



## Problematizing ‘alliance’ in anthropological archaeology

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### ABSTRACT

Alliances are critical components of human sociality, often essential to social existence itself. It is no surprise therefore that alliance crops up everywhere in anthropological and archaeological discourse. Yet scholarship on alliance consists largely of case studies rather than analytical discussion of the phenomenon itself. While alliances can be difficult to identify with confidence in the archaeological record, they are too important in human affairs to ignore. Motivated by our belief that anthropological archaeology cannot fully address competition and conflict without a better understanding of alliances, we survey here various dimensions of alliance that we hope can be useful in advancing the field. We focus primarily on military and political aspects of alliances – i.e., alliances intended to increase non-lethal and lethal collective strength and power. Our investigation draws from the ethnographic and historical record of premodern societies to identify both the common characteristics of alliances and their dimensions of variability. We offer thoughts on how some of this variation might be explained, and we conclude with some hypotheses and suggestions for future research.

“It is clear that daily lives would be much simpler and easier if people did not have to concern themselves with the maintenance of alliances.” (Hayden, 1987:84).

### 1. Introduction

Alliances are critical components of human sociality, advantageous in advancing mutual interests and essential even to social existence itself. They occur at any number of structural levels (between individuals, families, lineages, kindreds, villages, factions, ethnic groups, nation states, etc.) and involve any number of behavioral domains (military, political, social, economic, ceremonial, symbolic, and so on). The military aspects of alliances, however, have a particular – indeed existential – importance. On a social landscape of competition, threat, or enmity, there is no quicker nor more effective way of ramping up political and military might than forging alliances. On a landscape of war, there are few surer ways of becoming vulnerable than to be bereft of allies.

Given the importance of alliance as social, political, and military capital, it is no surprise that the term crops up everywhere in anthropological and archaeological analysis. What is surprising is the degree to

which our disciplines have left matters at that. Instead of a central object of discussion consonant with its scholarly importance, anthropology and archaeology have left alliance largely unexamined, an omission that seems particularly striking in a sub-discipline like the anthropology and archaeology of war. To be sure, we are hardly alone in our neglect. Alliances are observed in numerous mammalian taxa including primates, cetaceans, and social carnivores, and in other taxa including horses and birds (Harcourt and de Waal, 1992; Mesterton-Gibbons et al., 2011:188); but among students of those species as well, case studies of alliance far outweigh analysis of the phenomenon itself (Bissonnette et al., 2015). Towards redress, therefore, and motivated by the social importance of alliance in human affairs and a sense that archaeology cannot fully address competition and conflict without a better understanding of alliances, we survey here various dimensions of the phenomenon that we hope can be useful in advancing the field. We draw particularly from the ethnographic and historical record of premodern societies, focusing on both the common characteristics of alliances and their variability. We offer thoughts on how some of this variation might be explained, and we conclude with some hypotheses and suggestions for future research.

In archaeology, the reasons for alliance’s neglect are obvious:

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alliances are difficult to identify with confidence in the material record, much more difficult than conflict. While material evidence may demonstrate interaction, it does not necessarily indicate political or military alliance. Hence, textual sources and epigraphy have been especially important in revealing alliances among complex societies in the ancient world, as for the Classic Maya (Helmke et al., 2018; Martin, 2020; Munson and Macri, 2009; Žračka et al., 2020). This is not to deny previous important archaeological work on alliance and amity among, for example, the Coast Salish (Angelbeck, 2016), the peoples of the American Southwest (Braun and Plog, 1982; Duff, 2000:82; Upham et al., 1994) and Peru's Nepeña Valley (Ikehara, 2016). In recent studies, archaeologists have carefully inferred alliances and alliance networks through non-textual evidentiary lines such as ceramic styles and artifact sourcing studies; the spatial distribution of defensive sites and line-of-sight connections; settlement proximity to transportation routes; and isotopic analysis and other methods that trace migration and marriage patterns (e.g., Angelbeck, 2016; Arkush, 2011; Ikehara, 2016; Jones, 2010; Klaus et al., 2018; Knipper et al., 2018; Kohut, 2022; Mills et al., 2013; Mullins, 2016; Wu et al., 2024; Žračka et al., 2020).

In addition, a number of well-developed scholarly conversations exist that either rely implicitly on the concept of alliance or occupy terrain adjacent to it. Much has been written, for instance, about what defines and holds together a community, nation, or group. From foundational approaches such as Durkheim (1912) to more recent discussions of community and consensus (e.g. Anderson, 1983; Braun and Plog, 1982; DeMarrais, 2016; Kowalewski, 2013; Yaeger and Canuto, 2000), scholars have discussed how interaction, coresidence, participatory ceremony, the formulation of charter narratives, and other affective processes of identity-making can bind large and sometimes diverse groups into communities. Alliances are distinct from these affective forms of social cohesion, however, partly because they involve a small number of discrete parties (allies) and partly because they are highly *instrumental* and *situational*, being purposely designed to further specific ends in response to specific circumstances. Nevertheless, they use some of the same mechanisms and face some of the same problems (see DeMarrais, 2016). Other anthropological and archaeological literatures related to alliance include foundational approaches to gift-giving, exchange, and elite-sponsored craft production (Lévi-Strauss, 1949; Malinowski, 1922; Mauss, 1923; Polanyi, 1971; see also Earle, 2002; Helms, 1993); the question of how communities mitigate resource risk through external relationships (Hayden, 1987; Whallon, 2006; Wiessner, 1982); approaches to social networks and “network” political organization in archaeology (Blanton et al., 1996; Mills, 2017); and recent scholarship on collective action and cooperation (Carballo, 2013; DeMarrais, 2016; Ostrom, 2007; Roscoe, 2013).

The question of how alliances work in premodern settings, the theaters of greatest interest to archaeology, originally caught our attention during a workshop on socio-political and military organization among decentralized societies historically mischaracterized by outsiders as ‘barbarians.’ For these societies, one of the most effective strategies in the face of external threat was to expand and strengthen alliance networks to form larger-scale ‘tribes,’ confederations, leagues, and the like (Birch, 2022). Alliances among decentralized societies can help illuminate how political arrangements in fluid, heterarchical settings are assembled and maintained, particularly through bottom-up processes. Here, we provide a first pass at describing, analyzing, and unpacking premodern alliance and its properties in general comparative terms. Our aim is not to construct a typology of alliances but to explore their structure and those dimensions or axes of variability that merit closer study and comparative investigation. Since our focus is on premodern societies before and beyond contemporary nation-states, we do not attempt to cover the substantial work on “alliance theory” in international relations, nor game-theory analyses that inform modern geopolitics (e.g., Riker, 1962; Snyder, 1997; Walt, 1987), except insofar as they might apply in premodern contexts. While we address alliances across the premodern political spectrum, our particular interest is in non-state

societies and how alliances are constructed and managed without strongly centralized leadership. Our primary focus is on military and political aspects of alliance, while recognizing that alliances involve a spectrum of goals and associated behaviors across many realms, from exchange and land rights to kinship and joint ceremonies.

## 2. Defining alliance

Reflecting perhaps the many cultural forms that alliances can assume and the different structural levels at which they can be forged, the term *alliance* can be difficult to define. “Among the terms associated with international affairs,” as Marshall wryly observed, “alliance is a good way from being the most precise” (1965:58; see also Fedder, 1968:68-70 for international relations and, for fields as disparate as psychotherapy and botany, Doran, 2016:146-147 and Willner, 2020:139-140, respectively). We therefore constructed a semantic map of *alliance* from online-dictionary definitions of the term and its near-synonyms (e.g., *cartel*, *coalition*, *compact*, *confederation*, *congress*, *covenant*, *guild*, *league*, *pact*, *sodality*, *treaty*, and *union*), an exercise that revealed a considerable polysemy. Definitions agree, however, that the minimal elements of alliance include: a) a *relationship* between parties based on mutual interests and governed by an *agreement* about the rights and obligations due to each party; and b) the *parties* to this relationship. Accordingly, we define alliance as a formal or informal, intentional relationship between separate parties to advance mutual interests, with both sides’ behavior being governed by certain commitments and expectations of what is due to the other (Kohut, 2022). In this paper, we are primarily interested in alliance agreements that advance military and political interests and entail military and/or political support, while potentially including other obligations as well.

## 3. The elements of alliance

As noted, an alliance requires two or more parties and an agreement. In addition, it relies on at least one mechanism of interaction – in premodern settings, in-person interaction – and it involves agents (brokers), who instigate, engineer, and maintain it (Table 1).

### 3.1. The parties: polities, sub-polity groups, and individuals

Alliance implies the existence of allies, separate parties that each have some degree of autonomy. The scale and identity of these parties have important implications for how alliances work. In this paper our primary interest is alliances with military and political aspects, which may be forged between polities, sub-polity groups, or individuals. By polity, we mean an autonomous political community, any social group that acts as an independent, united entity in military relations with outside groups; following anthropological definitions, the polity is the group that wages war (van der Dennen, 1995:70–78; Kissel and Kim, 2019:39-41; also Grinin and Korotayev, 2011:292). Indeed, in societies without centralized leadership – i.e., where polities lack a recognized leader – the polity may be best conceptualized as a relatively stable unit of military (especially defensive) cooperation (Roscoe, 2009; 2013). In different archaeological settings, a polity might comprise the members of a longhouse, a village, a group of several scattered farmsteads, a city-

**Table 1**  
Basic elements of alliances.

<i>Element</i>	<i>Description</i>
The parties	Groups or individuals in alliance
The agreement	A formal or informal set of mutual expectations about behavior on each side
Mechanisms of alliance	Kin, affinal, adoptive, exchange, mutual-aid, and/or ritual relationships and interactions
Agents of alliance	Brokers who engineer and maintain alliance

state, or a regional chiefdom. By a sub-polity group, we mean a component group of a polity such as a kindred, subclan, clan, faction, ethnic group, and the like.

Most commonly, the parties to premodern military alliances were separate polities. Examples are legion, as for example across the hostile terrains of New Guinea. In the high-density foothills of the southern Torricelli-Prince Alexander ranges, village polities among the Iahita Arapesh, Abelam, and Yangoru Boiken were allied with one another in patchworks of peaceful and hostile relations (Kaberry, 1941:240; Roscoe, n.d.; Tuzin, 1976:53). Just prior to European contact, Mississippian polities of the southeastern United States were engaged in complex webs of asymmetrical alliance, as rival chiefs warred and jockeyed to amass regional power (Anderson, 1994; Dye, 2009). Several other cases of inter-chiefdom military alliances are illuminated by history, ethnohistory, and oral history (Allen et al., 2024; Bossen, 2006; Carneiro, 1990; Gibson, 2020; Junker, 1999). Archaeological examples include constellations of allied villages in late pre-Columbian highland Peru and in the American Southwest indicated by defensive settlement location and visual connections (Arkush, 2014; Haas and Creamer, 1993; Kohut, 2022; Wilcox et al., 2001).

In the much smaller communities that populated the pre-modern world, military alliances were forged not only between polities but also between sub-polities and individuals from different polities. Quite independently of their polities, for instance, sub-polity groups in different polities might ally for attacks on third parties. Large attacking forces in the Middle Sepik region of New Guinea were made up not of villages but of clans that belonged to different villages but saw themselves as axiomatically allied through totemic clanship and trade-partnerships (Harrison, 1993:65-66). Sodalities that linked religious groups in different trans-egalitarian polities could also be used to advance military ends against extra-polity enemies (Hayden, 2018).

At the level of the individual, of course, it was extremely common for a man from one polity to support an affiliate from another on the battle line or in launching an attack, an 'alliance' that was ephemeral in the extreme and often just a one-off. But many inter-individual alliances were culturally rooted and more lasting. Affines in different premodern polities might assist one another in ambushes against a third, and should war break out between their own polities, they went to great lengths to avoid harming one another. Usually, they would take up positions in entirely different sections of the field and, should they nonetheless meet, avoid firing at one another. In Viking-Age Scandinavia, textual sources similarly imply that it was, at times, difficult to wage war because so many of those involved were either related to or bound into friendship arrangements with members of the opponent's faction. Those who shared ties with multiple groups thus served as important mediators in conflict, and the formation of new friendship arrangements also served as a means of neutralizing emerging feuds and ensuring peace (Sigurðsson, 2017:26-28; 2020:23-26). In some contexts, however, these affinal or friendship alliances were recognized as serious security risks. Among the Mae Enga of New Guinea, who famously married their enemies, they were a constant concern when wars broke out, and men married to women from an enemy community were not only excluded from war planning lest they covertly leak the plan but sometimes bound and imprisoned prior to an attack (Meggitt, 1977:80-81). Nor were these sorts of informal alliances limited to affines. Among the Yangoru Boiken of lowland New Guinea, population densities were high enough that men belonging to different enemy villages sometimes found themselves farming closely adjacent border lands. To mitigate the mutual danger of their situation, they would forge a secret *hwula* ("adze") relationship, meeting clandestinely in the bush from time to time and exchanging small gifts. The relationship was essentially a peace-pact, an agreement not to participate in attacks on one another and to warn each other if the village of one was planning to ambush the other.

If we take seriously von Clausewitz's dictum that "War is nothing but the continuation of policy with other means" (Clausewitz, 1993:77), then political alliances are analogues of military alliances in so far as

both are instruments of policy, attempts to achieve one or more political ends, albeit by other than military means. On some level, of course, all alliances are political, buttressing the interests and influence of parties and brokers within a larger social context. Here, we highlight the alliances routinely forged in day-to-day politics and characterized by non-violent interactions and goals. They emerge among agents or sub-polity groups within a polity (which by definition are at peace) or among polities at peace, as vehicles for advancing shared political interests. Following pacification in New Guinea, for instance, erstwhile allies in war now rallied to support one another in prosecuting border disputes in newly-established court-systems (Meggitt, 1977:157). Sociologists have also frequently interpreted New Guinea millenarian movements as allying indigenous polities in a political response to European intrusion (e.g., Worsley, 1957). Similarly, the Ghost Dance wove numerous native North American polities together in a politico-religious movement that, it was believed, would bring the ancestors back to fight on their behalf against the intruders, end the Westward expansion, and usher in an era of peace and prosperity (Kehoe, 1989; Mooney, 2012; Thornton, 1986).

Moving down-scale, sub-polity factions may ally politically in non-violent opposition to another faction. Barth's classic study of the Swat Pathan (Barth, 1959b; Barth, 1959a) describes a highly competitive system of political alliance in the densely cultivated and circumscribed river valleys of northwest Pakistan. Elite Pakhtun landholders strategically aligned themselves into two large, opposed blocs in order to dominate lineage council decisions about land and irrigation rights. Within small communities, households and individuals engage energetically in political alliance-making. In a quantitative investigation of conflict in a Tsimane community in lowland Bolivia, Redhead and von Rueden (2021) traced multiple instances of coalition formation, finding that kinship and exchange relations were important grounds for political alliance, and that influential men tended to ally with one another in larger blocs or factions. In lowland Ecuador, Bowser and Patton (2004) mapped intra-community networks of alliance among male and female heads of households within a village. They found that married spouses forged complementary rather than parallel political alliances, with men's mapping more closely onto the two large ethnic factions inhabiting two spatial sections of the community, while women's, which were shaped by kinship and a range of other factors, sometimes cross-cut the male coalitions. A general context of frequent house relocation gave latitude for fluid and shifting alliances but also meant that new arrivals depended on a web of social relationships to help them claim the right to plant gardens or use water in their new house location.

### 3.2. The agreement

Based on our semantic map of dictionary definitions, the other key element of an alliance is an *agreement* about the behavioral expectations and obligations due each party in the relationship. Alliance agreements can vary in formality from casual "handshake" pacts to elaborate accords solemnized in symbolic media or formal documents, with their operation buttressed by an institutional structure that manages them. We explore in the sections below the enormous variety in the forms these agreements assumed.

### 3.3. Mechanisms of alliance: face-to-face interaction

In the premodern world, alliances required face-to-face contact and interaction and involved far more than just diplomatic words. Ethnographic and historical records show that politico-military alliances are almost universally grafted onto or manifest as mechanisms such as kinship, marriages, ceremonies, gifts, and feasts; frequently they capitalize on several such mechanisms at the same time. In themselves, these institutions and practices involve genuine – even intense – emotional bonds that function as the substrate of trust on which alliances are initially founded (Harrison-Buck, 2021; Hayden, 1987; MacFarlan et al.,

2018; Maschio, 1998). They are also instrumental for periodically renewing alliance agreements, such that failure to enact them may constitute breach of the alliance (as in marital exchange). The frequency and cost of these practices often underscore how much is at stake in an alliance.

#### a. Kin, affinal, and adoptive relationships

In decentralized societies, marriages and other kin links such as adoption commonly serve as important mechanisms of alliance between families, lineages, and larger corporate kin groups. On the one hand, they may serve as pre-existing relations on which alliances can be grafted – between, for example, ethnic groups (Reeve and High, 2012). *Contra* classic theories of segmentary lineage opposition (Evans-Pritchard, 1940), kin links are not *determinative* of alliances in politics or war, but they can be used pragmatically to mobilize and forge alliances that serve the ends of realpolitik (Helbling, 2006:126; see also Fadiman, 1982:34-35; MacFarlan et al., 2018). On the other hand, polities routinely use marriage and elective or fictive forms of kinship (adoption, godparenting, fostering, blood-brotherhood, clan and sodality affiliation) to create, cement, and formalize politico-military alliance (e.g., Burch, 2005; Pospisil, 1994; see also van der Dennen, 2014).

For very small groups such as forager bands, marriage constituted an especially close and committed bond because it demographically strengthened the group receiving a wife. In more centralized political systems, marriage between ruling or noble families was a critically important vehicle for generating and solidifying alliance because the families themselves could stand for the polities involved (Harrison-Buck, 2021; Matsumoto, 2024). Sabloff (2018) documents how, across archaic states, a lesser leader would accept a paramount leader's female relative as his primary wife, while his own female relative would become the paramount's secondary wife or concubine, symbolizing both the alliance relationship and its asymmetry. Quite apart from any affinal feelings engendered, the wives in these marriages could serve both as intermediaries and as hostages, helping to ensure the alliance was not betrayed. In one fascinating case (Sabloff, 2018:436), the ruler of Texcoco, who was married to a female relative of the Aztec ruler of Tenochtitlan, chose to accuse his wife of adultery and execute her, thus severing the alliance and declaring his political autonomy. Henry VIII of England might have applauded.

Where textual and epigraphic evidence is absent, studies of mobility and biodistance from skeletal remains can potentially make such relationships detectable to archaeologists. For instance, isotopic signatures of female long-distance migration indicates inter-polity marriages in Longshan China (Wu et al., 2024), while childhood mobility in Late Iron Age Europe may imply practices of fostering to strengthen inter-community and interregional ties (Knipper et al., 2018).

#### b. Gift and exchange relationships

Premodern politico-military alliances were almost universally expressed in high-value gifts. These items were themselves highly symbolic. For example, Iroquoian groups considered wampum beads, an item associated with well-being and healing, particularly appropriate gifts for mending relations and establishing positive grounds for alliance (Creese, 2016:22). Large belts of wampum beads, the obvious result of substantial group labor in shell bead manufacture, were exchanged in inter-tribal diplomacy and other expressions of coalition. In some cases, these were decorated with motifs of figures holding hands and in others with two rows of beads meant to represent two peoples who, although separate, travelled the same path. These items worked as durable reminders of special intergroup relationships. Other cases of famously elaborate exchanges, such as the Trobriand Islands *kula* ring and the Northwest Coast potlatches, appear to have originally served as mechanisms of military alliance as well as nonviolent competition (Goldschmidt, 1994). Similarly, *tee* pig-exchange networks in Highland New Guinea were used as tools to expand spheres of peace through mutual ceasefire pacts (e.g., Wiessner and Tumu, 1998). In politically

centralized societies, elites relied on the circulation of luxury goods to affirm alliance relationships, and there is substantial evidence that elite-sponsored craft specialization served the needs of alliance first, before other economic aims (Polanyi, 1971; Earle, 2002). Archaeologically, the distribution of "special," finely-worked, non-utilitarian artifacts may imply alliance via gifting and ceremonial exchange (Walthall and Koldehoff, 1998; Žraika et al., 2020).

Lower-value utilitarian goods were mobilized for alliance between polities, too. Exchange between groups that specialize in different (complementary) products is typically understood as a matter of economic efficiency, but it also facilitated and strengthened relationships with military and political value and may have been pursued partly to that end. Yanomamö villages developed distinct "local specialties" as a pretext for visits to build and renew military partnerships (Alés, 2010:157; Chagnon, 1997:162-163). On a much larger scale, the Old Swiss confederation began as a peace agreement between three cantons that later expanded to eight and then thirteen. Internal stability and the attainment of political and military objectives was achieved through institutionalized economic interdependence and a complex division of labor and production that kept populations in various environmental zones (mountains, plains, etc.) dependent on products of other regions (Würgler, 2008:29-30).

#### c. Ceremonies, feasts, and religious relationships

Cross-culturally, participation in feasts and collective ceremonies works as an expansive mechanism for the expression of partnership and alliance. Like valued goods, feasts, which present lavish amounts of high-value and especially meaningful comestibles, constitute a form of reciprocal gift-giving and a common setting for alliance (Hayden, 2014). Feasts and ceremonies are intensely charged gatherings that forge strong emotional bonds of trust (Hayden, 1987). They require (and symbolize) substantial collective labor on the part of the hosts, sometimes involving years of preparation, and they may allow a polity's entire population to participate.

When pegged to a ritual calendar, ceremonies also set a tempo for the renewal of alliance agreements. Held in a specific center, they offer the opportunity for appropriate representatives from distant communities to renew friendship and alliance. Sodalties and secret ritual cults can work in a similar way (Hayden, 2018). Adherents commonly use such cults to bolster their power over members of their community but, to the extent they draw members from different communities, they become sites for creating politico-military alliances against outside threat when needed. Likewise, van der Dennen (2014:470) points to shared religious centers and periodic shared rites, such as male initiation ceremonies, as a foundation for the emergence of peace agreements and confederacies. Indeed, hostilities were typically suspended during intercommunity rituals, and safe passage had to be guaranteed for people traveling to them. Preexisting inter-polity religious links, including participation in elaborate mortuary ceremonialism, for example, were instrumental in forging the Northern Iroquoian Wendat and Haudenosaunee confederacies (Birch, 2020; Williamson and Birch, 2023).

#### d. Bricolage: constructing alliance from what is at hand

Most commonly, politico-military alliance formation exploited multiple mechanisms simultaneously, with any and all relationships that were suitable and to hand being used to produce a strong product. Describing a circulating web of inter-community obligations among the Yanomamö – affinal dues, gifts of food and goods, ritual services, and military aid – Alés (2010:157) noted that "peaceful relationships... must be endlessly affirmed and confirmed at the risk of becoming undone." Helbling (2006:125) points to Maring feasts (Rappaport, 1968) as examples of the extreme cost that such activities and transactions can incur. Where alliance exchanges or gifts are costly to the giver, they usefully symbolize high levels of commitment or more durable commitments (discussed below). In addition, as Roscoe (2009:89-101; 2022) argues, their very costliness, working as honest signals of fighting

strength, advertises the worth of a specific ally and facilitates inter-polity alliance.

### 3.4. Brokers: the agents of alliance

Alliances are brought into being through agentive action, and in all but the most egalitarian of polities and the smallest of factions, they are articulated through individual brokers who represent their party, at least in principle. In societies with some degree of political centralization, brokers are frequently leaders. In fact, alliance diplomacy, along with war leadership, is one of the most consistent of leaders' responsibilities across middle-range societies (Feinman and Neitzel, 1984), suggesting that the management of "foreign affairs" serves to justify leadership roles in the first place.

In less centralized societies, brokers commonly occupy high-status roles, even in nominally egalitarian social settings. Among foragers in northwestern California, for instance, important and "wealthy" men maintained close friendships with unrelated counterparts in neighboring groups, symbolized in the exchange of large, handsome obsidian blades, which were subsequently closely guarded by their owners and displayed in important dances (Walthall and Koldehoff, 1998:267-268). These relationships were maintained across generations and the families thus linked could draw on them for aid in a range of affairs. In this and other forager examples, the whole group benefited from intergroup alliance, but the brokers derived special prestige from managing the relationship, not least through the possession and display of special exchange items and ritual implements (Walthall and Koldehoff, 1998). In a similar fashion, Eastern Abelan big men in New Guinea brokered sub-polity political alliances with big men and their factions in other village polities, both allied and enemy, in order to advance their own and their faction's interests against rivals within their village, using these links to conduct exchanges, mobilize aid, arrange truces, and secretly betray rivals within the village to enemies beyond (Forge, 1970:269-271). Brokers, in other words, possessed unusual social capital or relational wealth (Borgerhoff-Mulder et al., 2009; Bourdieu, 1986), which was visibly materialized through their gift items and special prerogatives.

In more politically centralized polities, ruling families have a greater ability to claim to represent it and to make, maintain, or break alliances unilaterally. In (ethno)historic mentions of alliances among chiefdoms, alliances are often closely attributed to individual chiefs themselves, as strategies in highly competitive regional politics vis-à-vis other chiefs (see, e.g., Gibson, 2020; Junker, 1999). For instance, Bossen (2006) discusses volatile alliance-making and -breaking by high-ranking chiefs in Fiji, where inter-polity alliances were essentially interpersonal. In preparation for an upcoming war, chiefs and their delegates engaged in intense diplomacy to assemble military coalitions and secure the allegiance of independent villages and chiefdoms. A 19th-century observer recounts: "Application is made to friendly powers for help... A sends a whale's tooth to B, entreating his aid against C, who, hearing of this, sends a larger tooth to B, to *bika* – 'press down' – the present from A; and thus B joins neither party" (Williams, 1982:44-45, cited in Bossen, 2006:244).

"In-between people" – individuals raised or embedded in more than one polity – also feature prominently in facilitating alliance. These individuals – the "weak ties" or bridges that function to strengthen interpersonal and inter-group relations (Granovetter, 1973) – played a particularly pivotal role when parties were linguistically or culturally differentiated, functioning as cultural brokers in presenting the intentions and aspirations of each party to the other. Even at a small scale, it was not uncommon for women to occupy this in-between position, as in the Ecuadorean village cited above (Bowser and Patton, 2004). As marriage partners in exogamous social settings, women may themselves be the living symbols of alliance and a principal form of "social glue" between polities, as Lévi-Strauss (1949) claimed many years ago. Their intermediate position, in fact, may allow women considerable ability to facilitate inter-polity alliances, broker truces, or advocate behind the

scenes to achieve them. Conversely, because of their kin ties to outsiders, they may be seen as marginal to male coalitions and potentially suspect. Where no such middlemen or middlewomen exist, polities may work through third parties if they are available, entrusting, as brokers, neutral agents or representatives of a third polity to which both have trusted ties.

As these cases illustrate, the intermediary position of brokers is both powerful and potentially marginal. Because they monopolize the presentation of each party to the other, they are enviably placed to shape these presentations in ways that advance their own personal interests or agendas over those of the publics they supposedly serve. This was the case on New Guinea's Sepik River, during the Second World War. Indigenous military brokers whom the Japanese had contracted to advance peaceful interaction with hinterland populations used their position instead to advance their own agendas against local enemies (Bragge et al., 2006). Brokers also control and can manipulate the flow of information and goods from their "foreign" counterparts. Yet their in-between position may simultaneously leave them open to suspicions of manipulateness or dual loyalty, especially in more collectively-oriented societies (Peoples and Haas, 2013). Regardless, their existing ties, social position, and personal agendas are important factors in determining which alliances can form, and with what rules, expectations, and outcomes.

## 4. Alliance variability

The particular ways in which these basic elements of alliance manifest can vary greatly from one society to another and from one period to another. Three dimensions of variability are already apparent in the above discussion: the scale of parties to the alliance, the mechanisms that undergird it, and the power and position of brokers (Table 2, first three rows). Here we discuss several additional dimensions (Table 2, rows four to nine).

### 4.1. The aims of alliance

Politico-military alliances, of course, advance some political and/or military end. In the military realm, Kohut (2022) distinguishes among alliances whose purpose is offensive (or predatory), defensive, or passive. An offensive or predatory alliance sees two or more parties allying in whole or part to launch surprise attacks or combine as aggressors against a common foe on the battlefield. Offensive alliances are often opportunistic and ephemeral. In the mid-1950s, one old Mianmin leader in Central New Guinea avenged the killing of his son by mustering around 100 warriors from across at least seven parishes to all but wipe out the small Atbalmin settlement of Betanel, some 25 km away (Neville, n.d.). No pre-existing alliance linked these Mianmin parishes, and there is little reason to suppose the alliance would have lasted had colonial authorities not immediately launched a 'pacification' program

**Table 2**  
Dimensions of variation in political and military alliances.

Dimension	Description
Scale of parties	individuals, sub-polity groups, polities, etc.
Mechanisms of alliance	marriage, other kin relationships, gifts, exchange, feasts, religious ceremonies, etc.
Position and power of alliance brokers	leaders, in-between people
Aims of alliance	political or military aims; offensive, defensive, and/or passive
Level of commitment	anticipated cost of obligations over the lifetime of the alliance
Symmetry	asymmetrical or symmetrical commitments
Institutionalization	informal to formal codification of rules, conflict resolution procedures, and institutional bodies
Durability	length of time an alliance lasts
Scale, transitivity	number of allied parties in pact

against them. On the other hand, offensive alliances can last well beyond a single action. Viking fleets operating in 9th century northern Europe, for example, were in some cases composed of numerous autonomous contingents, ranging from flotillas of ships to individual vessels and their crews, that operated on a coalitional basis. These forces, which in their largest form appear to have comprised thousands of people, were able to maintain a sense of unity and cohesion that enabled them to compete effectively against centralized kingdoms over the course of numerous years and even decades (Raffield, 2016).

Military alliances can also be purely defensive. This was the case of the longhouse polities that populated the Papua Plateau of New Guinea. Neighboring polities did not always join in offensive action, but if they were in close enough proximity, longhouse communities sometimes relied on their neighbors to help harry attackers as they withdrew from an attack (e.g., Kelly, 1977:19-20,132).

Finally, neutral or passive alliances were pacts that involved neither offensive nor defensive cooperation but simply an agreement that neither party would attack the other as long as certain rules were respected (Kohut, 2022). In the military realm, these peace pacts were no less important than offensive and defensive alliances, although the term *alliance* has tended to obscure them by conjuring an image of a relationship forged *to do something*, to advance some kind of collective action. There is ample evidence, however, that parties frequently cooperated in *not* doing something – specifically, *not* attacking one another (Roscoe, 2009:88). By neutralizing threat from one quarter, mutual non-aggression pacts allowed the parties to allocate their limited resources, including manpower, toward other conflicts or endeavors. These peace pacts might additionally involve agreements to share information about the enemy and allow safe passage for an ally's fighters (Kohut, 2022). The aforementioned "alliances" in the southern foothills of the Prince-Alexander-Torricelli ranges are cases in point. Although individual members of one polity would sometimes appear in the battle lines of another, and *hwula* partners would protect one another with advance intelligence of an attack, no offensive or defensive alliances linked the villages themselves. Instead, in a social environment where polities numbering a couple of hundred members lived cheek by jowl, where warfare could have been existentially devastating for both sides, live-and-let-live understandings had evolved between close neighbors. No formal peace agreements buttressed these mutually advantageous peace-pacts. Instead, when conflict between neighbors threatened, leaders and others immediately jumped into action to smother the unrest, fully aware that failure could be devastating for everyone.

Passive alliances or neutralism may not involve the kind of offensive or defensive cooperation that we typically associate with "alliance," but they nevertheless fit the definition. The parties must reach mutual understandings about territorial borders, resource rights, and other rules, understandings which must be periodically reaffirmed. For example, in the Andean highlands, a community's territory was traditionally recognized with periodic ritual circumambulations, in which authorities from neighboring groups marked the borders with stone cairns to prevent land disputes (e.g. Abercrombie, 1998:287).

The categories of offensive, defensive and passive military alliances are simplifications, of course; in practice, military alliances involve complexities specific to their social settings. Nevertheless, they are useful for grasping the range of military obligations in alliance, and especially for envisioning how they worked on premodern defensive landscapes, as we discuss in a later section. At a political rather than military level, similar patterns of offensive, defensive, and passive alliance characterize factional politics within and even between polities, as works in political anthropology have explored in abundance (e.g., Bailey, 1969; Barth, 1959a).

#### 4.2. Commitment and cost

A critically important alliance variable is the level of the parties' commitment to an alliance, which can be described as the costliness of

their expected behavior over time. Some alliances require major effort and substantial material flows, while others do not. In the words of Salzman (1978:66), "in political support, the scale might range from full material and group support, to partial material and group support, to material support alone, to verbal support, to apologetic lack of support."

In principle, one might expect that Kohut's (2022) three basic kinds of military alliance would correspond to different levels of commitment. Passive alliances, or peace pacts, generally require little direct investment, even though they are essential to everyday security. Defensive alliances might also involve little beyond providing advance warning of enemy attack or offering temporary refuge to fleeing warriors and non-combatants. If alliance involves committing fighters to the defense, costs can be considerably higher, requiring proportionately higher commitment. Likewise, offensive alliances may be low cost if, for example, they entail no more than economic and logistical assistance to an ally. Fadiman's treatment of 19th century pastoralist raiding in Kenya describes a relatively low-commitment form of offensive alliance in which a raiding party was guaranteed safe passage through an ally's territory, whether in advance or retreat, and could take certain categories of staple foods (but nothing more) for their immediate consumption (Fadiman, 1982:36). More commonly, though, offensive alliances involve committing fighters to an ally's offensive campaign, a sacrifice that demands considerable investment and an equally substantial pay-off.

However, considering behavior in the short term does not capture the true cost of an alliance. Instead, the best way to think of commitment is the costliness of expected behavior *over the anticipated lifetime of the alliance*, including the additional mechanisms and behaviors required to maintain it. Notably, among decentralized societies, offensive military alliances are typically more contingent and ephemeral than defensive alliances (Kohut, 2022:248; Roscoe, 2013), partly because of the expensive logistics of offensive campaigns. A short-term but high-investment partnership for an offensive campaign might involve less commitment overall (i.e., less total cost) than a long-term defensive partnership that requires lower investment most of the time. Even peace pacts may require continual maintenance, management of small grievances, and internal sanctions. Long-term partnerships may also involve other kinds of costly signaling behaviors such as gift-giving, joint ceremonialism, food-sharing, and cooperation to promote social solidarity (Bliege Bird and Smith, 2005; Conolly, 2017; Roscoe, 2009). These costly and frequent investments of people, labor, and goods demonstrate the continued commitment of parties to each other, while simultaneously displaying the continued prosperity and strength of each side.

#### 4.3. Asymmetrical commitments

Although alliance and its synonyms carry a basic connotation of equal partnership, asymmetrical commitments are common in alliance relationships, reflecting imbalances of strength or resources that give one side greater leverage (Helbling, 2006). Premodern military arrangements were frequently asymmetrical: for instance, defensive obligations might be mutual but offensive obligation one-way, with the weaker ally supplying fighters for the stronger ally's offensive campaigns in return for protection. The late medieval Scottish tradition of "manrent" followed this pattern: smaller clan lords voluntarily bound themselves to greater lords for protection, pledging to marshal their own kinsmen and dependents to fight in their more powerful ally's wars (Crawford, 2016; Wormald, 1985). Sabloff (2018) identifies many similar arrangements between lords of unequal rank across world regions. Among decentralized societies, Rice (2001) describes an asymmetrical defensive alliance between 19th-century Maricopa and Pima tribes living along the Gila River in Arizona, which they formed to resist common enemies such as Yuma raiders. The less numerous Maricopa, who were latecomers to the valley and located less advantageously downriver, were more exposed to Yuma attack and more likely to suffer losses in the initial hours of a raid. Receiving notice of an attack,

however, their Pima allies would shelter fleeing Maricopa if necessary and quickly mass a counter-attack. Here, the weaker Maricopa served as an early-warning system for the Pima and assisted them in skirmishes with other (Apache) enemies, while gaining in return some measure of protection in a hostile landscape (Rice, 2001:297).

As these examples illustrate, weak parties accept disadvantageous terms because they need allies more. Alliances, in other words, are not purely cooperative relationships: some degree of competition and exploitation can exist between the parties (Helbling, 2006:124-126). Even 'equal' alliance relationships may exhibit asymmetrical phases, and indeed, this may be more the rule than the exception. Forms of delayed reciprocity, or assistance rendered at need to one party, produce alliance relations that are asymmetrical in the short term: one side is in a temporary state of debt that may allow certain kinds of advantage-taking, even if the parties overall have equal standing (e.g., Chagnon, 1997). At the other extreme, a highly asymmetrical and exploitative 'alliance' may be tantamount to a relation of political dominance and subjugation – although it is worth noting that political domination was often euphemistically phrased as an 'alliance' between leaders, just as tribute might be glossed as "gifts."

#### 4.4. Institutionalization

Alliances and similar relationships vary greatly in their degree of institutionalization: the formality of the relationship and the level to which there are codified processes for enforcing expected behavior and resolving conflict (Birch, 2022). Indeed, several dictionary synonyms for alliance seem tacitly to capture this dimension of alliance variability, as well as involving dimensions of commitment (see above) and durability (see below). *Coalition*, *alliance*, *league*, *confederation*, and *union* are all synonyms for groups joined together for mutual benefit, but they imply different degrees of stability, tightness, and/or formalization. A *coalition* implies a temporary alliance, as in times of emergency; an *alliance* is longer lasting (see also, Mesterton-Gibbons et al., 2011:188). *Leagues* or *confederations* are more durable yet and commonly feature a formal, codified agreement – a *compact*, *covenant*, *pact*, or *treaty*: the latter four terms all operate as synonyms for "alliance" but refer more precisely to a formalized, often written agreement between parties that specifies its terms. Finally, a *union* implies a close, permanent alliance and suggests complete unity of purpose and interest, such that the separate states or parties become essentially one.

The institutionalization spectrum is clearly evident in the literature on alliance in decentralized societies. At one end of the scale are informal, minimally encoded alliances such as the simple peace-pacts that protected the customary trade partnerships of the Mountain Arapesh, made famous by Margaret Mead (1938). Each lineage or family in a village polity had a counterpart in the neighboring villages along one of the trade routes that crossed the Prince Alexander and Torricelli Mountains. In a relationship otherwise governed solely by customary expectation, the only formality was that, when a son had been initiated, his father dressed him in his finery and took him to be introduced to his partners along the chain.

Further along the spectrum are relationships in which the terms are explicit; there are rules about what counts as a violation of the alliance, and specific procedures exist to resolve conflict between partners, a formalization that might be expected to render the relationship stronger and more durable. The Haudenosaunee confederacy, for example, created councils and ceremonies to mediate intra-alliance conflicts of interest that threatened cooperative action, and developed very formal rules about reparations (Parmenter, 2010; Williams, 2018:147-148). So, if a person from one party killed a member of another, large amounts of wampum and other desirable goods had to be given to ceremonially "dry the tears" of the bereaved and pre-empt them from avenging their loss. In this way, the confederation was preserved and the parties could continue to cooperate in offensive or defensive activities, trade, and so on (Fenton, 1985). A number of other premodern leagues and

confederacies, such as the Boiotian League and Achaean League in ancient Greece, employed councils of representatives from their constituent polities to coordinate decisions and mediate conflict (see review by Birch, 2022). At the far end of the spectrum is the extreme institutionalization of contemporary alliances and confederations such as the European Union, the operation of which is managed and sanctioned by a staggeringly elaborate institutional structure.

Intuitively, institutionalization appears related to commitment. Institutionalization is itself costly and signals the investment of allies in their partnership. It can also significantly impact the relative autonomy of the parties in an alliance, and may ultimately engender major changes to their internal social and political organization. Temporary coalitions to achieve a specific external objective or resolve a sudden crisis may have little if any effect on the participating systems. In contrast, a close, permanent alliance such as a union will usually require synchronization of key political functions and some organizational adaptation – for example, the creation of parallel offices and their articulation with their collectives (Birch, 2022). In other words, institutionalization is a deliberate and costly investment that allies pursue to render their alliance more durable.

#### 4.5. Durability

The durability of an alliance is the length of time it lasts before disbanding or disintegrating. Ethnographic and ethnohistoric sources are rife with accounts of short-lived alliances that were broken as soon as one side thought it expedient to do so (e.g., Chagnon, 1997 on the Yanomamö; Bossen, 2006 on Fiji). Nevertheless, alliances and alliance networks can be both robust and enduring, even among decentralized societies. The Haudenosaunee confederacy (above) provides one example. In the Torricelli-Prince Alexander foothills of Sepik New Guinea mentioned earlier, warfare was a more or less permanent state of affairs, and the constellations of traditional peace-pact alliance it engendered were said to be as old and permanent as the warfare that generated them. Certainly, they had existed for generations. The tribal formations of the Central and Western Highlands of New Guinea comprised tightly allied clans that appear to have been equally long-lasting.

What factors might affect alliance durability? The perceived cost-benefit ratio that an alliance generates is likely core to the chances of it lasting or collapsing. Broadly speaking, alliances in which the benefits are perceived to outweigh the costs should be more stable than the opposite. Obviously, the aim of an alliance strongly affects this calculus. Alliances forged on the fly to address short-term objectives are usually ephemeral, while those addressing longer-term or recurrent issues (e.g., ongoing military threat, seasonal resource risk) are likely to be more permanent because they offer continued benefits. Neither brief, flexible alliances with varied allies nor stable, high-commitment alliances with long-term partners should be seen as more successful: alliances are situational.

Alliances intended to last, however, can still founder. Several considerations can undermine them. Alliances intended to be permanent, *ipso facto* tend to be costly (see previously); and they rest on expectations of what will happen in the future that may prove wrong. Military alliances, for example, can incur heavy compliance costs (see above) and may become vulnerable to the free-rider problem. One party to the alliance reaps the benefits when it is under military stress but is then tempted to defect if the threat matrix changes when it is called on to help. That is, short-term costs may be considered to outweigh long-term benefits. In addition, even when an alliance is beneficial to both parties, the potential is there for conflict to arise between them or their brokers (or even within one of the parties) that may prove impossible to resolve. In short, managing a long-term alliance can be exceptionally difficult for both parties.

As noted above, one strategy to promote durability is institutionalization – developing formal and often costly mechanisms to manage

conflicts within the alliance. Although we can generally expect more regulated and formalized alliances to be more stable and permanent (as in the Haudenosaunee confederacy), highly informal alliances such as the Arapesh example (above) could also be quite stable and indeed pass down through generations. In the Arapesh case, very low cost combined with the prestige associated with cultural exotics obtained through trade (Roscoe, 2022) may have been key factors. Hypothetically, then, the duration of an alliance might depend on its perceived cost-benefit ratio, the position and power of brokers, institutionalization, and other factors as well.

#### 4.6. Scale and transitivity (*the ally of my ally is my ally*)

Alliances vary in scale, here meaning not overall population numbers but the number of allied parties. A party can form alliances with any number of other parties, but these parties may choose to act as a single, large-scale, overarching alliance – all for one, and one for all (i.e., a multilateral alliance) – or as many separate dyadic relationships (i.e., bilateral alliances). A multilateral alliance rests on the principle of transitivity (the ally of my ally is my ally). These transitive alliances were rare among the relatively decentralized polities in contact-era New Guinea, and this may be true of decentralized societies in general. The peace-pact constellations in the southern foothills of the Prince Alexander and Torricelli ranges, for instance, were not at all transitive, even in offensive matters: just because some warriors from polities A and B might join polity C on the battlefield against polity D was no guarantee that warriors from A would therefore aid polity B in its battles. Indeed, polity B might be the traditional enemy of polity A! But transitivity was not unknown. ‘Tribal’ alliances in the Central and Western Highlands, for instance, were transitive: if an enemy moved on a clan, the other clans in the tribe would usually join it *en masse* on the battlefield.

All other things being equal, multilateral (transitive) alliances, often called alliance networks, coalitions or confederacies, are harder to maintain than their bilateral counterparts, since multiple parties mean multiple obligations to assist and multiple opportunities for defection and conflict. That is, the free-rider problem becomes more significant. We believe this problem mattered somewhat less in premodern multilateral alliances than one might infer from political theory in current international relations. In premodern societies, commitments were continually tested in minor ways, reputations reassessed, and alliances reconfirmed through marriages, gifts, and other mechanisms. Defection from an alliance, moreover, could provoke violent revenge.

Needless to say, these loyalty-reinforcing mechanisms imposed costs, and increasing the number of parties in an alliance involved other costs besides: more relationships to manage and more potentially burdensome institutionalization to do the managing. Riker (1962), who was influential in international-relations research on the calculus governing multilateral politico-military alliance, argued that participants create coalitions just as large as they believe will ensure winning and no larger. Powerful alliances cease to invite further members once the burdens incurred exceed the marginal benefits to be expected. Riker’s position has taken heavy fire (to use an appropriate metaphor) (e.g., Dinerstein, 1965; Fedder, 1968), but the issue he identifies is as relevant to premodern society as it is to NATO and other state alliances today.

The challenge was particularly difficult for decentralized societies seeking to build high-commitment political and military alliance networks that were at once large in scale and durable. Millenarian movements proved especially effective in rapidly constructing large coalitions that crossed polity and linguistic boundaries. But they were fragile, dependent on the success of their leaders’ prophecies of a new Heaven and new Earth. The Peli Movement, perhaps the most famous of New Guinea’s so-called ‘cargo cults,’ lasted no more than 20 years (Roscoe, 2024). In the Pueblo revolt against Spanish intrusion, multiple independent communities of the American Southwest banded together under the prophetic leader Po’pay, but their coalition lasted only 16 years before succumbing to factionalism and Spanish reconquest (Liebmann,

2012). One study of contemporary terrorist groups founded on apocalypticism put the average at 15.1 years (Umbrasas, 2018).

Intuitively, alliance scale and transitivity would seem to be a function of political centralization: the more powerful the brokers who forge alliances, the better positioned they are to create, maintain, and enforce large, multilateral alliance formations. Chiefdom confederacies are a case in point. Gibson (2011, 2020) reconstructs confederacies in early Medieval Ireland that were managed skillfully by chiefs of aristocratic lineage and could last centuries. In some cases the need to build multilateral alliances may have worked to increase the authority of leaders: Garrido and González (2020) document how native populations in northern Chile responded to Spanish incursion by concentrating power in the hands of particular war chiefs, allowing them to broker large-scale alliances that ultimately spanned hundreds of kilometers and banded distinct ethnic groups together against the Spanish enemy. Nevertheless, powerful leaders were not always necessary to build large coalitions. The highly decentralized and heterarchical Che (Araucanian) peoples farther south in Chile repeatedly managed over the course of several centuries to mobilize very large-scale networks of communities in unified military resistance against Spanish intrusion (Sauer, 2020). The coalescence of these and other relatively decentralized societies in large-scale coordinated alliance blocs is a particularly interesting phenomenon (Birch, 2022; Birch et al., in press).

## 5. Change through time

Alliances change through time as the parties build on their previous relationship, adding new realms of obligation as new situations arise. Nearly every dimension of variability in Table 2 is dynamic, not static. Agreements that initially require minimal commitment may be built into higher-commitment alliances, often symbolized by costlier gifts and more permanent kin links. Parties may seek to strengthen an alliance by institutionalizing new protocols and bodies such as conflict-management mechanisms. The symmetry of an alliance can also change, with equal partnerships evolving into political domination – witness, the expansion of the Inca empire. Early on, Inca lords forged marriage alliances with powerful nearby groups, but these were eventually absorbed into the expanding Inca state (Bauer and Covey, 2002); later imperial campaigns to the south appear to have started with diplomatic patron-client alliances, which military conquest converted into far more unequal relationships a generation later (Gyarmati and Condarco, 2018).

While developments through time are not deterministic, conditions and strategies early in an alliance do affect outcomes later on. In most cases, as noted earlier, politico-military alliances were grounded in some pre-existing social, economic, and/or ritual linkage that had previously established a measure of trust and friendship. The nature of this foundation – whether it is intermarriage, the coordinated use of an irrigation canal, recognized rules governing shared resource use, mutual ‘neutral’ spaces and sanctuaries, etc. – is an important factor affecting the alliance’s commitment and durability, as we discuss in later sections.

Even the exception here proves the rule. Attempts to create alliances in the absence of previous interaction would be risky, given that neither party would have any inkling of the intentions and trustworthiness of the other. The task, however, was not impossible. The Gutelu Alliance in the mid-Grand Valley of the Baliem, in what was then Dutch New Guinea, was created from what appears to have been little or nothing beyond the prospect of mutual benefit. The alliance originated around the 1940s, when leaders of the Dloko-Mabel confederacy secretly convinced their enemies, the Wilihiman-Walalua confederacy, that instead of fighting one another they should join forces to defeat the Widaia, a confederacy allied to the Wilihiman-Walalua. An agreement was made, a massive attack was launched, the Widaia were defeated and fled south, and the Gutelu Alliance was born (Broekhuijse, 1967:69; Heider, 1970:105-106). Needless to say, the alliance was relatively fragile, perhaps because it lacked any previous foundation of trust, and it

lasted only 20 years or so before rising friction between its component confederacies, in particular over leadership of a pig-feast, resulted in a devastating internecine attack (Heider, 1970:80-81,106,118–119).

In some cases, long-term alliance groups became permanent social formations. Alliance and cooperation for joint offense, mutual defense, and the mitigation of resource risk are classic explanations for 'tribalization,' the ethnogenesis of distinct regional groups integrated by solidarities, clans, exchange, and intermarriage, as in the American Southwest (Braun and Plog, 1982; Haas, 1990; Service, 1971:100-110). Strong and stable military alliance groups – i.e., confederacies – could become a foundation for the emergence of states, as in Early Medieval Ireland (Gibson, 2011). Gibson (2011) suggests these and other states that originated in confederacies of chiefdoms were characterized by relatively weak rulers and strong local leaders, a relic of the relative autonomy of polities bound consensually in alliances and confederacies (see also Birch, 2022).

## 6. Sources of alliance variability: Material and social context

A variety of material and social constraints or enablements may affect a political community's incentives and abilities to create, strengthen, and/or stabilize politico-military alliance. These conditions go some way to explaining the variability in premodern alliances. Here, to generate hypotheses and avenues for future research, we suggest and briefly explore several such factors.

### 6.1. The ground game: material conditions

Concrete practicalities of risk, distance, demography, resource use, and terrain have significant implications for whether alliances form and what configuration they assume.

#### a. Distance and population density

Inter-polity distance, which depends greatly on population density, can strongly influence military alliance formation in premodern societies through its effects on travel times. At one end of the scale, sizeable inter-polity separation can all but nullify the incentive for alliance. No alliances, for instance, linked the Kawenak Asmat fisher-forager village polities on the South Eiland and Kampong Rivers of southwest New Guinea (Eyde, 1967:279), likely because nearest neighbors lay some 11 km apart on average, a distance that greatly eroded the effectiveness of military cooperation. Likewise, in the Gulf District, Purari villages might profess friendship with others in a different tribe, but they were never allied militarily: "their geographical relationship to one another" – the closest were 10 km apart and most were 20–40 km away – "was part of the reason" (Maher, 1961:15).

At the other end of the scale, alliances – at a minimum, peace-pacts – are essential where polities are densely packed, to avoid the intrinsic risk of mutual military destruction. These circumstances favor alliance formation in so far as the parties live close by one another and are likely to interact frequently, offering a potential base for trust and formal alliance. By the same token, however, close proximity can promote resource disputes and other grievances. In Barth's study (1959b) of political alliances in northwest Pakistan, it was proximate landholders within a lineage segment's territory – often cousins and other close relatives – who were the fiercest rivals in the periodic reallocations of fields and the allocation of irrigation water. Similarly, to go by epigraphic evidence, conflict between Classic Maya centers was most common between neighboring polities, while friendly diplomatic ties spanned somewhat greater distances (Munson and Macri, 2009). To the degree that proximity generates conflict, in sum, neighboring groups must develop alliances – or at a minimum peace pacts – if they are to prosper.

Inter-polity distance can also affect the aim of military alliance. Nearby allies are far more effective for defensive aid than those farther away, the precise range depending on extant modes of signaling, the nature of the intervening terrain, and the means of transport (Roscoe,

2016; Kohut, 2022). Physical separation, however, poses considerably less of a barrier to alliances forged for offensive purposes. So long as the element of surprise can be preserved, allies can take all the time they want to organize and muster a large-scale, coordinated attack. The Mianmin force that attacked Betanbel (see above) was 11 days in the making, the organizers having trawled 220 or so square kilometers of some of the most rugged terrain in New Guinea in order to muster allies to their cause.

Following this logic of distance, we expect the nature of premodern military alliance to be fundamentally affected by population density. Where population density is high and polities are closely packed, the potential for conflict and mutual destruction is high: a situation of existential military threat, but also an opportunity for highly effective defensive cooperation. Under these circumstances, we expect enduring inter-polity military alliances to appear in the form of either peace pacts or, where the means of communication and travel allow, defensive alliances. Conversely, where population density is low and polities are far apart, this hinders the formation of defensive military alliance but permits offensive cooperation. Under these circumstances, we expect inter-polity military alliances to be ephemeral and offensive in purpose, with coalitions coming together to launch a raid only to then dissolve.

#### b. Terrain and forms of travel

Terrain and modes of travel and transport influence alliance formation for the same reason, inter-polity travel times. All things being equal, we should expect open, flat terrain to facilitate inter-polity interaction – both friendly and hostile – and thus favor alliance formation, especially peace-pacts and defensive alliance. (For instance, Haudenosaunee villages were preferentially located near trail systems to facilitate communication with allies [Jones, 2010].) Conversely, we should expect rugged, heavily vegetated, or swampy terrain to hinder the formation of such alliances, with the effect stronger on peace-pacts and defensive alliances than on offensive alliances, where travel times are less critical to effectiveness.

Other effects of terrain may work to reinforce these alliance patterns. Very rugged terrain and dense vegetation are typically associated with lower population densities in the first place, hence increasing inter-polity distance and reducing both the opportunity and/or need for alliance (see above). These landscapes offer great defensive advantages by making populations difficult to locate and attack, so they may thereby reduce the need for peace-pacts and defensive alliances. Conversely, open terrain increases the value of defensive alliances by increasing the ability to monitor the environment. On open, unvegetated landscapes, military forces approaching in daylight can be seen from high points from literally miles away, a situation that allows allies to raise the alarm through visual or auditory means, permitting defenders to either rally in numbers to resist or flee with their valuables to refuge (e.g., Kohut, 2022). Sentinel networks are of little value, however, on heavily vegetated terrain. In sum, we expect defensive alliances to be stronger in environments that allow easy travel and long-distance visibility than those that do not.

Travel and transport by horse over land, and by boat over water, are far more rapid than travel on foot and, in principle, would also be expected to increase inter-polity interaction and facilitate alliances, *ceteris paribus* (Roscoe, 2016:30-32). However, they potentially decrease the value of defensive alliance compared to movement on foot, because they facilitate hit-and-run raids and the efficient transport of spoils and captives. Rapid attacks by boat or horse leave no time for defensive allies to come to assist, although where the terrain allows, they may still warn defenders with signals (e.g., Angelbeck, 2016; Schaepe, 2006). Hypothetically, we may expect defensive alliances comprising warning systems but not military assistance in these contexts. By contrast, horse or boat raiders may still form offensive alliances in order to mass larger surprise attacks against a strong target and split the spoils.

### c. Subsistence production

As we observed previously, politico-military alliances are commonly constructed on pre-existing relationships, and prevailing modes of subsistence production can be important in shaping them. First, subsistence affects residential mobility. Foraging and pastoralism and, to a lesser extent, swidden agriculture are characterized by residential mobility and fluid polity composition. Where families and factions are not deeply invested in a patch of agricultural land, they can detach themselves from one polity and join another relatively easily, creating large webs of relationship across the social landscape, upon which both polity and sub-polity alliances can be built (as in the Ecuadorean example above; [Bowser and Patton, 2004](#)). The safe movement of mobile groups such as specialized pastoralists across the landscape may also rely on wide-ranging webs of amicable relationships (e.g. [Nielsen, 2009](#)). Seasonal aggregation for subsistence production can also enhance alliance formation. In [Angelbeck's \(2016\)](#) study of Coast Salish hunter-gather-fishers of the Northwest Coast, the seasonal aggregation and dispersal of plank-house households and larger villages, along with flexible bilateral kinship, allowed individuals and nuclear families to reaffiliate at will, to create large-scale military coalitions when needed, and to disband again once the threat had passed.

Second, recurrent subsistence risk, though stressful for those exposed to it, commonly generates webs of relationship that can also be advantageous in forging politico-military alliances. Scholars have long accepted that, among foragers, inter-band alliances and interpersonal ties – in concert with residential mobility – commonly constitute an insurance policy to mitigate seasonal resource risk (and expand the pool of marriage partners) ([Walthall and Kodehoff, 1998](#); [Whallon, 2006](#); [Wiessner, 1982](#)). The same strategy occurs among marginal farmers, as in some areas of highland New Guinea, where friends elsewhere provide a hedge against crop loss to frost, hail, or drought and could be called on for both aid or refuge in times of war ([Wohlt, 1978](#):110-123). As with residential mobility and seasonal aggregation, risk-buffering encourages families and groups to develop many relationships and hence, a very wide pool of potential alliance partners. In these environments, we might expect politico-military alliances to be more flexible but also more fragile.

The converse of this scenario is found where permanent sedentism and subsistence production reinforce long-term, entrenched relationships of interdependence with other parties. This should have the opposite effect from mobility and risk-buffering relationships, producing predictable and durable alliances. Irrigation agriculture is a prime example. The distribution of limited irrigation water among communities along a canal or river, whether in the American Southwest or the central Andes ([Rice, 2001](#); [Netherly, 1977](#); [Sherbondy, 1982](#)), requires careful coordination to avoid sparking conflict. In these interparty arrangements, communities upstream have the inherent advantage of accessing water first and controlling the amount released to downstream communities. Thus, irrigation systems generate long-term relationships that can be capitalized into highly durable political and military alliances, but these arrangements can also be quite asymmetrical, shading at the extreme into political domination (see [Netherly, 1977](#) for examples from the contact-period Andean coast).

## 6.2. The social environment

A second, major source of variability in the construction of politico-military alliance between polities is the prevailing social environment. The structural form and pre-existing social articulations between the parties are likely to affect the ease with which an alliance can be created, the form it takes, and its strength and durability.

### a. Political centralization

A central factor in alliance formation is the identity, structural position, and power of the brokers who instigate the arrangement and serve as diplomats and spokespeople for their group. Centralized

political communities appear to be better positioned than decentralized polities to master the kinds of structural challenges to large-scale, high-commitment, durable alliance outlined earlier. In centralized polities, alliance can be coordinated through leaders. In their decentralized counterparts, alliance formation must negotiate concerns with local sovereignty and significant conflict-of-interest challenges. An important question, therefore, is how durable alliances are among decentralized societies relative to centralized societies. [Birch's work on confederacies \(2022:10\)](#) suggests they tended to disintegrate once external threat lessened, lasting no more than about 150 years. The longest-lived confederations, Mayapan and the Old Swiss Confederacy, which persisted for ~ 500 years, were those with relatively more centralized institutions that fostered economic interdependence.

### b. Pre-existing bonds and network structure

In decentralized societies, high-commitment political and military alliances between polities are typically “piggy-backed” on pre-existing social, economic, and ritual bonds and interactions that connect sub-polity units such as families, clans, or moieties in one polity with their structural equivalents in another (e.g., [Burch, 2005](#)). The properties and strength of the resulting inter-polity alliance are likely to depend to a considerable extent on the nature and structural level of these base links.

First, the permanence of the base link is likely to affect alliance durability. As grounds for alliance, for instance, kinship links and marriages were uniquely secure and lasting, in contrast to, say, a ritual feast or a successful trade transaction. Other bonds that were especially permanent, such as residence on a shared irrigation canal (discussed above), should also produce more durable alliances than those that need to be renewed frequently and may therefore be vulnerable to reshuffling in the process.

Second, these pre-existing bonds operate at different structural levels: some connect households, others whole communities. That is, the scale of the parties in the original bond will also likely affect the viability and strength of the politico-military alliance founded on it. Some polities in alliance might be connected only by a handful of affinal links between households. Others, though, may be able to capitalize on links between larger groups at higher structural levels, such as trading or exchange relations between clans or men's-house groups, or ritual or sodality links between moieties. All other things being equal, we might expect that bonds connecting larger groups and hence a larger proportion of a polity's population would favor a more stable politico-military alliance.

The multiplicity of bonds – both the number of bonds and the diversity of different kinds of bonds (e.g., affinal, trade, ritual, and other cooperative ties) – is also likely to affect the strength and stability of alliances. Multiple pre-existing durable ties among large structural groups should produce an exceedingly resilient alliance; a handful of weak ties between small groups will either produce a highly contingent alliance or one that requires formal diplomatic protocols and agreements to maintain and strengthen those bonds.

The interaction of these links in politico-military alliance may seem confoundingly complex, but social network analysis based on material culture, settlement or spatial data, and textual and epigraphic records can be successfully employed as a means of graphing the topology or structural form of social articulations. Of particular relevance are cases where archaeologists have used social network analysis to study alliance dynamics as indicated by ceramic traits ([Birch and Hart, 2018](#)) and line-of-sight links among hillforts ([Mullins, 2016](#); [Earley-Spadoni, 2015](#); [Kohut et al., 2024](#)). Social network analysis is used at two levels: to assess the relative position of particular nodes in the network, and to assess and compare the structure of entire networks ([Mills, 2017](#)).

For decentralized societies, the network of bonds that sustained alliances may have often had a fundamentally branching or nested structure. Classic anthropological formulations on segmentary lineage systems drew attention to nested military alliances ([Evans-Pritchard, 1940](#), [Fortes, 1945](#); [Sahlins, 1961](#); [Salzman, 1978](#)), in which smaller segments frequently formed offensive and defensive alliances with

closely related partners, and yet they could band together in larger blocs at need following genealogical relatedness. Other scholars have observed similarly nested alliance patterns arising from non-kin logics such as physical proximity, location on irrigation canals, and participation in age cohorts and sodalities (Angelbeck, 2016; Arkush, 2014).

The overall network structure of inter-polity linkages in a region may have important implications for the general dynamics of resulting alliances. Consider, for example, the implications of focused vs. diffused inter-group linkages. If individuals and sub-polity groups in polity A have most of their network of links with polity B, the two polities may be better positioned to form a durable alliance than if its members had relationships across many polities. By contrast, if a polity has wide-ranging links, it may be better able to build a large-scale multilateral alliance, but perhaps at the cost of the robustness and stability of the alliance.

### c. Relative strength and threat

According to balance-of-threat theory in current international relations, the alliance behavior of states is determined by the threat they perceive from other states. Walt (1987) contends that strong states generally balance by allying against a perceived threat (i.e., they add allies until a balance is achieved), whereas very weak states are more likely to bandwagon with the rising threat to protect their own national security. A similar logic is likely to influence premodern polities, including decentralized nonstate societies, especially in situations of colonial or imperial intrusion. In the face of a powerful external threat, smaller and weaker polities may have chosen to align with the intruding power in asymmetrical alliances, while stronger polities may have opted to band together against it. That is, when some potential alliance partners are much stronger than others, the influence of pre-existing bonds only goes so far (see also Benenson et al., 2009).

To summarize, this discussion has raised several tentative hypotheses or predictions concerning how alliances behave (Table 3). Some are statements about their internal logic; others posit how material and social factors affect their working. We advance them not as definitive statements but as cautious, probabilistic suggestions intended to spur further research.

**Table 3**  
Variability in politico-military alliance.

Alliance variables – predictions (assuming <i>ceteris paribus</i> )
<ul style="list-style-type: none"> <li>Offensive military alliances are on average less durable (i.e., more fragile) than defensive and passive alliances.</li> <li>High-commitment alliances (i.e., those with costly expected obligations) should be associated with more costly signaling mechanisms (gifts, feasts, marital exchange, etc.) than low commitment alliances.</li> <li>High-commitment alliances should involve greater institutionalization (e.g., mechanisms to adjudicate conflicts of interest, enforce rules, obligations, and rights).</li> <li>Greater institutionalization should result in more durable, longer lasting alliance.</li> <li>Larger-scale multilateral alliances are less durable than smaller and bilateral ones.</li> </ul>
Contextual factors – predictions
<p><u>Density and distance:</u></p> <ul style="list-style-type: none"> <li>Proximity renders alliance more likely; distance makes it less likely.</li> <li>Proximate polities are more likely to forge defensive or passive alliances (peace pacts) than are distant polities.</li> <li>Because distance preserves secrecy and proximity undermines it, dispersed populations and distant polities are more likely than proximate counterparts to form offensive alliances; because distance discourages alliance, however, these alliances will usually be ephemeral. <ul style="list-style-type: none"> <li><i>Corollaries:</i> low-density settlement patterns for small-scale decentralized societies should result in few military alliances, and those will be offensive and ephemeral. High-density settlement patterns should be associated with defensive or passive alliances.</li> </ul> </li> </ul>
<p><u>Terrain and transport:</u></p> <ul style="list-style-type: none"> <li>Open terrain and good visibility should result in more defensive alliances than rugged or heavily vegetated terrain.</li> <li>Rapid transport by horse or boat and the capacity for surprise attacks may result in defensive alliances that involve warning systems but not military assistance.</li> </ul>
<p><u>Subsistence:</u></p> <ul style="list-style-type: none"> <li>High residential mobility and seasonal aggregation/dispersal facilitate more flexible and possibly larger-scale (multilateral) alliances than sedentary settlement patterns, though these alliances are likely to be less durable.</li> <li>Under high resource risk, parties develop diverse relationships to buffer risk, creating a large pool of potential alliance partners.</li> <li>Stable patterns of interdependent, coordinated subsistence production (e.g., on an irrigation system) result in more durable alliances with a stable set of partners.</li> </ul>
<p><u>Social factors:</u></p> <ul style="list-style-type: none"> <li>In more centralized societies, powerful leaders can broker larger scale, multilateral alliance networks more readily than is possible in decentralized communities.</li> <li>Alliances forged from preexisting bonds at a low structural level (e.g. between families) should be less durable than those at a high level.</li> <li>Weak polities tend to align with a stronger power rather than banding with other polities, even those with whom they share pre-existing bonds.</li> </ul>

## 7. Conclusion

In focusing on premodern military and political alliances, this paper has done no more than target the rough outlines of a subject that merits much fuller investigation. Alliance was usually a very high-stakes matter, the focus of considerable effort and strategic investment. This much is clear from the ethnographic, ethnohistoric, and historical literature, making it all the more surprising that scholars have paid so little attention to understanding premodern alliance relationships. The way alliances worked among decentralized societies is especially worthy of study. Much of our knowledge about these societies derives from their histories of encounter with state societies and in particular imperial and colonial powers. As decentralized societies resisted those powers, negotiated with them, traded with them, and preyed upon them, alliances were among their most critical resources. That some decentralized societies were able to coordinate very large-scale, high-commitment, and relatively stable alliances in the face of external threat (e.g. Sauer, 2020) is a matter for particular wonder and further research (Birch et al., in press).

As an object of analysis politico-military alliance is potentially as varied and complex as it is ubiquitous in human affairs. Nevertheless, as we have tried to show here, it can be broken down analytically into several dimensions of variation, such as aims, durability, scale, and so on. Furthermore, we suggest some of these dimensions are related to each other or to certain contextual factors of the social and environmental landscape that affect individual, sub-polity, and polity motives and capacities. Not all aspects of alliance are open to archaeological investigation, especially where textual and epigraphic evidence is lacking, but a great deal can nonetheless be done. In particular, the physical interactions and mechanisms of alliance result in traceable movements of people (e.g. wives, fostered children), the items and traditions they bring (e.g., ceramic traits) and prestige goods given as inter-elite gifts or in ceremonial exchanges. Military and political cooperation go hand-in-hand with economic interdependence, subsistence-risk pooling, and physical proximity. Defensive and passive alliances leave their traces especially clearly in settlement patterns, revealing stable arrangements of military cooperation between communities. The

structure of ties between parties and the larger networks they generate can be reconstructed and fruitfully analyzed through social network analysis.

Much more remains to be understood about the logic of politico-military alliances in premodern societies, in addition to the hypothesized relationships in Table 3. One clear question for further research is how alliances worked among politically centralized societies with powerful leaders as brokers, as opposed to decentralized societies. A better understanding is likewise needed of how the alliances of more mobile people differed from those among more sedentary people. What circumstances allowed durable alliances and large-scale confederations to be built? When and how did these alliances result in ethnogenesis and/or state formation? Alliances do not always benefit the parties equally; although asymmetrical alliances have largely been overlooked so far, their social and political dynamics could reveal much about political domination. Finally, the role of brokers in decentralized societies is especially interesting, and potentially accessible to study when isotopes or non-local objects can identify individuals or households who may have acted as intermediaries. Did brokers gain power and prestige as societies under threat invested in alliances, or did their “in-between” status render them vulnerable? In exogamous social settings, what role did women play in alliance formation? Under what conditions were women active brokers as opposed to passive pawns or ‘gifts’? Although alliance may be more difficult to detect in the archaeological record than other forms of social interaction, its widespread presence and influence throughout human history make it too important to ignore. As this review shows, attending to alliance is essential for understanding the dynamics of social, political, and cultural change.

#### CRedit authorship contribution statement

**Elizabeth Arkush:** Writing – review & editing, Writing – original draft, Investigation, Conceptualization. **Paul Roscoe:** Writing – review & editing, Writing – original draft, Investigation, Conceptualization. **Jennifer Birch:** Writing – review & editing, Conceptualization. **Ben Raffield:** Writing – review & editing, Conceptualization.

#### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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#### Data availability

Data will be made available on request.

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