities where these homologies of behaviour are observed are all the direct lineal descendants of a common ancestor community, whose behaviour patterns they have to some extent conserved. But such a simple explanation, except in a straightforward colonial situation, is rarely valid. Often the different communities developed simultaneously and their structural homologies developed with them. No individual centre can claim primacy for them all.

It would theoretically be perfectly possible for neighbouring early state modules (ESMs) to differ greatly in all these respects. Or at least they could differ as much between themselves within the ambit of a single civilisation as do ESMs when chosen for comparison from different civilisations. In the biological case that would often be so. Communities of a given species of social insect, for instance, show much the same structural homologies when compared with near neighbours as with other communities spatially remote from them. But this is not the experience with human societies.

Evidently the structural homologies which we see among the ESMs of a civilisation are the product of the interactions which have taken place between them, in many cases over a long time period.

In a strictly ecological sense we might regard some of the features which these societies share as necessary adaptations. These would be features which might have evolved quite independently in response to the similar environment in the different communities, each faced with analogous practical problems. Thus we might expect analogies in house structure among communities in arid lands, where mud is the only obvious building material. The *pisé* structures of the early Near East show many similarities with the adobe constructions of the American South-west, and a broadly 'functional' explanation along those lines could easily be constructed. If we are not surprised by similarities between Near Eastern and South-western structures, we have no cause to be any more so by comparable similarities between structures at different sites within the South-west.

Some social forms may be discussed and perhaps 'explained' in the same way. In a general sense, the recognition of the emergence of 'state' societies in different parts of the world implies the assertion of some measure of structural homology. And since the different areas were (in some cases) not in significant contact with the others, the homologies in these instances cannot be ascribed to interaction.

The homologies upon which we are here commenting are, however, very much more specific than these in terms of structure. We are talking in terms of *specific* architectural forms, *specific* numerical systems, *specific* symbolic systems, and indeed, a very wide range of homologous structures which are seen within the social and projective systems of a given area.

The important question which we are asking is this: To what extent was the very emergence of such systems significantly determined by the interactions whose operation we may infer from the specific structural homologies observed? The distinction here is not a trivial one. We are concerned to explain certain important developments, such as the emergence of a particular governmental form, or the inception of specialised places of worship of monumental scale. In the cases which we have under consideration, these structures took on a specific form—specific, that is, to the civilisation in question, but shared among the constituent ESMs. The explanation for the shared elements within the civilisation, that is to say for the structural homologies, comes from the interactions between the polities—the peer polity interactions. To what extent were these peer polity interactions an indispensable and necessary element in the emergence of such systems, whatever their specific form?

The analysis of change

The approach advocated here differs from many earlier ones, where the dynamic for change is often viewed as operating outside the area and thus outside the societies which are the subject of study; this is exogenous change. Alternatively, several scholars have studied a single polity, effectively in isolation, and sought there the dynamic of change within the subsystems operating inside that polity or between those subsystems; this is endogenous change. It is relevant to note some of the properties of these two perspectives. Both offer useful approaches to the study of change, but they omit precisely that factor which is singled out for consideration here, namely the interactions of neighbouring polities of equivalent scale and status.

Exogenous change

Many analyses of societal change have utilised what may be termed 'models of dominance', where the changes within the area in question are explained largely in terms of the influence of, or of contact with, an adjacent area where the socio-political organisation is seen to be in some sense more 'advanced'. It is hardly necessary to recall the many early

analyses of state formation and other processes of organi-
sational growth conducted in terms of the 'diffusion' of
culture. Morton Fried's use of the terms 'pristine' and
'secondary' to classify state societies into two categories,
namely independent (parthenogenetic) and derivative,
depending on the degree of purity and autonomy in their
antecedents (Fried 1967: 231), is a popular and widely
followed example of recent diffusionist thought. Another is
the closely related idea of areas which are designated as 'core'
and 'periphery' within a broader economic entity or 'world
system', to use the terminology of Wallerstein (1974). Such
concepts have been found useful in discussing the impact of
the Western colonial powers in recent centuries upon what
today is sometimes termed the 'Third World'. In my view,
however, there are risks in projecting too vigorously onto the
prehistoric past the particular circumstances of society,
economy and transport which may make these terms
appropriate, for instance, to the West Indies in the eighteenth
century AD.

It should be noted that an emphasis upon exogenous
change is not restricted to the 'cultural historical' school,
which traditionally has favoured explanations based upon
diffusion, nor to their neo-Marxist successors, in whose works
a number of the same ideas are curiously reflected. Some of
those advocating a systems approach likewise insist on looking
outside the system for their explanatory thrust. Thus Hill
(1977: 76) has written: 'no system can change itself; change
can only be instigated by outside sources. If a system is in
equilibrium, it will remain so unless inputs (or lack of inputs)
from outside the system disturb the equilibrium.' Likewise,
Saxe (1977: 116) writes: 'the processes that result in
systematic change for all systems are and must be initiated by
extra-systemic variables'.

It is not, of course, part of the case of Hill or Saxe
that the outside sources instigating change need themselves be
more complex societies than those under study, whereas that
is precisely what the diffusionists and some of the neo-
Marxists do argue. But either way, the exogenous approach,
while entirely appropriate in those cases where the dominance
relationship can clearly be demonstrated, is not an appropriate
general model for all early socio-political change. In the words
of Gordon Childe (1956: 154) it 'has the effect of relegating to
the wings all the action of the prehistoric drama'.

There is a further class of models which may be
considered here with the straightforward exogenous ones.
These are the ones where there is a major regional diversity
which the society manages to exploit. In such cases, the
diversity may well be outside the territory of the society, but
the organisational response is an internal one. Flannery's
explanation for the rise of the Olmec (Flannery 1968), and
those of Rathje (1973) and Tourtellot and Sabloff (1972) for
the rise of the Classic Maya, fall within this category.

Endogenous change
At first sight the alternative to an emphasis on external
forces or influences acting upon the area in question, and

leading to transformations within the society which is under
study, is to look at the territory and at the polity which it
contains, considered in isolation. This has, in effect, been the
approach adopted by many workers attempting 'processual'
explanations, whether or not the idea of isolation is
deliberately introduced as a positive feature of the model.

Many, although not all, of the 'prime mover' approaches
hitherto proposed operate in this way. For instance, irrigation
and the accompanying intensification of agriculture are often
seen to relate functionally with certain organisational changes
within the society, and a growth process is sustained by this
interaction. In other models population increase is a 'prime
mover', and accompanying it there is the ever greater
efficiency of economies of scale and of administrative hier-
archies, which favour more effective information flow as the
number of units to be co-ordinated increases. Many of the
most interesting growth models recently proposed, such as
those of Wright (1977b), of Johnson (1978), and indeed the
processes indicated by Flannery (1972), are essentially of this
kind.

A systems approach can harmonise admirably with this
view; there is absolutely no need for it to lay stress only upon
homeostasis, as the authors cited in the previous section do.
Maruyama (1963) long ago emphasised the importance of
positive feedback leading to morphogenesis, and I have myself
(Renfrew 1972; Cooke and Renfrew 1979) used this notion as
the major explanatory mechanism for the emergence of com-
plexity in the Aegean. The treatment has often been
essentially an endogenous one.

Peer polity interaction
The peer polity approach is intermediate, from the
spatial perspective, between the two preceding ones (Fig. 1.5).
Change is not exogenous to the system as a whole in the region
under study, as it generally is when agencies of 'diffusion' are
invoked. Nor is it necessary to define the system so widely as
to include whole continents, as is so often the case when
'world systems' are brought into the discussion. But, on the
other hand, the locus of change is not situated uniquely within
the polity under study, as sometimes seems the case with the
endogenous approach.

Instead, change is seen to emerge from the assemblage of
interacting polities, that is to say it operates in most cases at
the regional level. Interactions at this scale have been largely
ignored in many discussions of state formation, where, as
noted above, the consideration has often been in terms of
'secondary' states (i.e. exogenous change) or 'pristine' states
(where the change is often regarded as endogenous).
Interestingly, it is in the discussion of non-state societies that
more careful consideration of significant contacts at the inter-
mediate scale has taken place, notably with Caldwell's useful
notion of the 'interaction sphere', initially applied to the
North American Hopewell finds (Caldwell 1964).

While analysis at the local level, in terms, for instance,
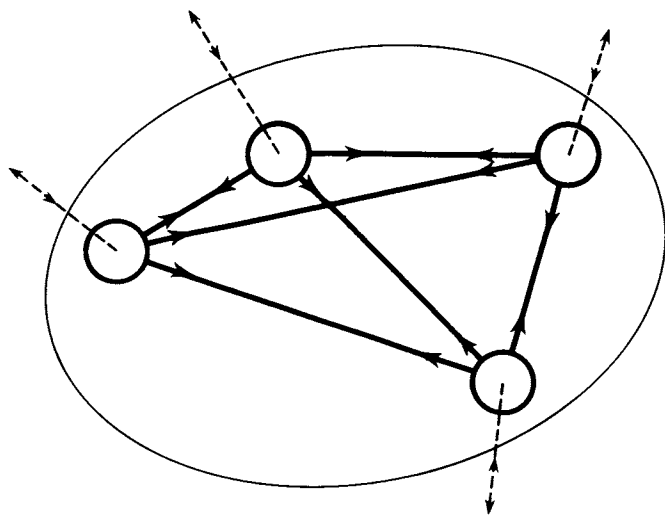of the intensification of production, it always necessary, and

Fig. 1.5. Peer polity interaction. Strong interactions between the autonomous socio-political units within the region are of greater significance than external links with other areas.

an assessment of the significance of long-distance contacts equally desirable, it is suggested here that in many cases it is the intermediate-scale interactions between local but independent communities which are perhaps the most informative and certainly the most neglected. For it is at this level that those uniformities emerge which sometimes seem to have a significant role in determining the future pattern of development. The significant unit is thus seen, in this perspective, to be the larger community beyond the polity level, comprised of loosely related, yet politically independent, interacting groups. It is here, for instance, that the processes of ethnic formation must in many cases operate, and here too that the foundations for the later emergence of the nation state are laid.

Using the concept
The real interest of this analytical perspective will emerge below. But it is first necessary to examine the risks of circular reasoning which a careless or loosely defined application of the notion of peer polity interaction can readily carry with it. The risk of circularity is most acute when the aim is not primarily to examine change, but simply to explain the existence in the archaeological record of the rather wide-spread distribution of a particular feature or trait.

In such a case the first stage might be the recognition and definition of the wide spatial distribution of the feature in question. This distribution, particularly if it is greater in areal extent than other comparable distributions at that time or earlier, clearly stands in need of explanation. It might be thought tempting, then, to assert the operation of some principle of peer polity interaction to explain the distribution—perhaps countering other diffusionist suggestions that the distribution is the result of contacts with some other area. Evidence for the operation of this process of peer polity

interaction is then sought, and prominent among the supporting arguments is obviously the widespread uniformity in question.

This, however, is a purely circular argument. In effect, it has been possible to equate the *explanandum* and the *explanans* by separating them by means of a single hypothetical construct, namely peer polity interaction. The distribution is at once seen as explained by peer polity interaction and constitutes the evidence leading us to propose peer polity interaction as an explanation. Such an explanation is empty of meaning.

On the contrary, it is essential to bear in mind that our aim is the explanation of a temporal pattern, namely the changes which have taken place in the degree of complexity in the organisational aspects of a given society; simple trait distributions are not the appropriate subject of the explanatory exercise. And change in complexity must evidently be documented by some measure of complexity.

The causal role of the process of peer polity interaction can more legitimately be asserted when we have evidence of contact prior to the change in question in terms of information flow or the movement of goods, as well as at least the outline of some mechanisms whereby the interaction can be seen to have some role in facilitating the observed change. These circumstances may not be sufficient to document the explanation or even to make it entirely plausible, but they will at least save it from circularity.

Such then are the necessary conditions for the concept of peer polity interaction to be used as an explanatory or interpretive framework. Accompanying this general framework come some empirical observations, which it is worth setting out. For in this volume there is the opportunity to consider several interesting cases where the notion of peer polity inter-action may be used. It is desirable therefore to make some positive statements which can be tested.

1   Within a given region with a human population, we shall term the highest order social units (in terms of scale and organisational complexity) 'polities'. It is predicted that, when one polity is recognised, other neighbouring polities of comparable scale and organisation will be found in the same region. (This is simply a statement of the early state module observation, which applies to other and simpler organisational forms, too.)

2   When a significant organisational change, and in particular an increase in complexity, is recognised within one polity, it is generally the case that some of the other polities within the region will undergo the same transfor-mation at about the same time.

3   Leaving out of account the specific criterion which may be used in statement 2 above to recognise organisational change, we can predict that several further new institutional features will appear at about the same time. These may include architectural features, such as monumental buildings of closely similar form; con-

ceptual systems for communicating information, such as writing or other sign systems (including systems of mensuration of number, length, weight and time); assemblages of specific and special artefacts which may be associated with high status in the society in question; and customs (including burial customs) indicative of ritual practices reflecting and perhaps reinforcing the social organisation.

4 The observed features will not be attributable to a single locus of innovation (at least not in the early phases of development), but, so far as the chronological means allow, will be seen to develop within several different polities in the region at about the same time.

5 It is proposed that the process of transformation is frequently brought about not simply as a result of internal processes tending towards intensification, nor in repeated and analogous responses to a single outside stimulus, but as a result of interaction between the peer polities, which we can examine under the headings of:

    (a) competition (including warfare), and competitive emulation

    (b) symbolic entrainment, and the transmission of innovation

    (c) increased flow in the exchange of goods

6 Moreover, this general assertion—that many organisational transformations may be explained in terms of peer polity interaction—may be elaborated to make a further prediction. In a region with peer polities which are not highly organised internally, but which show strong interactions both symbolically and materially, we predict transformations in these polities associated with the intensification of production and the further development of hierarchical structures for the exercise of power.

The nature of the interactions
The nub of the matter, and the real focus of interest, lies in the *nature* of the interactions between these peer polities and *between whom*, precisely, they operate.

The emphasis here is not primarily upon interaction in terms of the exchange of material commodities, but rather in the flow of information of various kinds between the polities. The importance of information exchange as a fundamental component of exchange systems has been made elsewhere (Renfrew 1975: 22–3), but here we can go further and consider the importance of such symbolic exchange even in the absence of trade in material goods.

It may be suggested that the emergence of new institutions in society can often profitably be considered in terms both of intensification of production, and of peer polity interaction. Many significant social transformations are accompanied by increased production (of foodstuffs and other materials), which permits not only increased population density but also the accumulation of pro-

duction beyond subsistence (PBS), which in turn allows the employment of craft specialists and other personnel at the behest of the élite, which in some cases controls that PBS. Within that framework, any interactions which serve to promote intensification of production are relevant to the discussion.

Warfare, to the extent that it uses up resources (whether as a result of destruction and looting, or in supporting an army), will promote intensification if it takes place on a sufficiently prolonged basis. (On the other hand, if it results in a great many deaths, so that food production can in consequence be substantially reduced, the converse is the case). Warfare (Fig. 1.6) is clearly one form of interaction between peer polities which may favour both intensification and the emergence of hierarchical institutions (initially for military purposes) within the various polities (Carneiro 1970; Webster 1975).

Competitive emulation is another form of interaction where neighbouring polities may be spurred to ever greater displays of wealth or power in an effort to achieve higher inter-polity status. There is a clear analogy here with individual behaviour, for instance in the well-known case of gift exchange, where positive reciprocity can be used to enhance status. The same process operates at group level in the familiar example of the potlatch, where the chief of a group engages the status of the whole group in the munificence of his feast-giving and gift-giving. This is a process favouring intensification, in that the resources utilised fall within the category of production beyond subsistence. But in an interesting way the emulation consists not only in the making of expensive gestures. The magnitude of these gestures has to be measured along some scale, and the gestures are thus similar in kind. If status is achieved, for instance, by erecting a particular kind of monument, the neighbouring polity will most readily acquire greater status by doing bigger and better.

There is reason to think that this is a significant factor in peer polity interaction. In several cases where there are concentrations of surprisingly large monuments – for instance the image *ahu* of Easter Island (Fig. 1.7) or the stone 'temples' of Malta—competitive emulation may help account for their otherwise rather puzzling scale. Within the present context of discussion it may in part also help explain the structural homologies of their form.

It would be wrong, however, to think of all the relevant interactions as essentially competitive. There is another process, perhaps of greater relevance, which I should like to term *symbolic entrainment*. This process entails the tendency for a developed symbolic system to be adopted when it comes into contact with a less-developed one with which it does not strikingly conflict. For one thing, a well-developed symbolic system carries with it an assurance and prestige which a less developed and less elaborate system may not share. These remarks apply, for instance, to the adoption of writing systems (Fig. 1.8) as much as to the adoption of systems of social organisation (such as some of the institutions of kingship).
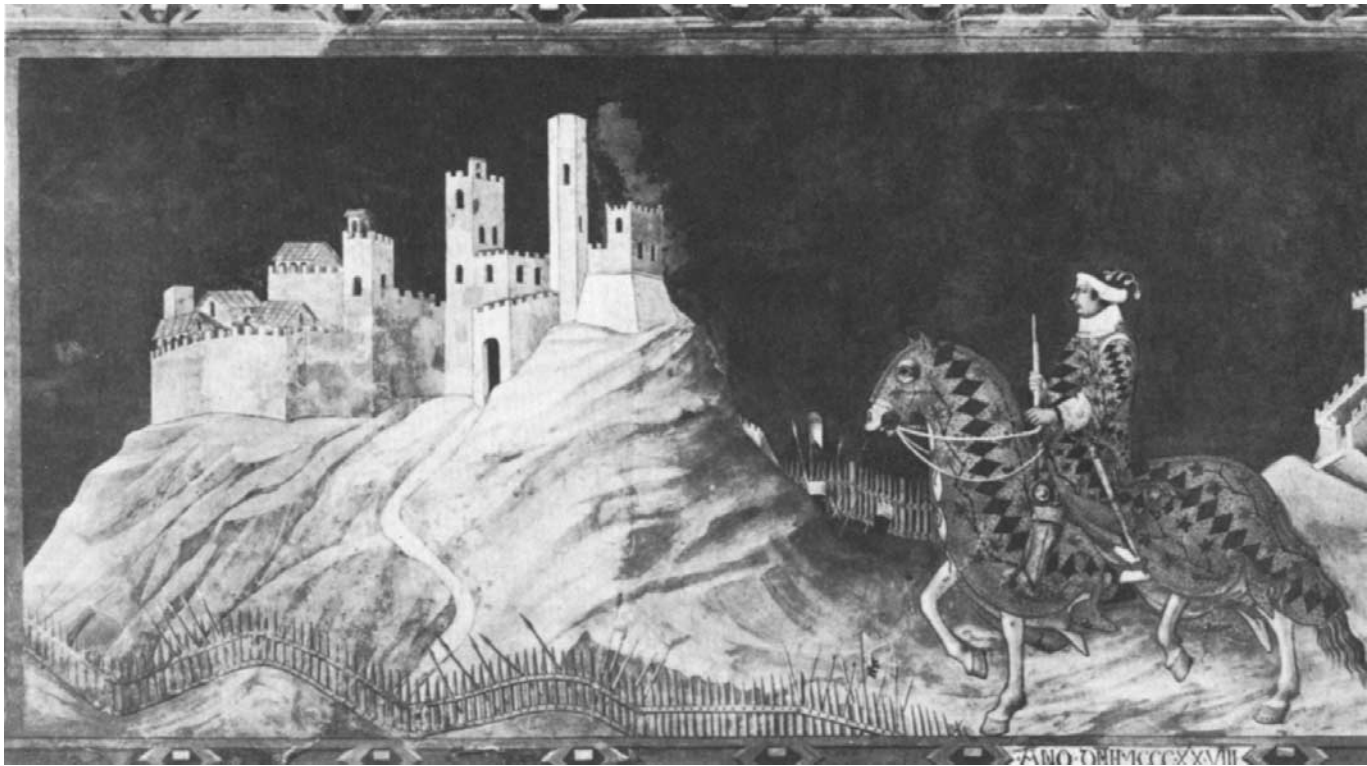
Fig. 1.6. Warfare: a *condottiere* of Renaissance Italy, depicted outside a well-fortified hill town (Guidoriccio da Fogliano, in the painting attributed to Simone Martini in the Palazzo Pubblico, Siena).

Fig. 1.7. Competitive emulation: an image *ahu* of Easter Island, with colossal statue. The *ahu* were focal points within tribal territories.

We may imagine, for instance, in the Mesopotamia of the Protoliterate period, that several cities had centralised economies where an adequate system of recording would be a bureaucratic advantage, and indeed where some steps towards such a system had independently been taken. A really effective system developed in one would find ready adoption in many of the others.

A similar view may be developed for the adoption, or at least the parallel growth, of a political or administrative system, including that of kingship itself. The very existence of such a social order in one polity could tend to further the stability of a similar order in a neighbouring one. For it is the very nature of power that it is held by a few and accepted by many. The act of acceptance implies a sort of willing suspension of disbelief, an acquiescence in a belief structure or political philosophy, which neighbouring belief systems can do much to influence.

The *transmission of innovation* in a sense embraces symbolic entrainment within its scope, but refers also to innovations which are not, or do not at first seem to be, of a symbolic nature. Such innovations are perhaps 'transmitted' within the peer polities of the interacting group, and at first sight this would seem to be an example of the familiar process of 'diffusion'. Yet it differs from the standard view of that process, not only in that the peer polities have the status of more-or-less equal partners (which is not the case in most studies of diffusion), but, as I have argued elsewhere (Renfrew

Fig. 1.8. Symbolic entrainment: writing in early Mesopotamia emerged in a number of cities, probably simultaneously—Protoliterate tablets of limestone found at Kish, c. 3500 BC, length c.6.4. cm.

1978c) the crux of the matter, the true innovation, is not the original invention of the new feature or process but rather its widespread acceptance by the society or societies in question. Acceptance of an invention in one society may facilitate or even sanction it within another in which the invention itself may have occurred at an earlier time.

Although the emphasis here is primarily upon the exchange of information, there is no doubt that an *increased flow in the exchange of goods* can itself further structural transformations. For, clearly, if a society acquires an increasing proportion of its gross annual turnover from outside its own territory, those engaged in exchange are likely to become more numerous and new institutions may develop to cope with the reception, allocation and distribution of goods. The same applies to exports as to imports, and here the significant feature may be the increased level of production required to produce the materials to be exported. This may favour craft specialisation, perhaps mass production, and certainly other organisational features not hitherto required. All this is, of course, simply the familiar process of economic growth based partly on a developing import and export trade, and there is nothing very specific to peer polity interaction about it. Indeed, it applies to, and has been used with equal validity on, dominance models, where a more developed socio-political organisation enters into economic relations with, and perhaps 'exploits', a less developed one. Here we return to the neo-Marxist 'world system' approach. But economic growth is not an exclusive property of unequal partnerships. Moreover, with that growth and with the development of new organisational institutions, there is plenty of scope for the processes of emulation and symbolic

entrainment to operate and hence to influence the specific forms and structures of these emergent organisations.

These observations only begin the task of considering the range of significant interactions operating between polities. And while the discussion has, for the sake of example, dealt primarily with early state societies, many of these points apply also to less highly structured social formations.

They also hint at problems as yet hardly broached by archaeologists, and rarely by anthropologists. One of these relates to the formation of ethnic groups. How do such groups form, sometimes over a long time period, and what governs their scale and extent? The same questions are pertinent to the understanding of the behaviour of specific languages. What determines the area over which a particular language is spoken and the number of people who speak it, and the expansion or contraction in its linguistic boundaries? There are few ready answers to such questions at present. Yet we are approaching them when we consider and seek to explain the widespread distribution in space of certain archaeological phenomena, such as Beaker burials, or Hopewell ceremonial behaviour. Our approach, however, specifically does not make assumptions about the equivalence of linguistic or ethnic or 'cultural' groups. It seeks instead a fresh grasp of the interaction processes underlying them.

An example

The trajectories of development in the Greek islands at different times offer an appropriate example of the relevance of this approach. During the first millennium BC many individual and rather small islands achieved the explicit