

What is a society? Building an interdisciplinary perspective and why that's important

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Abstract

I propose the need to establish a comparative study of societies, conceived of specifically here as *bounded groups beyond a simple, immediate family that have the potential to endure for generations, whose constituent individuals recognize one another as members, and that maintain control over a physical space*. This definition, with refinements and ramifications I explore, serves for cross-disciplinary research because it applies not just to nations but to diverse hunter-gatherer and tribal groups with a pedigree that likely traces back to the societies of our common ancestor with the chimpanzees. It also applies to groups among other species for which comparison to humans can be instructive. Notably, it describes societies in terms of shared group identification rather than social interactions. An expansive treatment of the topic is overdue given that the concept of a society (even the use of such synonyms as primate “troop”) has fallen out of favor among biologists, resulting in a semantic mess; whereas sociologists rarely consider societies beyond nations, and social psychologists predominantly focus on ethnicities and other component groups of societies. I examine the relevance of societies across realms of inquiry, discussing the ways member recognition is achieved; how societies compare to other organizational tiers; and their permeability, territoriality (allowing for mobile territories), relation to social networks and kinship, and impermanence. We have diverged from our ancestors in generating numerous affiliations within and between societies while straining the expectation of society memberships by assimilating diverse populations. Nevertheless, if, as I propose, societies were the first, and thereafter the primary, ingroups of prehistory, how we came to register society boundaries may be foundational to all human “groupiness.” A discipline-spanning approach to societies should further our understanding of what keeps societies together and what tears them apart.

1. Introduction

I broadly address societies, in the sense of *enduring territorial groups whose members recognize each other as belonging*, as warranting far greater research focus, and collaboration, across disciplines. Societies include nation states; horticultural and hunter-gatherer groups in our past; and select groups in other species. My goal, beyond first distinguishing societies from other groups, is to highlight the critical features of societies and their implications, to motivate academics to investigate why such groups exist, how they stay intact, and what causes them to fall apart. This treatment is overdue because societies are too often examined in a scattershot way or confounded with other assemblages where the associated individuals don't recognize themselves as belonging to a particular group over the long term.

Among the points raised in this article that are likely to yield fruitful discussions: (1) Societies cannot adequately be distinguished from other associations based on shared culture, political autonomy, cooperation, or functionality. (2) Societies should be understood fundamentally as *identity groups* in which membership is determined by shared perceptions of belonging, rather than as social groups held together by positive interactions, even if most scholars are primarily interested in the causes and consequences of sociality within such groups. (3) Recognition of membership in societies takes two basic forms. Many animals have *individual recognition societies*, which depend on the members' ability to keep track of every other member as a unique individual, a type of minimal group I call a “mere acceptance group.” Humans are among a minority of society-dwelling vertebrates that instead employ markers of identity, such as specific gestures, rituals, and modes of dress, to establish who belongs. (4) Even though human societies remained small through prehistory, the possibility that such *anonymous societies* opened for life among strangers would prove essential to the expansion of smaller societies into nations. Indeed, humans are far from the only species that have anonymous societies, and the size of such societies need in no way be limited by brain size (i.e., Dunbar's number). (5) Although societies may have neutral or friendly relationships, they retain their separation. (6) Society members need not be related, and assessing

and keeping track of kin and assessing and keeping track of society members are likely to be cognitively distinct tasks, carried out to navigate different, if at times overlapping, challenges. (7) To better reflect the diverse means by which societies command physical space, the concept of “territory” should be treated broadly to include whatever land or stretch of sea a mobile society controls at a given time, through aggression or avoidance, and to allow for the possibility that visits from outsiders may be permitted. (8) Studied with respect to their social ramifications, the society can be one of several tiers of engagement, with other associations, such as matrilineal, of secondary social importance. (9) Societies are distinct from social networks, which tend to be more fluid and extend within and between societies. (10) Societies are impermanent. I contend that their “collapse” (more often a division) generally stems from divergences in how members identify each other, a process of “turning the familiar into the foreign” that represents a critical aspect of social change.

An underlying presupposition is that people do not join societies because they assess it serves their interests; rather, membership is as central to ordinary human existence as finding a mate or rearing a child (making any exceptions especially intriguing: sect. 8). It is also imperative to understand that contrary to the concerns of some (Dunbar, 1988, p. 10; Giddens, 1984), societies can be clearly delimited even though they are not static: Societies often permit social intercourse with outsiders, can be open to transfers in membership, and in humans are permeable to goods and ideas.

Why are societies, of the sort I characterize here, important? For humans, the society is universally the most significant group for assigning duties, obligations, rights, and benefits to individuals (Searle, 2010), so their study should clarify how these properties arose. What of other species with clear-cut groups that extend beyond the workaday ties of parent(s) rearing offspring? There will always be attractive and repulsive forces when living among others of one's own kind (Krause & Ruxton, 2002). The proposed concept of “society” does not specify the advantages of societies, which vary greatly; can be an upshot of selection acting on the individual members, the group as a whole, or both; and may be difficult to work out, as MacDonald and Newman (2022) found for social badger clans that Kruuk (1989, p. 109) called “tight communit[ies] of solitary animals.” It is not the job of a definition to explain the phenomenon it names. Rather, the definition has been worded to avoid preconceived notions of function, and to serve instead as a neutral framework for addressing big questions around why societies exist. Hence this article investigates the basic, proximate mechanisms of how such groups form and maintain continuity in time and space, as a jumping-off point for further studies.

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What is clear is that although even a facility to form fluid assemblages can furnish net benefits (Krause & Ruxton, 2002), many society-inhabiting animals no longer have an option to survive outside such discrete groups.

My contention will be that our primogenitors have always lived in societies, even as those societies have changed dramatically, which is to say that humans have never inhabited an “unbounded social landscape” (Gamble, 1998, p. 443; Ingold, 1999). Past societies, the “nations of their day” (Moffett, 2019, p. 5), trace back uninterrupted to those of a common ancestor with the chimpanzee and bonobo, or so the principle of parsimony suggests given that all three species form enduring ingroups with clear memberships.

Beyond building on that hypothesis, my objective is to express the idea of a society such that, however alien they otherwise appear to us, we can seek useful analogies with animals living in groups that share the characteristics I have laid out, if only for mechanistic reasons. A survey and detailed review of vertebrate societies is underway, but my exemplars here will be biased toward our fellow mammals, often as contrasted with social insect societies. In what ways does their identification as comembers, and relations within and between the societies, resemble or differ from the situation for *Homo sapiens*, and what might this tell us about societies as a general life strategy?

1.1 Meanings matter

A commitment to carefully articulate what is meant by “society” amounts to more than mere semantics. As Hume wrote, “The chief obstacle... to our improvement in the moral or metaphysical sciences is the obscurity of the ideas, and ambiguity of the terms”; two centuries later Austin (1975) insisted that serious thought must begin with a clear grasp of the meanings of words. My aim is to offer a definition of society (mapped out in sect. 3) that translates across academic vocabularies while conforming to a commonplace perception of societies that gives primacy to the passport-holding, national anthem-singing, territorial groups of our day over the varied institutions that compose or connect them. Admittedly, for political scientists, macrosociologists, and economists who think of societies entirely in terms of states, no wider conception than this is necessary; just a handful of social scientists are motivated to delineate societies so as to embrace pre-state peoples (e.g., Riley, 2021). Still, I hope my approach puts important concepts in play to support productive interchange and debate (Clark & Tetlock, 2022) across sociology, anthropology, psychology, biology, and, increasingly, computer science, applied mathematics, and others.

The word “society” of course has multiple common usages – *Merriam-Webster Unabridged* gives 17, starting with “companionship” and “voluntary association.” There is a major difference between “companionship,” or being merely social, and forming separate, enduring groups. English would benefit from a unique word for the latter, especially because no *Merriam-Webster* entry adequately covers it; closest is 4B: “a community, nation, or broad grouping of people having common traditions, institutions, and collective activities and interests.” Clearly the perspective on societies taken here by no means applies to every broad grouping of people. The chance of my putting forward a novel term for the groups I have in mind that would catch on widely is slim, to say the least, so what I seek is to present a definition of “society” that stands on its own in order to open up a dialogue.

1.2 Societies in other species

Terms whose meaning matches that of “society” in the sense employed here exist for other species: Take “community” for chimpanzees, bonobos, spider monkeys, and some bottlenose dolphins; “troop” for other primates, gorillas included; “unit” for gelada monkeys and sperm whales; “clan” for spotted hyenas, meerkats, and, again, sperm whales; “pack” for gray wolves; “core” for African savanna elephants; “coterie” for prairie dogs; “pride” for lions; “band” for horses and plains zebras; and “colony” in two mole rat species – to mention just the intensely studied mammals that come up in this article.

But should these be called societies? In the past few years, words like “troop” – let alone “society” – have fallen out of favor among biologists. The move of choice has been to replace such terms with the vague word “group,” with a loss in clarity and unfortunate consequences for the study of sociality. As I have written (Moffett, 2019, p. 5), “While a troop is undeniably a group, it is a group of a very special sort, being set off from all other monkeys by a closed and stable membership that makes it... worthy of being labeled by a term of its own.” This aversion to discussing societies has curious outcomes; for example, despite its title, the 760-page text *Mammal Societies* (Clutton-Brock, 2016) very seldom brings up societies in the sense employed here, presumably because the author uses the word only in the broad sense of “voluntary association” (e.g., the book describes certain groups as “stable” but nowhere specifies what this means).

I understand why some might hesitate to apply the term “society” and its synonyms to animals or even early humans. “Society,” like many words, originally described living peoples before it was applied to prehistoric groups and the natural world. No analogy is perfect, and most words must embrace some range of phenomena to be of practical utility. Still, it is important not to lose sight of the fact that human societies are mediated by uniquely complex cultures and intentional behaviors, and the capacity to imagine the mental states of others (Tomasello, 2014), innovate technologies (DeFries, 2014; Henrich et al., 2016), produce art (Winner, 2019), assign symbolic values to objects (Guibernau, 2013; Moffett, 2022a), and so on. Such distinctions guarantee the impossibility of ever subsuming sociology into the hard sciences, even if insights from biology contribute to the social sciences and vice versa. Nevertheless, some of the most illuminating comparisons in science are those made between things ordinarily seen as distinct (Moffett, 2020a), in this instance including across radically unrelated species that differ markedly in the structure of their societies yet may have converged on similar solutions to how they navigate challenges of group membership.

Certainly we cannot appreciate how the human experience of societies is unique without first understanding its continuity with life strategies in other species. Thus the discussion to follow draws freely from information about other animals before narrowing its focus to people. Human societies have shifted over time along several paths from the “ethnolinguistic groups” (I prefer to call them multiband societies) of hunter-gatherers spread out in multiple wandering, generally fluid bands, to an assortment of what are loosely called tribes (the mid-range societies of settled hunter-gatherers and horticulturalists: Fowles, 2002), to chiefdoms and states. I discuss tribal and hunter-gatherer societies in the past tense, as the groups that are now embedded within national territories, so in my parlance (sect. 3.8) should be considered ethnicities rather than societies, except for the very few that

have stayed out of contact (though the word will likely still have some utility for anthropologists studying any such groups that have by and large continued to act independently). I pay recent nomadic hunter-gatherers relatively close attention as a contrast to nations in that their social organizations, while featuring derived cultural innovations, more likely reflect patterns from our past (Rodseth et al., 1991).

1.3 A note on organization

Section 2 considers common definitions of “society” already in the literature. Section 3 proposes a revised definition, then discusses its implications point by point. Once the society is understood in terms of an identification with others, we explore how it relates to varied social groups (sect. 4) and networks (sect. 5). Section 6 reviews how members assess who belongs, and the impermanence of societies. Section 7 describes how any definition, and to the point here, the one proposed for society, can fall short, giving instances of groups that might reasonably be considered societies but strain the proposed definition, whereas section 8 addresses human populations that may lack societies in the sense pursued here. The conclusion reflects on why studies of societies may be rewarding across disciplines.

2. Alternative approaches to describing societies

A common diagnosis of societies by social scientists (as in respected textbooks like Stolley, 2005) states that they consist of people sharing a culture. A single culture does not, however, accurately describe modern societies, which incorporate cultures from varied sources (sect. 3.7). Although multiculturalism is a wellspring for national character in places like the United States, on close inspection even the most uniform nations are heterogeneous; for example, the dominant ethnicity of China, the Han, encompasses what originally would have been independent peoples that have not quite merged through assimilation (sects. 3.6 and 3.7: Joniak-Lüthi, 2015). Still, this interpretation of societies may serve if by “common culture” we mean those aspects of identity (i.e., markers: sect. 3.4) that even diverse societies require of their citizens to stay intact without undue application of force (in the United States, respect for the flag, endorsement of ideals of freedom, etc.: Levinson, 1988; Orgad, 2011; Poole, 1999). In the sense of sharing one uniform culture, though, such societies only existed before sedentary peoples incorporated outsiders en masse (sect. 3.7).

Others conceive of a society as a people who share “a myth of common descent,” or “an intuitive sense of the group’s separate origin and evolution” (Connor, 1992, pp. 48–49), a conception that fails for hunter-gatherers, whose oral traditions centered on nature, the supernatural, or the recently deceased rather than on the group’s deep history and those who founded it (Gilderhus, 2010; Wiessner, 2014).

My mentor Edward O. Wilson (1975) defined “society” broadly as “a group of individuals belonging to the same species and organized in a cooperative manner” (adding that reciprocal communication, “beyond mere sexual activity,” is crucial also). Taking this perspective allowed Wilson to discuss all manner of groups under a society rubric, even what he called “elementary societies” (p. 8) of fish schools, herds of bison, and clouds of gnats. Such aggregations benefit the participants through energetic savings or safety from predators, yet although the animals in them may maintain social connections to certain individuals, they have no steadfast affiliation to the collective. This

interpretation of societies as cooperative units has roots extending as far back as Spencer (1893, p. 244), who wrote, “A society, in the sociological sense, is formed only when, besides juxtaposition [i.e., proximity: but see section 2I] there is cooperation.... Cooperation, then, is at once that which cannot exist without a society, and that for which a society exists.”

Because cooperation has often been highlighted in expositions of societies – and groups more widely considered (Moffett, 2022b) – I must emphasize that societies, in the sense that I will pursue in this article, are not necessarily natural units of cooperation, in that openness to cooperation (or, equally, to reciprocal communication, which in turn can improve cooperation: Turchin & Gavrillets, 2009) doesn’t always knit society members together, a fact recognized by many in sociology. Simmel (1908) saw collaboration and conflict as inseparable “forms of sociation,” each unimaginable without the other. Whatever cooperation exists may be occasional and quite opportunistic (Olson & Blumstein, 2010).¹ Arguably unanimity will matter less when societal identities are clear and uncontested, and moreover across-the-board cooperation could engender low innovation and social stasis; actually some conflict could have social utility, even at times when societies become weighed down by discord (e.g., Lea, Blumstein, Wey, & Martin, 2010; Rawlings & Friedkin, 2017).

At the same time, relations between societies can be cooperative; meanwhile individuals not identifying with a society can cooperate (sect. 5). For such reasons, even though cooperation is the feature that draws many to study societies, that does not make it the best criterion for defining, and thereby distinguishing, societies. Patterns of coordination and cooperation are often instructive only when we already have a solid representation of what the societies are, based on other information (notably, the criteria emphasized here: clear memberships, durability, and control of space).

Instead of cleanly defining, and separating, societies, cooperation, including the “socially aligned groups” (Moffett, 2022b) of Pietraszewski (2022), can shift mercurially even while the borders of a society stay intact (Barth, 1969). This is the primary reason I characterize societies in terms of “belonging” (i.e., as “identity groups,” a phrase free from connotations of cooperation: sect. 3.1) rather than as social groups, which unduly centers cooperation (indispensable as it may be to forming social identities: Smaldino, 2019) in how societies should be set apart in practice. That said, it is hard to imagine a situation where cooperation between societies *exceeds* that within societies, invariably making the society itself, as recognized here, a critical unit of study. In fact, with social norms like altruistic punishment in place (Boyd, Gintis, Bowles, & Richerson, 2003; Fehr & Gächter, 2002), cooperation can flourish even in large societies, including among strangers in humans, paving the way for the members to work toward collective goals.

Lenski (2015, p. 17) points out that Wilson fails to differentiate between societies-as-wholes and families, local communities, and other associations. Lenski’s definition is directed more expressly at the bounded groups I have in mind: “To the degree that an aggregation of people is politically autonomous and engaged in a broad range of cooperative activities, it can be considered a society.”

Yet Lenski (p. 18) admits that “in practice, it is sometimes difficult to apply the present definition of societies, since self-governance exists in varying degrees.” Consider nomadic hunter-gatherers, who could reach some decisions during occasional gatherings of the roving bands that made up each of their enduring ethnolinguistic groups (which are typically taken to represent

hunter-gatherer societies and indeed were their societies in the sense espoused here). Still, these nomads lived in the day-to-day in shifting “campfire democracies,” with each band acting autonomously. Further, when people left camp to hunt or gather, those smaller foraging groups would likewise have been autonomous. Hence what Weber (1978) called “legitimate power” shifted with the skills of those present at the time (Boyd & Richerson, 2022).

So, although I agree with Lenski that societies are “the primary organizational subdivisions of the human population as a whole,” his criterion of political autonomy doesn’t suffice to distinguish societies from many social groups, even if such autonomy takes its most exaggerated forms in nations, with their laws, social hierarchies, and (always multitier) political structures; nor is it clear how his notion of *political* autonomy can be applied to animals (that said, animal societies generally do act independently and their social machinations have been described as “political”: de Waal, 1982). When human societies enlarge, political systems become increasingly intricate (Turchin et al., 2017) and act to constrain people’s identities (e.g., Moffett, 2019, pp. 252–253; Nolan & Lenski, 2004). Thus, although autonomy, or its lack, can assuredly be of overriding importance, for example after a state seizes control of a neighboring people (sect. 3.7), it is more fruitful to look at societies as I have done here and then document how patterns of autonomy alter as a society elaborates.

The lack of cooperative unity, and autonomy in any sense, within each society of Argentine ants, which spread amorphously as “supercolonies” across many square kilometers (Moffett, 2012a), has been the basis to argue for societies as *functionally* independent entities, the position being that more significant units than the supercolonies themselves must exist in this species (Gordon & Heller, 2012). This conclusion derives from the observation that everything connected to the production and dispersion of resources, and the regulation of both, occurs locally (Heller, Ingram, & Gordon, 2008); and, further, that supercolonies tend to be distributed discontinuously, such that portions of them carry on in isolation. The problem with this interpretation is that this patchiness is not a product of any divisive *social* distinctions made by the ants. Rather, it is a consequence of a supercolony’s vast range. A supercolony can extend across areas that, for example, undergo unsuitably dry spells, isolating subpopulations of this society that seamlessly merge again when moisture levels increase.

Functionality exists at multiple levels in living things: Cells, organs, bodies, teams, societies, allied societies, to name a few (sect. 4; e.g., bands are often depicted as the economically functional units of a nomadic hunter-gatherer society: Bettinger, 1980). So, although functionally cloistered regions can be detected within a supercolony, the ants residing across the land it occupies also act to create a truly enduring functional unit by rejecting foreigners, ensuring well-defined supercolony memberships, with mass warfare arising where supercolonies come into contact (Moffett, 2012b).

This section has critiqued competing attempts to frame much the same idea of a “society.” Although almost no definition, including the one I propose, is without deficiencies (sect. 7), and though each of these alternatives undoubtedly has utility for particular research programs, they fall short in practicality as well as in fully, accurately, and unambiguously capturing the concept of a society as a bounded and lasting collective that can be broadly implemented – the intention here. Rather, criteria like cooperation, autonomy, and functionality, while essential to nations and other societies, serve equally well in describing a wide assortment of groups for our species and other animals.

3. Building an interdisciplinary definition of societies

How to spell out the concept of a society? The brief sentence encapsulated at the start of this article will often serve. For academics, however, issues arise requiring further explanation. Let me propose a detailed exposition to capture a society's distinguishing attributes as it might appear in a scholarly dictionary, with the subsection numbers at points meriting discussion to follow.

A society is a group (sect. 3.1) extending beyond an immediate family (sect. 3.2), capable of perpetuating its population for generations (sect. 3.3), whose members ordinarily perceive one another as belonging together (sect. 3.4) and set apart from other such groups (sect. 3.5) (notwithstanding transfers between societies, either mutually agreeable [sect. 3.6] or initially forced [sect. 3.7]) and which regulates access to part or all of the space or spaces it ultimately inhabits (sect. 3.8) across which its members travel with relative impunity (sect. 3.9).

3.1 A society is a group

The definition is worded to make clear that by “group” I mean a “real group” (Dunham, 2018) that I will call an “identity group” in contradistinction to a “social group.” The latter can signify all manner of social interchanges, including many that, in aggregate, form networks that don't inevitably yield distinct groups (sect. 5). The very name also generally signals a presumption of positive interactions; indeed elaborate definitions of “group” have been presented in this journal to refine this perspective (Pietraszewski, 2022). “Identity group” applies instead to groups in which everyone has a grasp of, and respect for, membership rooted in a shared identity (a view aligning closely with Henri Tajfel and John Turner, e.g., Turner, 1984; though as used in this phrase, “identity” implies nothing about the cognition underlying group membership).

Identity groups obviously have social ramifications, the members affected by the actions of the others by virtue of their shared inclusion, prospects for cooperation ranking as a paramount advantage among those. Yet cooperation can be so varied and shifting, extending both within and across societies, that it is judicious to define societies in a way that is neutral to its existence, even if opportunities for social interactions are the principal payoff for the emergence of societies and hence come up often as a subject in this article. A shared identity might even be sufficient to keep a struggling society intact through periods of social dysfunction, particularly because, in humans, societal identities include cultural institutions that set rules for how we interact (Wiessner, 2016). That said, societies where competition swamps cooperation probably won't last; on the contrary, competition can further motivate individuals to establish ties and rules against misbehavior (Boyd et al., 2003). What minimal cooperation exists might come into play in the control of a physical space (sect. 3.8), because a single member is unlikely to defend its society entirely on its own.

Members may fall into power relationships, statuses, or roles (including role identities: Burke & Stets, 2022), but these categories aren't essential to societies and have been left out of the definition. Mutual acknowledgment (knowing *we* belong together) is common to all human groups (Marilynn Brewer, personal communication, 2020), and this perception of *we-ness* is likely to precede statuses or roles because they would be uninterpretable without it. Still, identity markers (sect. 3.4) made it possible for humans to interact impersonally by occupying abstract positions, as emphasized by Tönnies (1887).

3.2 A group must extend beyond a simple, immediate family to be considered a society

By “simple, immediate family” I mean one or both parents with offspring that normally become independent once they can fend for themselves. Although such a family doesn't merit the word “society,” in some species overlapping generations stay with their parent(s) for most or all of their lives; these include colonies of social insects, groups of certain skinks that While, Chapple, Gardner, Uller, and Whiting (2015) call “furies,” and some cooperative breeders (e.g., birds like Florida scrub jays: Woolfenden & Fitzpatrick, 1984). In a subset of these societies, older offspring protect and raise siblings, an “advanced” form of sociality, or eusociality (Foster & Ratnieks, 2005; Liao, Rong, & Queller, 2015; Wilson & Hölldobler, 2005).²

The kin structure of societies³ is a product of how those groups originate or are maintained. Cases exist where no adult member is related to any other, as in horses and some bats (Berger & Cunningham, 1987; Wilkinson, Carter, Bohn, & Adams, 2016). At the opposite extreme, gray wolf packs and African savanna elephant cores can represent extended families and are often referred to simply as “family groups” on that assumption. All the same, nonkin that are not in a position to breed can permanently join a pack or core as members that are treated indistinguishably from kin (Cynthia Moss & Dan Stahler, personal communications 2015, 2018; Vonholdt et al., 2008; Wittemyer et al., 2009).

Human societies are composed of multiple family lineages. Within their societies, hunter-gatherers almost always lived in proximity to more nonkin than kin, affines included (Apicella, Marlowe, Fowler, & Christakis, 2012; Hill et al., 2011); “thus, permanent *communities* would have been more natural to humans than even kinship organization which...had to be invented,” starting with the nuclear family (Abrutyn & Turner, 2022, p. 135). Evaluating and monitoring society members generally versus kin in particular involve intrinsically different facets of life that I postulate will be cognitively distinct and reflect adaptations to what can be divergent challenges, in the former case for example in accessing mates, expanding opportunities to share in tasks like child rearing, or reducing conflicts with outsiders.

3.3 A society is capable of perpetuating itself for generations

The idea that societies must be self-perpetuating traces to Parsons (1966). What's important is the *potential* to endure, given that a society may fail in unfavorable circumstances. People value this collective continuity (Sani et al., 2007); indeed, in our species and many others, societies carry on largely by families begetting families, though there are alternative strategies involving nonkin (sect. 3.2), and in species like the sperm whale, males reaching adulthood roam free or variously aggregate without participating in female-dominated societies.

3.4 A society's members perceive one another as belonging together

For Anderson (1982), societies, and especially nations, represent “imagined communities” – artifacts of contemporary life perennially forged in the mind by modern mass media. The fact is that all societies, whether Belgium, the Ju/'hoansi San, or a gorilla troop, are products of the minds of their members (Moffett, 2020b). In this sense all are imagined, regardless of whether the members' interactions are face-to-face in a small tribe or conducted over

the geographical span of a country. At issue, ultimately, is how society memberships are expressed in the brain.

George Schaller called lion prides closed social units whose “composition...remains constant from year to year,” writing that “A pride member joins others unhesitatingly, often running toward them, whereas a stranger typically crouches, advances a few steps, then turns as if to flee, and in general behaves as if uncertain of its reception” (1972, pp. 37, 46).⁴ Such descriptions underscore that societies are not mere sets of individuals but members that recognize who belongs. An individual’s acceptance over the long haul is contingent on the assessments of the other members, deduced by researchers like Schaller from their comprehensive understanding of how the animals interact. Below I concentrate on two contrasting approaches to membership recognition.

3.4.1 Individual recognition societies versus anonymous societies

I have proposed (Moffett, 2013) that recognition of group membership emerges by two means: Either every member comes to know all the others individually (based on appearance, scent, posture, etc.: Tibbetts & Dale, 2007), or else, as in humans, they grow to be sensitive to shared markers of identity (also called tags, labels, or symbols). Markers include behavioral or physical traits perceived either subconsciously or consciously as signals of membership (Boyd & Richerson, 1987; Cohen, 2012), often modified to amplify intersociety differences (Wobst, 1977). The markers that people share act to make strangers seem less strange (Greene, 2013, p. 51). Whether significant in distinguishing a specific individual or as a group marker, traits may have evolved as identity signals (e.g., human facial variability: Sheehan & Nachman, 2014) or become useful by chance. I’ve dubbed societies formed by the first approach “individual recognition societies” and those taking the second strategy “anonymous societies.”

People in a small enough society might know everyone so well that individual recognition serves in everyday life even while they are also demarcated by traits that *potentially* allow them to get by without recalling all the members; these serve to confirm affiliation and reduce identification errors (Moffett, 2019, pp. 109–111) – in this sense all human societies are inherently “anonymous” (though differentiation in markers may be minimal after some societies divide, as when construction of a highway came to abruptly split one society of the Ache population into two: Kim Hill, personal communication, 2023, sect. 6). Nomadic hunter–gatherer societies grew only into the low thousands (such that men in two extant societies experience a “social universe of about a thousand”: Hill, Wood, Baggio, Hurtado, & Boyd, 2014, p. 6). Yet it’s possible that “more widely separated bands of a tribe have no personal knowledge of or direct contact with each other,” as Schapera (1930, p. 77) reported for Bushmen societies; Coren Apicella tells me the same is true of the Hadza. Consequently, foraging peoples would have shown a reliance on markers (i.e., “emblematic style,” which “carries information about the existence of groups and boundaries and not about degree of interaction across or within them”: Wiessner, 1983, p. 257).

Chimpanzees and bonobos, by contrast, have individual recognition societies in spite of their phylogenetic closeness to humans and the fact their communities can display cultural differences (these being the most abundant markers in humans, though of course chimpanzee cultures are far less elaborate: Whiten, 2011). These apes apparently lack the ability to register shared, distinctive behaviors as markers of group identification: Although an individual that transfers to another community (sect. 3.6) is likely to take on any cultural traits of that society

(as in other group-living primates: Van de Waal & Canteloup, 2023), an individual that continues to employ a technique characteristic of a different community, say to catch termites, isn’t shunned or attacked for its “deviance.” In sharp contrast to humans, then, these species don’t perceive strangers as fellow society members, though they can gradually accommodate the occasional newcomer.⁵

Whenever individual recognition exists, the members may differentiate not just each group mate but foreigners they have come to know, whom they respond to either as outsiders that are usually a threat, as chimpanzees do; as potential friends, as do bonobos; or even as potential trading partners, as in humans. *H. sapiens* aside, the premiere anonymous societies occur in social insects, the workers of which, unlike people, are incapable of telling apart individuals outside of certain categories like castes (with one exception: Tibbetts, Pardo-Sanchez, Ramirez-Matias, & Avargués-Weber, 2021), let alone individualize them *sensu* de Waal and Tyack (2003). In ants, for example, hydrocarbons on the body surface, made consistent across the colony when its members exchange food and groom each other, serve as a “gestalt” scent that workers learn to classify others as colony mates, whether they are a few or, in Argentine ants, reach into the billions (Tsutsui, 2004). The few nonhuman vertebrates known to have anonymous societies employ socially learned markers; in two mole rat species, for example, an odor (Barker et al., 2021), while some whales learn group-specific vocalizations (Gero, Whitehead, & Rendell, 2016).

The human identification with societies goes beyond recognizing who belongs because it encompasses not just the markers associated with our behavior and bodies but things we make and treasured features of our territory, as a kind of societal extended phenotype. It takes in attributes requiring language, such as shared myths and, for many tribal groups and nations, narratives around group history (Smith, 2000). Further, a capacity to discern our society holistically generates a group consciousness and ardor for our common experiences, affections likely to have deep roots (Johnson, 1997). The conclusion of Seyfarth and Cheney (2017) that “in the mind of a baboon...social categories exist independent of their members” would allow for other primates perceiving societies as distinct, coherent entities (their identification with a society is group-based rather than purely interpersonal: Brewer, 2001), though whether they respond to them as if they have essences (e.g., Lurz, Krachun, Hopkins, & Tagliatela, 2022) hasn’t been examined.⁶ Because neither essentialist beliefs (Prentice & Miller, 2007) nor entitativity is required to distinguish societies, I won’t pursue the subject further.

3.4.2 The simplicity, and difficulties, of anonymous societies

The fact that individual recognition societies commonly have populations of a few dozen, in chimpanzees reaching just beyond 200, is probably at least in part a reflection of the cognitive constraints on each member in keeping track of all the others.⁷ When and how our ancestors came to have anonymous societies when other apes didn’t remain an enigma, but adding reliable markers to what had originally been hominin societies more like those of our sister species the chimpanzee and bonobo (Samuni, Langergraber, & Surbeck, 2022), dependent on individual recognition, would eventually permit our societies to increase in size virtually ad infinitum by incorporating individuals who were strangers to one another (Moffett, 2019).

The social brain hypothesis postulates that certain vertebrates evolved big brains to handle the mental gymnastics of building

social networks (e.g., Dunbar, 2009; but see Charvet & Finlay, 2012; DeCasien, Williams, & Higham, 2017). Yet insects' minute brain size speaks to the low cost of using markers, such that increases in overall population size (above and beyond the members' social connections) is no longer a cognitive challenge. Certainly, though, that cost goes up for people, who imbue markers with shared meaning and reduce the possibility of social confusion or identity theft by displaying an immense range of them. Some set us apart as individuals whereas others are associated with the diversity of affiliations in the modern world – from professional organizations to alma maters (sect. 4) – but many connect us to our society. Whether identities grow more elaborate as groups amplify in saliency or number, thereby attracting progressively more markers, is an open question. Cultural traits garner the most attention, among them complicated, tough, or risky rituals (Rossano, 2015; Watson-Jones & Legare, 2016). At the other end of the spectrum are subtle identity cues of which we may never be aware; for example, Americans show surprising success at distinguishing Americans from Australians at a distance by how they walk or wave a hand (Marsh, Elfenbein, & Ambady, 2003, 2007). For early hominids threatened by neighbors, detecting someone's affiliation from afar, perhaps before they could be identified personally, would have had survival value. Among hunter-gatherers, "even gestures can be misinterpreted, as winks and handshakes in one group are mere twitches or touches to the other" (Broome, 2010, p. 17). As is true for modern nations, identity clues littered the hunter-gatherer landscape: !Xô Bushmen can pick out arrowheads left behind by another group of !Xô "as coming from !Xô 'who are not our people'" (Wiessner, 1983, p. 267). Differences mattered: Studying G/wi Bushmen, Silberbauer (1981, p. 2) noted the "reassurance and lessening of tension that is seen when a stranger is recognized as a fellow G/wi."

The ensemble of markers turns us into walking billboards of our identities, the combined effect often overriding assessments of any particular trait. We categorize others faster than we consciously register, prioritizing some markers over others, and sorting through ambiguous information (Dobs, Isik, Pantazis, & Kanwisher, 2019; MacLin & MacLin, 2011; Young, Sanchez, & Wilton, 2017). We accommodate varied perceptions of identity across our society yet see it as a unit. As Poole (1999, p. 16) expressed it, "What is important is not so much that everyone imagines the same nation, but that they imagine that they imagine the same nation." Dramatic variations in lifestyle can be acceptable: The Fur people of Darfur either raise cattle in settlements or turn to nomadic herding (Haaland, 1969).

We allow for such variations while seeing foreigners as distinct even if there are intersecting aspects of our cultures, such as a common language (even hunter-gatherer *ethnolinguistic* societies can share their primary language with neighbors: Boyd & Richerson, 2005; Fiske, 2018). Meanwhile identities are far from stable: Markers fall from favor or transform without disrupting society boundaries (Barth, 1969). Still, societies can fragment if this elasticity falters, should extreme differentiation in member identities engender clashing perceptions of who belongs (sect. 6).

Minimal group studies reveal that the binding power of markers also holds for artificially constructed groups, united by a perceived commonality, even one as trivial and arbitrary as being told their coin toss landed heads (Dunham, 2018) (although people can nevertheless associate such markers with a meaning: Hong & Ratner, 2021). An individual recognition society stays bounded over the long term with no such shared characteristics employed

for categorization or, indeed, anything beyond mutual acceptance to link its members, in what I call a "mere acceptance group" – a group that is *truly* minimal. Whether individuals of other species (and presumably most likely those with anonymous societies) can extemporaneously form minimal groups is unstudied, but the potential simplicity of markers raises the question of why many vertebrate societies depend on cognitively expensive individual recognition. Perhaps more animals use physical or behavioral markers than we realize. But the fact is that many, if not virtually all, birds and mammals recognize other individuals, if just their own offspring for a narrow time window (Wiley, 2013). Thus, individual-specific recognition would have been a readily available means of forging societies for most species. In short, anonymous societies are likely to be a derived condition among vertebrates.

3.5 A society's members set themselves apart from outsiders

Relationships between societies can be tricky. The "uncertainty of reception" Schaller describes in lions (sect. 3.4) is common even in species where societies intermingle, like the bonobo (sect. 3.8) and of course people. At the other extreme are species that almost always keep far from, or respond agonistically to, outsiders. Goodall (2010, p. 239) reflected on her studies of the Kahama and Kasekela chimpanzee communities at Gombe (societies that had recently split off from each other: sect. 6):

[The chimpanzee] sense of group identity is strong and they clearly know who "belongs" and who does not. ... And this is not simple "fear of strangers" – members of the Kahama community were familiar to the Kasekela aggressors, yet they were attacked brutally. ... Moreover, some patterns of attack directed against non-group individuals have never been seen during fights between members of the same community – the twisting of limbs, the tearing off of strips of skin, the drinking of blood. The victims have thus been, to all intents and purposes, "dechimpized," since these are patterns usually seen when a chimpanzee is trying to kill an adult prey animal – an animal of another species.

The phrase "set apart from other such groups" in the definition doesn't require that societies respond to outsiders aggressively, as chimpanzees do foreign communities, but at least as different. Hence populations kept apart merely by the patchiness of favored habitat, that indiscriminately intermix should the opportunity arise, should not be regarded as societies; those individuals don't exhibit affiliations with one another – of uniquely belonging together – that can be construed as a membership. Examples include fish in different ponds and spiders weaving communal webs that smoothly combine if brought into contact (Aviles & Guevara, 2017). Asian elephant herds are similarly open-ended (though within the similarly fluid herds of African savanna elephants are close-knit "cores": De Silva & Wittemyer, 2012).

Dual "citizenship" exists only in humans. Among hunter-gatherers, the equivalent occurred when a person willingly married into another society; newcomers were expected to assimilate but seldom lost their connections to their birth people, which often eased intersociety tensions and improved trade and defense relations (Walker, Hill, Flinn, & Ellsworth, 2011). Still, certain animals can belong to two societies at once, at least surreptitiously: The independent movements of lions in societies characterized by strong fission-fusion (sect. 3.9) explain how males can be part of two prides for months, their travels back and forth going unnoticed (Packer, 2023).

3.6 Transfers between societies

At one point Wilson (1975, p. 582) comes close to separating groups with clear memberships from his looser conception of societies as cooperative groups (sect. 2), distinguishing casual “societies” that individuals enter and leave freely from demographic societies “stable enough through time, usually owing to [their] being relatively closed to newcomers, for the demographic processes of birth and death to play a significant role in [their] composition”; groups for which transfers are rare he designates “closed societies.”

The criterion, employed here, of a defined membership doesn’t exclude permanent transfers between societies. Such transfers can be necessary if only to avoid inbreeding. Many vertebrate societies contain a few dozen individuals, too few to qualify as “a true Mendelian population” (Wilson, 1975, p. 117). Although nomadic hunter–gatherer societies were sufficiently large to act as a breeding population, some exogamy was the norm (Denham, 2013; Marlowe, 2005; Wobst, 1974). Changes in allegiance can be part of the life cycle: Young female chimpanzees regularly make the switch, as do male spotted hyenas. Even so, barriers to admission can be extreme; newcomers may be repeatedly rejected.

Yet even individuals that were strong-armed into a society (sect. 3.7) may earn their place as members. In species with anonymous societies that accept transfers (e.g., ants do not), newbies must take on the society’s defining markers; in pinyon jays, for instance, by learning a society-specific call that allows flocks many hundreds strong to merge in midair before returning each to their own piece of land (Marzluff & Balda, 1992). Humans too must adopt obligatory group characteristics (i.e., assimilate) as much as permitted (or even, in some polyethnic societies, encouraged) and attainable – a willing immigrant (or a formerly subjugated or enslaved individual: sect. 3.7) who walks, talks, or dresses differently than we do (sect. 3.4) may still be perceived in the day to day as not belonging despite having been granted citizenship by a government body.

What then of the requirement, put forward by some, that a society must be impermeable, that is, relatively impervious to immigration (Kerth & van Schaik, 2012; Ziller, 1965), at times to the point of barring interactions with outsiders? In theory, even high immigration rates shouldn’t undermine a society if there is little ambiguity about the point when each immigrant is accepted as a member. Reciprocal communication of a cooperative nature between societies need not threaten their borders either. Nor must societies be closed from trade with – or theft from – neighbors. Throughout history, people have absorbed whatever ideas and goods they wished, often modifying them into something culturally acceptable as *our own*, all without their societies breaking down; consider the influx of western goods into China, which has remained solidly “Chinese” (Knight, 2008). This openness has existed even while the ease with which goods or ideas are adopted is influenced by social norms and the overall “tightness” of the society (Gelfand et al., 2011; Uz, 2015).

Notwithstanding the resilience of humans in the face of outside influences, in practice we expect people to rebel against whatever they perceive as an inundation of outsiders or their ways that they fear will defile their identity (e.g., Schaller & Neuberg, 2012), a resistance that can raise a high bar to entry. Although societies put limits on their permeability and on that basis are “closed” groups with “fixed” memberships, I find it impossible to place a figure on what counts as “too high an influx” or a “flood,” which is why I have kept the criterion of “closure” out of the definition itself.

3.7 Outsiders can be forced into a society and at least initially not be treated as members

In addition to allowing willing foreigners to become society members (sect. 3.6), humans have a long history of forcibly inserting outsiders into their societies to benefit themselves. Nomadic hunter–gatherers seldom took slaves, not needing the extra manpower and unable to retain captives (Cameron, 2008), but incorporation of outsiders escalated after people settled down. Sedentary peoples more readily seized individual foreigners, putting them into servitude, and could also conquer entire societies, taking their land as well. These forms of domination, and not (Moffett, 2019, pp. 281–283), as Rodseth et al. (1991, p. 233) propose, a capacity for “forming intergroup alliances,” led (when accompanied by other social changes beyond the scope of this article, e.g., Johnson & Earle, 2000) to the rise of chiefdoms and states. Contrary to expectations of free movement of members across the space occupied by a society (sect. 3.9), chiefdoms and states could choose to constrain subjugated populations to their original homelands or other peripheral areas (e.g., for the Inca, see Malpass, 2009; for the Chinese, Allard, 2006; Brindley, 2015).

A significant question is at what point, if ever, the vanquished could be considered *members* of the society. Assimilation was key. Depending on the whims of their subjugators, such peoples could be gradually integrated. The result was the initial emergence of ethnic groups, in which populations originally from different societies come to share a sufficiently overarching identity to be perceived as part of the same society while remaining distinct (group distinctiveness: see sect. 9).

It is worth noting that it isn’t just immigrants and subjugated people who must absorb a society’s markers; a society’s native young must find their place in its membership as well. Berger and Luckmann (1966, p. 149) write, “The individual... is not born a member of society. He... becomes a member of society. In the life of every individual... there is a temporal sequence, in the course of which he is inducted into participation in the social dialectic.” People do not come into the world walking, waving their hands or speaking “like an American” but rather adopt these characteristics in childhood; with establishment of a societal identity later in life (i.e., through assimilation) being far more arduous. The young in individual recognition societies face a different task: Like transfers, they must learn to recognize each society member, and each member must become familiar with them in turn, coming to accept them in part because of their comfortable association around society members who know them already. With both approaches the infants are given a “free pass.”

The closest parallel to slavery or subjugation in nature exists in ants. Social insects, like humans, first learn and adopt their colony’s identifying markers (in their case, an odor: sect. 3.4) while young. When immature ants are stolen from another nest, the “slaves” learn the scent of their captors’ colony instead. But in what might be construed as the insect version of assimilation,⁸ older slaves and slavemakers alike constantly adjust their perception of the colony’s “national” scent, which changes as slaves are added from novel sources. The flexibility of slaves and captors in recalibrating their identity is presumably no different from what must exist in any ant, because the colony odor, while partially genetically determined, is likely to be recast as foragers ingest foods with different aromas. Still, coexistence in a slavemaker nest of what would normally be members of distinct colonies can cause social breakdowns: Slaves may eat their captors’ eggs or attempt to run away (Czechowski & Godzińska, 2015). For

humans as well, slaves taken on raids were often children whose identities could be easier to mold (Cameron, 2008).

3.8 When interacting with outsiders, a society has ultimate control over access to the circumscribed physical space, or spaces, it occupies, which can be fixed in place or mobile

A society maintains control over who enters all or part of stretch of ground its members currently occupy, with some or all of its members regulating entry or denying access to outsiders through the use of either aggression or avoidance. The situation where more than one set of individuals coinhabits a region in a sustained way describes something quite different: They may for example be networks of kin (e.g., primate matriline: sects. 4 and 5) or, in humans, ethnic groups coexisting in a society – or, of course, all manner of other groups in today's nations, from neighboring towns to universities and chess clubs (with social media enabling more such groups to emerge in digital “spaces” online). On this basis I exclude from consideration as a “society” any diaspora living intermingled among the populations of other societies, such as the Romani (Hancock, 2002). I also exclude street gangs, as these don't control access of everyone, people who don't belong to a gang included, to their turf.

Most hunter-gatherers were nomadic, but their excursions were generally as circumscribed as those of agriculturalists (e.g., Hewlett, van de Koppel, & Cavalli-Sforza, 1986; Mulvaney, 1976; Verdu et al., 2010), with the people of each society dispersed over a common territory (Heinz, 1994; Mulvaney & White, 1987). Still, for nonhuman animals as for ancient peoples, territoriality – a word with varied meanings (Maher & Lott, 1995) involving control of a space that provides a haven within from conflict with nonmembers (Morris-Drake, Kennedy, Braga Goncalves, & Radford, 2022) and ready access to resources – seldom amounts to the geographies precisely mapped out by nations. With some exceptions (e.g., Schradin & Lamprecht, 2000), most species don't neatly demarcate group territorial boundaries or have societies populous enough to entirely repel their neighbors, making spatial overlap commonplace (Powell, 2000), though there can also be underuse or shunning of the borderlands (Wrangham, Lundy, Crofoot, & Gilby, 2007).

I portray societies as inhabiting physical *spaces* rather than specific stomping grounds because a society can migrate as a group (Dousset, 2019, calls these “explorer societies”), overlap with neighbors in their home ranges, or, in what I will call a “mobile territory,” stick together while crisscrossing the same land as other societies, as baboons do. Such a group attempts to monopolize whatever site it occupies at a given time by defending that space and its resources when and if necessary, although conflict, with the possible outcome of ceding possession through forced retreat, can be reduced through spatiotemporal partitioning – proactively steering clear of nearby societies (e.g., Markham, Guttal, Alberts, & Altmann, 2013), notably when those are stronger, avoidance being another way to maintain exclusive control at least over potential mates as a resource. How much a mobile society invests in its defense can vary markedly depending on the situation (as is true for “fixed” territories, e.g., Christensen and Radford, 2018, with the loss of territorial control for sedentary humans often resulting in the dominant society engulfing what had been a separate society and its land through subjugation). Although the tradition in ethology is to view territories as set in place (Jerram Brown, personal communications, 2023, 2024; Brown & Orians, 1970; Kaufmann, 1983), the

borders and overall position of territories, as conventionally defined, are typically fluid; some lion prides, for example, will completely shift in location as months or years pass (Craig Packer, personal communication, 2023). Allowing this word to encompass situations where a group can dominate whatever locale it inhabits at the moment is consistent with perspectives of territory that are ethological (a defended area, e.g., Noble, 1939) or ecological (an exclusive area, e.g., Schoener, 1968). The relative advantages of mobile versus fixed territories likely depend heavily on resource distribution (e.g., Casimir, 1992; Maher & Lott, 2000).

The option for the plural – a society can occupy *spaces* – reflects the fact that some of the members may for a time scout new terrain on their own; it also allows for situations where portions of a society come to reside elsewhere. In some cases, such as Alaska for the United States, the spatial divide does not impede full interchange between a society's populations; in others, members fall out of contact yet retain their common identity at least for a time, as occurred with Vikings outside Europe (Davis, 2009) or with disjunct populations of an Argentine ant supercolony (sect. 2).

Territoriality in the broad sense I propose is all but absent in geladas, which almost always (sect. 6) pass with indifference among the members of most other units (enduring societies composed of one or two males and a few adult females: Bergman, 2010; Roux & Bergman, 2012: sects. 4 and 7). Because having ultimate control over an area, if only when push comes to shove, is problematic for this and a few other species (sect. 7) and can be operationally difficult to support, the diagnosis of “society” could be simplified by removing this criterion, perhaps at minimum for some diasporas whose very insular structure sets them apart from the host society. Without it, however, categories like ethnicities in effect become “societies within societies” (Moffett, 2019), which is not how they are treated in common parlance; few examples of “societies within societies” exist once the stipulation of spatial control is added (e.g., sperm whales, sect. 4). I have chosen to regard control of space as more than a foundational supplement because it is close to universal and instrumental in distinguishing societies from such internal groups.

3.8.1 A society may allow nonstressful, even cordial, visits from nonmembers

Two views about territoriality have existed side by side. To the biologist, territories are exclusive, or defended, areas, meaning outsiders are barred, to the degree that the territory holders can keep them out. But as the term is employed, for example, to describe nations, a territory is a physical space under the absolute control of a society that can nevertheless be open to visitors, if in a regulated manner. I prefer to use the term in this way, given the potential benefits of intersociety tolerance (Pisor & Surbeck, 2019; Rodrigues, Barker, & Robinson, 2023). Humans, like bottlenose dolphins along the Gulf Coast (Wells & Scott, 2018) and bonobos, maintain positive connections between communities, such that their societies can amicably mix.

Restricting the concept of territoriality to compulsory expulsion of outsiders has removed from consideration all kinds of interesting “shades of gray” phenomena. Certain bonobo communities interact more aggressively (Martin Surbeck, personal communication, 2024), and even communities on good terms at times avoid each other, with initial contact sometimes characterized by frantic screams, chases, and bites by the males that can cause the visitors to retreat (Tokuyama, Sakamaki, & Furuichi, 2019). Intergroup socializing can also occur in species where amicable relations are ordinarily absent, as when the young of passing baboon troops

briefly play together (Catherine Markham, personal communication, 2023).

As Kelly (2013, p. 154) wrote for hunter-gatherers, “No society has a truly laissez-faire attitude toward spatial boundaries.” Still, an openness to outsiders is possible, for example should resources be too sparse (or too plentiful: Cashdan et al., 1983) to make defense of the land worthwhile or to bring about social exchanges between societies (sect. 3.6). Nomadic pastoralists often claimed the right to traverse adjoining territories to access seasonal foraging grounds for their herds (e.g., Barfield, 1993; Henrickson, 1985). Prairie dogs exhibit a détente among their coterie when they leave their group’s territory to visit communal foraging grounds (Slobodchikoff, Perla, & Verdolin, 2009); indeed, for them, territoriality might be expressed less around food resources than scarce dwelling places.

Normally contact between societies is brief, though socializing can extend over days in bonobos (in which case the groups usually sleep well apart: Furuichi, 2011, 2020). Humans are the exception; foreign traders could remain indefinitely, for example, in some early states (McNeill, 1986).

3.9 Few impediments exist across the space occupied by a society to the movements of its members

A society’s occupancy of a space doesn’t mean that all its members interact or are even close enough together to ever do so. Although there are societies such as monkey troops whose members stay together, my wording notably accommodates fission–fusion, prominent in humans, chimpanzees, bonobos, and spotted hyenas, among others, wherein individuals spread widely across a common area, moving as individuals or in small subgroups that variously intermix (Aureli et al., 2008). Once membership is established, proximity is seldom required – a gray wolf can go on a long sojourn (Messier, 1985) yet return to its pack with no social stress, even while neighbor wolves in other packs are driven off. No member of a society that has remained in one place long enough to identify with its land needs to walk every inch of that territory to feel a strong connection; still, an individual or family may favor – or even lay claim to – a plot of ground within it, as is common for humans. Analogous behavior occurs in one fish species, which defends a group territory where each female has a snail shell retreat that she shares with her young (Schradin & Lamprecht, 2000).

Among hunter-gatherers, a society’s overall territory could be split up among its bands (Marlowe, 2005), but the extent of this selectivity varied. Individuals from the four Ache societies switched often and fluidly between bands that moved across wide swaths of their overall territory (Hill & Hurtado, 2017), whereas many Indigenous Australians kept a long-term commitment to a band that usually camped and foraged inside a limited part of the tribal lands (Stanner, 1965).

In the context of expressing how a society used its land, “territory” is far too strong a term for the terrain within which each hunter-gatherer band largely spent its time. Typically, members from elsewhere in the society could enter each other’s spaces to seek resources or meet friends or kin, much as neighbors do today. Such visits would have been far more casual and fluid than interactions across societies, where the purpose might have been to negotiate alliances for defense or trade (Wiessner, 1982). Hence “territorial exclusion within an ethnic group of foragers [e.g., between the bands in a hunter-gatherer society] was much less strict than that between ethnic groups” (Marlowe,

2010, p. 268). The bands of a !Kō Bushmen society inhabited contiguous spaces, whereas unoccupied, or far less occupied, terrain lay between !Kō societies (or “nexuses,” Heinz, 1972), much as is the case in species whose societies can be in conflict – fire ant colonies, chimpanzee communities, and gray wolf packs.

4. Societies are generally the most salient of what can be multiple levels of sociality

Advancing now beyond questions around the definition of a society as an enduring kind of identity group, we can move on to how societies fit in with the varied *social* associations of humans and other species, and indeed the ways that identity and social behaviors, broadly speaking, interrelate. Certain animals, among them modern humans to an extraordinary degree, form multiple socially meaningful groupings, some as sharply defined as the societies themselves, others diffuse and fluid (e.g., sect. 5), that can interact in crosscutting ways and tend to nest inside each other. Such multilevel (or modular) associations are a subject of much interest (e.g., Chapais, 2011; Grueter et al., 2020; Hill, Bentley, & Dunbar, 2008; Wimmer, 2008). Each tends to have its own cognitive demands, degree of cohesion, optimal size, sometimes expressed by a scaling ratio, and often a political or economic significance (e.g., Caporael, 1997; Hamilton, Milne, Walker, Burger, & Brown, 2007; Zhou, Sornette, Hill, & Dunbar, 2005), the addition of tiers being linked to greater social integration (e.g., Johnson & Earle, 2000).

By definition societies can be picked out from other tiers by their primacy with respect to abiding *identities* (and, for humans, political autonomy, in that societies recognize no other group as having legitimate say-so about how they exercise decision-making power and claim a monopoly on the use of physical force: Weber, 1919). They don’t need to be the apex social stratum, either: Bonobos will create alliances across amicable societies (Samuni & Surbeck, 2023).

And yet despite their relative salience, or centrality (Leach et al., 2008) for the overall human population above and beyond close kin, compared to many social groups the existence of societies in everyday life can be as easily overlooked as the blue tint of the sky. Still, the omnipresence of markers primes our feelings toward our society even when our minds are elsewhere, galvanizing us to act on its behalf when the need arises (Billig, 1995; Hassin, Ferguson, Shidlovski, & Gross, 2007; Kemmelmeier & Winter, 2008).

Let me first consider some animal examples evincing the primacy of societies. Intermingled in a baboon or macaque troop are matrilineal – collections of females descended through different maternal lines. Primatologists treat matrilineal units as units of sociality. Yet these lines are not distinct groups with absolute cutoffs in who should belong where. Further, each female actually formulates her own relationships, and while many of those will be with individuals she grew up around, who indeed tend to be others in her mother’s family or their offspring, in practice whom a female associates with hinges on her tastes, such that intolerable kin are left out and agreeable nonrelatives added in. Hence, although the social networks of genealogically related females overlap, they are not consistently manifested across all the females as distinct and bounded entities (sect. 5). Certainly, the females of a matriline lack any commonality that might demarcate them as a functional or collaborative unit, for example by converging en masse on occasion to groom, or by carrying out actions that serve the benefit of the collective. The only affiliation registered uniformly

by all the baboons, male or female, is the identification to the others in the troop itself – the society.

Among geladas, the small “units” are their societies, recognizable as the preeminent tier. Although these monkeys forage in herds of hundreds, their ability to tell apart other individuals, studied so far for the males, nonetheless is so limited that they recognize just the members of their units – making them unambiguous identity groups. That’s true with one exception: Geladas may still socialize with individuals in the unit that has most recently split off from their own. Two tiers have been proposed above this pairing, the band and community (Roux & Bergman, 2012; Snyder-Mackler, Beehner, & Bergman, 2012), but both are of questionable importance as either social or identity groups (though see Pappano, Snyder-Mackler, Bergman, & Beehner, 2012): The units not only fail to identify as comembers of those in the other constituent units but also share nothing with those greater collectives other than the habit of moving more or less across the same general ground. A similar lack of social significance is true for human groupings discriminated by anthropologists that are not recognized by the people in them and don’t play into their personal relations, such as, in some instances, phratries, tribes, clans, subclans, and lineages (Roscoe, 2009, p. 76). Until more is known, then, such groups should not be considered tiers in a multitier *social* organization.

The social structure of our species is multilevel, though the number of levels need not be exceptional. Commonly three “archetypical tiers” (Grueter & White, 2014) are recognized for nomadic hunter-gatherers – the family, the band, and the society (called a “community” by Layton, O’Hara, & Bilsborough, 2012), with the bands often being very changeable assemblages (sect. 3.9; of course hunter-gatherers also formed intersociety collaborations). As for the astonishing number of group categories, and social strata, in existence today, “a likely scenario is that this multifarious identification spun out of the primal affiliation to the society itself to create scores of collectives of lesser urgency, stature and duration” (Moffett, 2019, p. 133). The alternative, that cognition that arose for smaller groups was extended upward to societies, is unlikely because among nomad hunter-gatherers, the only consistently manifested groupings between the family and the society were shifting bands, to which foragers like the Ache had no specific sense of identity (Kim Hill, personal communication, 2011).

That is not to deny that some people show less of a “tribal” (Clark, Liu, Winegard, & Ditto, 2019; *sensu* Greene, 2013) allegiance to a nation than they do to, say, an ethnicity (e.g., Citrin & Sears, 2009) or organized religion. I propose that such groups, which largely emerged in recent millennia and receive the most research attention, ensure member commitment by commandeering some of the social features (and the mental energies directed at them) that were initially employed to empower societies (e.g., offering an inspiring foundation story, powerful symbols, and a sense that the group itself is meaningful, i.e., its entitativity; Cornelissen, Haslam, & Balmer, 2007; Melewar & Karaosmanoglu, 2006; Toosi & Ambady, 2011; Werbner, 2010). Employees are not obligated to keep a lifelong connection with their firm, but insofar as a company unites them around an identity that ensures their efforts are directed at group goals, a Google or Apple instills a positive, reliable sense of belonging to create an exceptional workplace (O’Reilly, 1989; Pratt, 1998). Extremists can resort to coercive persuasion (e.g., Borum, 2004; Singer, 2003) to further hijack the psychology that may have originated to impassion people about societies. Certain street gangs demand

a lifetime of loyalty (Alleyne & Wood, 2010; Pyrooz, Sweeten, & Piquero, 2013). Important here is the identity fusion arising from taking risks together (ch. 6 in Collins, 1988; Goldman, Giles, & Hogg, 2014; Whitehouse & Lanman, 2014), the expectation in groups like the mafia being that membership will pass down through the generations (Dainotto, 2015).

In describing tiers of sociality, for obvious reasons I prefer phrases like “multilevel organization” to options like “multilevel society,” which employs “society” in its loosest sense to mean sociality. In fact, the wording of my definition doesn’t readily allow species with a nested social organization to simultaneously possess two tiers that can be described as societies, if only because the levels, if well-defined (sect. 5), can’t both identify with, and claim *exclusive* dominion over, the same space at the same time. Indeed, the ethnicities of modern states usually (but not always initially: sect. 3.7) intermix relatively freely even when some are concentrated in ethnic neighborhoods.

That said, New Guinea had (and still has) a high density of groups organized into multiple strata for which the primary level of identification – the society – can be hard to disentangle. Highland populations such as the Enga comprise tribes and clans within those tribes, both of which endure for generations and have a sense of group history (Wiessner & Tumu, 1998). Still, the clans can be identified as the societies for the Enga, as each clan claims ownership, and control, over a piece of land. Tribes can amount to long-standing military alliances between clans (Paul Roscoe, personal communication, 2023), essentially like the one among the tribes that composed the Iroquois Confederacy (Shannon, 2008).

At least one instance of “societies within societies” exists in another species. Sperm whales form units of 6–24 adult females with offspring that stay tightly together while roaming extensively (having mobile territories: sect. 3.8), each identified by unit-specific click patterns (codas). The same whales also belong to “clans” ranging over thousands of square kilometers, within which are embedded hundreds of units using both clan- and unit-specific codas. The units of each clan share a culture: A method of catching squid. Clans, like units, can be sensibly designated as societies because while two units of the same clan can team up on hunts, those of “foreign” clans absolutely avoid each other, keeping their distance even though the clans overlap in their distributions across broad regions (Cantor et al., 2015; Hersh et al., 2022).

5. A society seldom corresponds with a social network

How is it that, despite these apparent cognitive constraints on group size, modern human societies are nonetheless able to form super-large groups (e.g., nation states)?

— Dunbar (1993, p. 692)

Doubtless societies provide rich soil from which networks of social interaction can grow, in vertebrates typically based on the individual recognition of each member, and those networks can in turn reinforce the value of societies to their members. But that does not mean the societies themselves, built on identification to a group (a common-identity or collective-identity group: Prentice, Miller, & Lightdale, 1994; Van Stekelenburg, 2013), rather than on social relations (e.g., Smaldino, 2022), are reducible to social networks, notwithstanding trends among political scientists, economists, sociologists, and some social psychologists and biologists to regard them that way.

Recognizing this is the solution to the puzzle Dunbar put forward on the relation between cognition and social group size, quoted above. There need not be a “unifying social network spanning the boundaries of social units,” as claimed by Grueter et al. (2020, p. 837). No human society has ever consisted for longer than a brief moment solely of a “band of brothers.” Hence the number of stable relations people can maintain, which Dunbar (1993) calculated to be 150, is much lower than the populations attained by most nomadic hunter–gatherer societies (e.g., Marlowe, 2005).

To express it another way, because societal borders needn’t conform to the aggregated contacts between all its members, containing as they do disconnected components and “bridging ties” shared across societies, accurately describing a society requires going outside the logical universe of networks; similarly, portraying how networks relate to a society requires independently assessing who belongs where (Roberts, 2010). As Schaller (1972, p. 37) wrote of lions, “Companionships have no influence on pride composition.” Here I encapsulate the difference between group and network:

- Membership in a society, when that group is not in danger of dividing (sect. 6), tends to be a relatively stable, yes-or-no matter, with ambiguity rare and a broad alignment in perceptions of who belongs, even if some individuals are more invested in the society than others.
- Although network analysis accommodates networks of infinite variety, social interaction networks usually have edges that differ greatly in strength from one node to the next, reflecting such matters as variable degrees of kinship, and often driven by ego-specific choices that shift readily over time.

The distinction Kappeler and van Schaik (2002) make between social *organizations* and social *structure* is significant here. The social network literature is concerned primarily with the former – the quantitative, structural aspect of social life – when in actuality, individuals may have no sense whatsoever of “belonging” to a network in the way society members see themselves as belonging together. The idea that societies consist of individuals that bond socially (say, through grooming; Dunbar & Shultz, 2010) therefore fails to accurately capture the boundaries of those groups. Most societies not only contain their share of negative – overall harmful – social ties (Offer, 2021) but also may include isolates lacking any social network. Despite their solitude, hermits, in our species, can be recognized as being connected to a society by accent, dietary preferences, and so on. In fact the widespread emphasis on network centrality (the most sociable, “key,” or central, individuals, e.g., Sparrowe, Liden, Wayne, & Kraimer, 2001; Sueur, Jacob, Amblard, Petit, & King, 2011) undervalues those who are weakly connected (Granovetter, 1983), if not completely disconnected. I would argue that at minimum members must recognize that an ignored, shunned, or asocial individual is, for all that, a part of their society, however little [s]he intermingles (a viewpoint running counter to the expression “gambit of the group,” which assumes that everyone in a group will associate with everyone else: Whitehead & Dufault, 1999).

Network analysis can nevertheless be used to gauge the existence of interesting groups, societies among them; for example if the number of edges between clusters, or modules, is significantly less than expected by chance (Hamilton et al., 2007; Newman, 2006). And certain societies can be mapped out precisely via social networks because every member will likely have

some (positive) interactions with every other and yet never with outsiders, such as small ant colonies (at least for workers of the same age cohort: Mersch, Crespi, & Keller, 2013)⁹ and some primate troops (Kasper & Voelkl, 2009). Yet social relations are typically far more complex than that, notably in humans, even for peoples who tend to conceive of ingroups in network terms (Brewer & Yuki, 2007) – and of course, indirect social connections link virtually the entire world population of our species.

For all these reasons, societies, as groups bounded by a shared and persistent sense of belonging, deserve formal study in their own right, independent of the social networks of their members.

6. Assessing who belongs and the impermanence of societies

Societies usually have clear memberships, which is to say no one is accepted as a fellow member by some and rejected by others (as contrasted with social or kin connections, which grade in intensity and are ego specific: sect. 5). Still, differences in outlook arise,¹⁰ as when a newcomer vies for admission into a society; for instance, a female chimpanzee may be welcomed by the males but threatened by female members (Kahlenberg, Thompson, Muller, & Wrangham, 2008: sect. 3.6). The upshot for the female who wears down any opposition isn’t mere tolerance but recognition as part of the community.

What this means in practice is that for most animals, membership in a robust society is all or nothing, with confusion rare – though the matter is complicated in our species (sect. 3.7), where perceptions of who *truly* belongs are influenced by factors like ethnic background (sect. 7).

For humans, variations in opinion about group membership may not matter if everyone believes agreement exists, but, as in other vertebrates, when differences become manifest, they can result in the emergence of subgroups (or “factions”) that may ultimately fracture a society. I describe societies, and their memberships, as potentially enduring for generations, but that isn’t to say they are permanent. I hypothesize (Moffett, 2019) that most if not all societies eventually break down, up to and including state societies (Joyce Marcus, personal communication, 2017; Feinman & Marcus, 1998; Hally, 1996). This doesn’t mean that human societies “collapse” sensu Diamond (2011); far more often they split into smaller units with which the members more strongly, and uniformly, identify.¹¹

Although ecological stress or intersociety conflict (the foci of Diamond) can speed this fragmentation, societies, I propose, splinter regardless as an outcome of changes in their members’ collective identification. A faculty for shutting off an awareness of belonging to *our kind* becomes a mechanism by which those in a society solidify their divorce from former mates, producing independent *social* units. Given its profound significance, this metamorphosis in societal identity, which I have described as “turning the familiar into the foreign” (Moffett, 2019, p. 4), is remarkably understudied.¹²

7. Definitions gone wrong

Pressed hard, any definition, other than those from mathematics and for some abstract ideas, will break down. And some ways of framing a definition of the very same thing may be more practical or informative than others. What does this suggest, then, about how definitions for terms like “society” should most usefully be

formulated? This is a question attended to by Moffett (2000, pp. 570–571), to wit: “Show me a car, and I might show you a pile of junk that once functioned as a car (and maybe in a mechanic’s mind it still is). Show someone a star, and an astronomer points to a mass of convergent superheated dust. The hallmark of a good definition is not entirely that it tidily delimits a set of Xs, but that it...breaks down when things get conceptually intriguing about X.”

The influential sociologist Snow (2001) has written that it is a “sociological truism that the issue of identity becomes more problematic and unsettled as societies become more structurally differentiated, fragmented, and culturally pluralistic.” But while framing societies as identity groups can sometimes be problematic, the shortcomings lead to less confusion than those encountered for alternative approaches to distinguishing societies (sect. 2) and indeed are often enlightening, for example with respect to the origins and maintenance of modern societies. And so, a nation that challenges the description of a society as a landholding group with a clear membership can illuminate the factors that keep those individuals together or tear the society apart. Consider Iran, whose government counts Kurds as citizens even though it suppresses their identity (especially that of the Sunnis, who thus have greater motivation to rise up: Tezcür & Asadzade, 2019), whereas the Kurds think of themselves as a nation occupying what should be an independent homeland (Soleimani & Mohammadpour, 2019), making them in effect a “society in suspension” (Güneş Tezcür, personal communication, 2023). Even in nomadic hunter–gatherer societies, which lack internal ethnic group distinctions, differences in identity could accrue from place to place within a territory and cause clashing opinions about who belongs, presaging a permanent rupture (sect. 6).

Having a definition of society that is both unambiguous and utilitarian allows us to pick out deviations from what we might predict and investigate why they came to be. I briefly present a few cases here, then consider extreme outliers in how human populations have been structured in section 8.

For instance, modern countries stretch the definition of society put forward here because they confront forms of identity pluralism that were weak in the distant past, including undocumented, economically integrated occupants whose existence exacerbates clashes in perception of who belongs. I have argued (Moffett, 2019) that medieval European feudalism enabled lords to suppress their subjects’ solidarity with inhabitants of far broader areas – a kindred feeling that greatly simplified the later establishment of states to which people readily identified (Beaune, 1991; Gat & Jakobson, 2013; Hale, 2004; Reynolds, 1997; Weber, 1976).

For any definition, situations likely exist that force us to bend the rules imposed by its formulation. Nowadays large parts of the globe consist of nations whose borders were drawn up by outsiders, to which the people feel little affinity (e.g., Alesina & La Ferrara, 2005). Citizens in regions like Africa may retain a primary commitment to their original territory-holding tribes, making a country more of a loose confederacy than a nation. This description applies also to Switzerland, whose statehood rests on alliances between 26 local cantons speaking four languages. Each canton has a unique historical narrative and its own constitution, flag, and, for many, “national” anthem, such that Swiss citizenship “refers to one who can vote, and nearly nothing more” (Chollet, 2011, p. 746).

One outlier region is New Guinea, where central highland populations like the Enga are made up of multigenerational

societies (clans) that form defensive alliances called tribes (sect. 4). Until recently, the Enga had no sense of belonging together as “Enga,” other than feeling some closeness to those who shared their dialect. The cultural uniformity across 500,000 Enga is therefore remarkable. With almost no differences “marking” each clan (beyond certain conventions that come to the fore during marriages and rituals: Polly Wiessner, personal communication, 2024), their memberships are singularly reliant in the day-to-day on the recognition of individuals.

Modern nations present other challenges for the definition that speak to the changes that have shaped these societies over the centuries. The tendency of such groups as religions and even corporations to take advantage of identity signals of the same kind that I have argued arose originally from societies means a society is no longer the most salient identification for everyone (though saliency is an ancillary feature of societies, rather than a defining one: sect. 4). Furthermore, being multicultural, nations can be strained by the fact that few shared signals of identity are now formally required of all their citizens (sect. 2). As a result, people’s perception of who truly *belongs* is no longer clear and absolute, with minorities being registered as relatively peripheral and indeed seeing themselves as such (e.g., Devos & Banaji, 2005; Yogeewaran & Dasgupta, 2010). This must have been true in the distant past, for example for the hunter–gatherer individual who married into a neighbor society, except that present-day citizens readily distinguish entire communities within their society. And so it is that for nations, political autonomy, as it is expressed *at the level of the entire society* (sect. 2) by means of active governance in managing friction between internal groups, has become essential. That said, none of these embedded communities have ultimate control of their own group territorial space, so (even should they desire independence, as described for the Kurds) the only entity that merits the designation of *society* remains unequivocal.

What of other species? In my survey of vertebrates, carried out most thoroughly for mammals, I am surprised by how cleanly most species fit the proposed frame of reference on societies. As previously mentioned, geladas are an exception; despite their units being “probably homologous” (Bergman, 2010:3051) to baboon troops (with their mobile territories: sections 2H and 3), they do not maintain control of a physical space other than to drive off outsiders when they occupy an area with an exceptionally desirable resource, like certain seeds (a rare event for this grazer: Noah Snyder-Mackler, personal communication, 2023). Instead, all but a very few units disregard each other except to drive off outsiders when they pass across an area where they encounter something exceptionally desirable, like certain seeds (a rare event: Noah Snyder-Mackler, personal communication, 2023). Control of a group space appears inconsistent at best in a few other primates (e.g., red colobus, Graells’s tamarins, and squirrel monkeys), which resemble geladas in that troops can intermix with apparent indifference, or at least not socializing in an obvious way (Thomas Strusaker, Stella De La Torre, & John Terborgh, personal communications, 2023; though this possibly doesn’t apply to squirrel monkey troops, as these may draw close but still keep a short distance apart: Anita Stone, personal communication, 2023).¹³ In section 3.8 I argued for retaining control of space as part of the definition despite these outliers.

An example of a group that doesn’t meet our expectations of a society is a breeding congregation of green iguana, in which a male and up to eight unrelated females expel outsiders from a defended space. The groups are too temporary to be called

societies, however, going their own way after the breeding season to inhabit new territories with largely different sets of individuals each year (Gordon Rodda, personal communication, 2023; Rodda, 1992). Horses form bands that last indefinitely, even if individuals turn over as new members join and others depart or die, so the word “society” clearly applies; whereas plains zebras often disband with the death of their stallion, with just a few bands carrying on should successive new males seize the stallion position (Severine Hex, personal communication, 2023; Ransom & Kaczensky, 2016). As with the iguana, plains zebra groups appear to primarily serve a procreative function that (in the zebra, usually) pays off by being much shorter-lived than societies.

All that said, I have left certain concerns around “what is a society” open to the discretion of others. How few individuals can be considered a society? And how many generations need to be regularly involved? There might ordinarily be little utility in applying the word “society” to four individuals, yet at least one ant species has colonies that peak at that size (Delabie, Fresneau, & Pezon, 2000), and even the very last survivor of a human society will retain the identity associated with his or her people.

8. Might some human populations not live in societies?

A few human populations may not be structured into societies in the sense described here. Great Basin Indians such as the Shoshone lived as hunter-gatherers whose interactions could suggest that the drive to control land and have a group identity can break down under extreme conditions. The meager resources of the Great Basin are often described as having made land tenure so untenable that people of varied named affiliations moved freely across the same areas (Bettinger, 2015; Steward, 1938). I find more plausible those who argue that the tribes occupied well-defined spaces and sought permission to enter neighboring lands (Gregory Smoak, personal communication, 2023; Knack, 2001; Smoak, 2006), as was a widespread expectation between friendly hunter-gatherer societies (sect. 3.9).

More problematic is the view that the Shoshone, who differed in lifestyle over a wide area (being split by anthropologists into categories the Shoshone did not themselves recognize), identified not with other Shoshone but exclusively with close kin. Even though multiple “family clusters” came together to perform tasks or socialize, they are often said to present a “family level of sociocultural integration” (Bettinger, 2015; Steward, 1955, p. 101). And yet the Shoshone traditionally referred to themselves collectively as *Newe*, meaning “the people” (Smoak, 2007). Indeed, despite their lack of an overall political structure (as was generally true for nomadic hunter-gatherer societies: sect. 2), Murphy and Murphy (1960, p. 292) pronounced the Shoshone to be “a *people* in the truest sense of the word,” supporting the view of Lévi-Strauss (1956, pp. 277–278) that “in mankind, a family could not exist if there was no society.” Not only did precontact *Newe* speak one primary language (with dialectal variations, as was commonplace for hunter-gatherers), but they also shared unique beliefs, stories, ceremonies, and dances, retaining these norms despite often (but not always: Steward, 1938, pp. 207–209) being at peace with non-*Newe* occupying adjacent areas. Thus I agree with Richerson and Boyd (2008, p. 277) that the Shoshone were “part of a multiband community” even if its utility was “rather limited” given the strength of family ties in that society. Furthermore, the tribes of the Great Basin were separate entities in that while they could establish alliances, they

existed under no paramount, superordinate identity (*sensu* the ethnicities embedded in societies today).

I don’t see the Great Basin Indians as presenting a challenge to the perspective on societies here. The peoples spread thinly across Australia’s Western Desert were (and are) a more extreme outlier. Although they show numerous commonalities and a total population in the range of hunter-gatherer societies (1,500 at first contact), disagreements have existed about their sense of identity (compare the chapters in Peterson, 1976). Plainly their social networks were vast; as Tonkinson (1987, p. 206) concluded, “A certain degree of exclusiveness is essential for human social groups to maintain their sense of distinctiveness, but in areas as harsh as the Western Desert the need to assert a particular identity has to be balanced against the need to remain on good terms with neighbors.”

Yet being “on good terms” doesn’t translate into a sense of belonging together as a people; in fact, their only existing word to describe themselves collectively, “*Mardu*,” came into use after colonization. Over 40 dialects exist across the region, and although the interests of individuals of the same “dialect-named group” tend to align, no such group ever acts as a unit, let alone the desert inhabitants as a whole. Wholesale aggression occurs solely with tribes beyond the desert edge and has affected only those people who perchance live near this ecological borderland; but the Western Desert is so desolate that outsiders seldom find anything worth fighting over with the “*Mardu*.”

What anthropologists point to as the key source of identity in the Western Desert are “estates” of perhaps 30–100 or more members (Bird, Bird, Coddington, & Zeanah, 2019). An inquiry about someone else’s estate is the closest these people come to asking, “What is your country?” (Douglas Bird, personal communication, 2023), yet the individuals connected to these places do not constitute a corporate group. Estates are considered ancient, each claiming its own totemic founder as well as the right to artistic designs, rituals, song-words, and so on. However, these rights can be transferred elsewhere, such that what most persists are significant landmarks or objects within the core of the region most associated with an estate, to which those rituals and so on are applied. Although people may take pride in the cultural elements connected with their estate’s special locations, no estate has a “territory” *per se*, and many individuals spend much of their lives roaming far from that area and don’t maintain especially strong ties with others of their estate. In addition, estates are assigned at birth, so a person is not necessarily part of the same estate as any genealogical kin; and furthermore, people may claim membership in multiple estates, to which they show varying degrees of commitment.

Accordingly, individuals “do not belong to constituted and durable social entities that would also be landowners and descendants of the same mythical ancestor” (Dousset, 2019, p. 161). Their mode of life appears contrary to expectations from social psychology about the human drive to identify with bounded ingroups, societies, or otherwise; as well as contrary to usual ways of understanding inheritance, sense of family included: Although most hunter-gatherers classify nonrelatives as kin in establishing social relationships (i.e., they have nongenealogical, fictive kin), their biological parents nevertheless rear them; whereas at least half of Western Desert children are taken far from their biological parents to be raised by distantly related “social kin.”

The Western Desert lifeways are thought to have originated in recent millennia (Smith, 2013). An enigma for ethnographers is how unusual organizational systems like theirs arose from the societies of our ancestors, and indeed what those ancestral

societies originally looked like, recognizing that the variability of organizational forms is ultimately what we want to understand.

9. Conclusion: Why focus on societies?

In framing a society concept around “a membership recognized by its constituent individuals,” I have purposefully left open what precisely the members detect in identifying who belongs, as well as the purpose such an identification might hold. This approach yields a definition encompassing both humans, with their cultures and other “markers” of identity, intricate cooperation, and systems of political autonomy, and animals that may lack such attributes, and I trust will aid us in learning, among other things, how these vital human groups emerged from simpler ones and reveal what could be enlightening commonalities with other species.

Why put societies forward in promoting a discourse between academic disciplines? Discussions of societies – even the ramifications of how we define that word to indicate lasting groups to which the members are linked over the long term – lead us to deep questions about the human condition, including how people have organized their lives through the millennia and our place among the other animals dependent on such groups. The occurrence of enduring, clearly membered fission–fusion groups in our sister species, the bonobo and chimpanzee (whose societies, aka communities, are homologous to each other: Samuni et al., 2022), supports the thesis that communities of this description extended back to our common ancestor, well before world religions, cohabiting ethnicities, and most other kinds of social groups that are important to people’s lives today arose, making societies the original, and foundational, human group (sect. 4). That would mean that much of human intergroup cognition likely evolved in the context of societies. If so, once societies are distinguished generally, their boundaries identified, basic concerns about sociality, many first raised by Durkheim (1982) might be pursued as understandable principally within the societal realm; these include patterns of cooperation and conflict, management of cheaters, and the enhancement of complexity by means of reciprocal processes of integration and specialization across the membership. Even when the concept of *society* put forward here leaves something to be desired, as it does for Western Desert peoples who seem to lack a sense of collective belonging, the proposed definition serves as a reference standard for studying social change and transformation.

Many contemporary social troubles, and triumphs, may be an outcome of mental facilities adapted to tribal and hunter–gatherer groups, now repurposed (or exapted, sensu Gould & Vrba, 1982) in cobbling together multiethnic state societies that grew, step by step, from those smaller societies – nations that may function less than perfectly yet remain sufficiently sturdy to persist, and flourish, for generations. If societal memberships indeed come to be recognized as the precursors of other kinds of human groups that have grown in prominence within nations – races and ethnicities most profoundly among them – social psychologists, to name one academic discipline, will be able to better account not only for our identities and the social behavior that they engender but also for how and why these qualities emerged, expanding the potential scope of their inquiries and the applicability of their findings to fields like sociology and anthropology. Yet to date most aspects of psychology have only been investigated with respect to their expression in groups *internal to* societies.

A few psychological properties connected with group formation that have been looked at with reference to the modern nation

taken as a whole¹⁴ include entitativity (Callahan & Ledgerwood, 2016); perception of group essences (Haslam, Rothschild, & Ernst, 2000), of group membership (Devos & Banaji, 2005), and of outgroup warmth and competence (Fiske, Cuddy, & Glick, 2007); nationalism and patriotism (Smith, Oxley, Hibbing, Alford, & Hibbing, 2011); dehumanization or inhumanization (Leyens et al., 2003); social looseness (Gelfand et al., 2011); perceptions of immigrants (Esses, Jackson, & Armstrong, 2001); development of a child’s need to belong (Barrett, 2007); the emergence of ethnocentrism (Brewer & Campbell, 1976); and, of special interest given the uniqueness among the primates of anonymous societies in humans, the psychology around national symbols (Becker et al., 2017; Butz, 2009; Geisler, 2005; Hassin et al., 2007). Studies of these same subjects on hunter–gatherer societies could be especially illuminating.

One example of a trait of human psychology worth investigating at the level of whole societies was described by Brewer (1991), who proposes that people feel the greatest sense of security when they achieve an optimal level of distinctiveness from others. The societies of nomadic hunter–gatherers were small enough that membership in them was sufficient to provide people with that sense of balance between fitting in (being part of a group) and being different (in this case, from other societies); hence their members formed few more exclusive associations – they organized no circles of basket-weaving enthusiasts, for example. As societies grew, their internal complexity increased such that the members could be born into (e.g., an ethnic group) or choose from an ever-expanding array of groups and institutional entities that had no equivalent in the past, from political parties to religions, fraternities and poker clubs, multiplicitous ways of identifying with others that satisfy this need to belong yet be set apart from the crowd.¹⁵ One result is that more groups than ever before have come to compete with the society for our sense of group identities and loyalties.

The societies themselves arguably attain a middle ground of distinctiveness, also. To be a healthy society, as to be a well-adjusted individual, is to be both alike and different. Similarities between neighboring societies encourage positive interactions; differences give each a sense of pride, reduce competition (e.g., Milton, 1991), and bestow economic opportunity should a society offer something needed elsewhere. Such differentiation may be ancient. For Indigenous Australians, “each locality tended to make certain objects with a skill or flair which was admired in other localities” (bowls, jewelry, etc.: Blainey, 1976, p. 207). Perhaps specialization became commonplace for societies coincident with, or before, becoming the norm for individuals (Moffett, 2019, p. 235).¹⁶

Consideration of other species may bring fresh avenues of research to light. I conclude by calling attention to the one that intrigues me most: The sensitivity of humans to physical and behavioral markers as signs of shared group identity, a responsiveness apparently absent in most vertebrates, including all other apes. When our species first developed this hyperawareness to badges of membership is a mystery, given that it was a necessary but presumably fortuitous preadaptation to the emergence of modern states. Sociologists and political scientists predominantly view identities in flexible, instrumentalist terms, yet these fields could profit from exploring in greater detail how societies function by offering members a dependable sense of belonging to an abstract group that lets strangers feel comfortable together, while granting them the freedom to recognize and construct relationships with select others. Indeed, the view I’ve presented is that

the most fruitful interpretation of human societies is based not on traits like cooperation or culture, which manifest in a myriad of ways both within and between societies, but on identity, that bed-rock sense of belonging.

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Notes

1. Hence even outright aggression right up to and including civil wars (e.g., Wallenstein, 2012) can run rampant inside societies, such as the feuds between villages of the Yanomami, which I interpret as belonging to a single society, though subgroups have emerged (Ferguson, 2001; Lizot, 1984).
2. A “simple, immediate family” can reasonably be viewed as expiring when the parents die, making the stipulation that a society “perpetuate its population for generations” unnecessary. I include it given the possibility that a family could be interpreted as transferring across generations as one offspring after the next reproduces.
3. Recognition of kin, like that of society membership, can occur on an individual basis or by detection of shared traits (Penn & Frommen, 2010), though of course unlike societies, with their boundaries, genealogical relationships fade with genetic distance (sect. 5).
4. Schaller's quote is focused on lionesses – the sex with the longest-term commitment to a pride.
5. Furthermore, I have seen no evidence that an unfamiliar individual is shunned or attacked by chimpanzees *because* of its alien behaviors – being a stranger to them is sufficient.
6. Rather than perceiving societies in a strictly interpersonal way, could animals dependent on individual recognition have a concept of a society as a group? Could something (an “essence”) acting like a marker exist in their heads that our species has come to express, and recognize, with our bodies and behaviors?
7. Animals living in larger groups can show more variation in traits that signal individual identities, ameliorating the cognitive costs of individual recognition (Pollard & Blumstein, 2011). Hypothetically, a society that stays in a tight group could grow at least somewhat larger without a shared marker if its members are tethered together by being constantly sensitive to the presence of a particular animal, e.g., keeping a dominant individual's voice, as cue or an evolved signal, in earshot.
8. In the case of ant slaves, assimilation is biologically a dead end because, having been removed from the birth nest, they are unable to help their birth queen rear their genetic kin.
9. As ants are unable to distinguish between individuals, ant interaction networks are far simpler than those of vertebrates in not reflecting complex social choices – an ant can work with whatever individuals of the appropriate caste, such as workers or soldiers, are handy without having to navigate a history of personal relationships (Moffett et al., 2021).

10. Even ants often unrealistically (Moffett, 2012a) assumed to have unified colonies can show errors, or misalignments, in identity, but these probably rarely if ever escalate to cause their societies to sunder (e.g., Sanmartín-Villar, da Silva, Chiara, Cordero-Rivera, & Lorenzo-Carballa, 2022; Whitehouse & Jaffe, 1996), as they can in vertebrates.
11. This stronger identification occurs in part because social networks (which tend to include kin) stick together. Division is just one means by which new societies form (Moffett, 2019, pp. 246–248, e.g., Kowalewski, 2006).
12. The formation and division of factions has been investigated for other social groups (Sani, 2009).
13. In red colobus this obliviousness may represent an accommodation between troops that have recently divided (Colin Chapman, personal communication, 2024).
14. Most published works compare nations that differ markedly, such as Western vs. Asian countries.
15. Individualistic and collectivist societies differ in how people attain optimal distinctiveness (Triandis, 1995, p. 10).
16. Of course, nomadic hunter–gatherers recognized differences in abilities, but job specialization other than by sex or age was rare. Moffett (2019) carries these arguments further, describing the balance ethnicities in modern societies achieve between being seen as part of the greater society yet remaining culturally distinct.

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