

Revisiting the culture–social structure duality debate through the lens of personal networks

Original Study

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Abstract: In this article, we address a long-standing debate in social science about whether culture or social structure provides the best lens for understanding human behavior and how that scales to the level of social institutions. We argue that the notion of personal networks offers new insights into this culture–social structure dualism. We demonstrate this by examining early human systems based on kinship and complex systems pointing to the research of anthropologists working in southern Africa who created the concept of personal networks as a necessary tool to understand newly emerging social systems under British colonial rule.

Keywords: Culture–social structure • Personal networks • Manchester School • Multilevel networks • Cultural institutions • Kinship

1. Introduction

The concepts of *culture* and *social structure* were fundamental to the onset of the social sciences in the late nineteenth century. Edward Burnett Tylor, one of the first anthropologists, defined culture as “that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society” (*Primitive Culture*, 1871). Since the term was first introduced, numerous scholars have put forward alternative or complementary definitions of culture (Baldwin et al., 2006; Kroeber & Kluckhohn, 1952). These definitions typically aim to refine the notion of a “complex whole,” often at the expense of the “member of society” component. In a parallel development, Herbert Spencer (*The Study of Sociology*, 1873) proposed the concept of social structure as an analogy to the organs of a living organism performing functions to keep it evolving and alive. Likewise, the list of uses and meanings has also been extensive, including the elaborations made by the Functionalistic School best represented by the works of

Bronislaw Malinowski and A. R. Radcliffe Brown (for a review, refer to Martin, 2009).

Some scholars, such as Siegfried F. Nadel (Dimaggio, 1993; Nadel, 1957), as well as Eisenstadt (1989), Emirbayer and Goodwin (1994), and Mohr and Duquenne (1997), highlighted the tension between the two approaches to the study of human societies (i.e., focusing on the description of either the cultural or the social dimensions), describing it as the culture–social structure duality. This dichotomy arises from the challenge of simultaneously considering culture and patterns of social relationships when studying social phenomena, each requiring different methodological approaches (i.e., analyzing meanings, qualities, and attributes versus formal analysis of roles and positions). This debate resonates with the large literature addressing the dualism of *structure–action* (Giddens, 1979, 1984).

Mary Douglas and her colleagues (Caulkins, 1999; Douglas, 1996; Mamadouh, 1999; Rayner & Gross, 1985; Spickard, 1989) proposed one of the few attempts to reconcile the culture–social structure debate with their Grid/Group theory. This theory posits that all human societies can be meaningfully classified along two axes: *grid*, which refers to the level of control over shared

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classifications of the world, including the categorization of individuals (“what can I do”); and *group*, which refers to the level of control over an individual’s membership in bounded groups (“who am I”). The two coordinates intend to be interrelated or “compatible” in a way that makes it possible to find a correspondence between culture and social structure.

The development of Social Network Analysis (Freeman, 2004; Wellman & Berkowitz, 1988) contributed largely to the formal measurement of social structures in many realms of society, but it also contributed to the intellectual agenda addressing the culture–social structure duality. Indeed Social Network Analysis looked for relational patterns in the realm of cultural manifestations (one of the aims of French Structuralism, refer to Levi-Strauss, 1995), while developing concepts such as “netdom” (the simultaneous coalescence of networks and identities, refer to Fontdevila & White, 2010), “weak culture” as the set of norms that allow us to navigate among structural holes or fragmented networks (Schultz & Breiger, 2010), and of course, the concept of the “social field” (Bourdieu, 1977; Fligstein & McAdam, 2011; Serino, 2021). The concept of “embeddedness” may also play a role in this debate (Granovetter, 2018). A common theme in this intellectual debate is the hypothesis that both culture and social structure are interrelated, or, using the Mary Douglas term, “compatible,” through mechanisms that to date are not fully understood. In the words of McLean (2016: Chapter 8):

While I am skeptical of strong claims that particular social structures and particular cultures entail each other, there are many intriguing examples where they do seem to go together, to the point where we can talk about *network culture(s)*.

In this article, we aim to contribute to the conceptualization of the culture–social structure duality by pointing out two fundamental issues. On the one hand, kinship-based social systems demonstrate a correspondence between social structures and culture. On the other, more complex social systems demonstrate the multilevel nature of both culture and social structure. To accomplish this task, we use an egocentric approach, looking first at ego within societies structured by kinship and next at ego in complex or organizational societies (Perrow, 1991) as the center of a network of personal relationships whose groupings can be considered as imprints of a variety of institutional spheres along with socioeconomic backgrounds, life-course dynamics, and other factors.

To illustrate our argument, first, we will address the issue of the origin of institutions in human societies from

an evolutionary perspective as did Tylor. We will provide ethnographic examples of the direct correspondence between cultural and socio-structural phenomena. It will become clear that ego is part of a kinship web that accounts for a great deal of cognition and behavior, in a way closely related to the “mechanic solidarity” posited by Durkheim (*De la division du travail social*, 1893). In complex societies, ego is embedded in a stratified social structure and affiliated to a variety of institutions and groups, in a way closely related to the “organic solidarity” concept, but also to the “web of group affiliations” of Simmel (1964). To illustrate the latter point, we will introduce the emergence of the personal network concept as a response to the shifting object of study of British Anthropology from tribes to migrants in urban settings, where kinship gave way to the socio-cultural complex under colonial rule. Next, we will review the variety of factors explaining the structure and composition of personal networks and their dynamics, arguing that within this complexity, it is still possible to trace the imprints of the cultural institutions in which the individuals are embedded, as well as the complex social structures. Personal networks are a multi-level phenomenon that bridges the culture–social structure dualism.

2. The institutional sphere of kinship

2.1 Humanity from an evolutionary perspective

The *Social Brain Hypothesis* (Dunbar, 1993, 1998; Meguerditchian et al., 2021) suggests that the notably large neocortex and other brain regions in hominids evolved in response to the demands of maintaining larger social groups and more complex forms of socialization in adaptive selection. For human beings, the development of larger brains has led to longer durations of infancy, childhood, and adolescence before reaching early adulthood. This extended developmental period is attributed to the need for the sizable brain to pass through the restricted space of the female cervix during childbirth. Consequently, as the brain size expanded, it required a significant portion of its development to occur postnatally, necessitating extended parental care. Furthermore, the characteristic role-playing activities of young individuals are crucial in developing the interpersonal skills needed to navigate through larger-scale social structures that extend beyond

their immediate communities (Carlson et al., 2013). In summary, the adaptive benefits of a larger brain are evident: it fosters the development of more sophisticated emotions, higher intelligence, advanced language skills, and a richer culture within the context of larger social groups (Abrutyn & Turner, 2022).

This capacity of human beings to shift between scales (immediate and “imagined communities”) is what separates human social cognition from that of other primates (Graeber & Wengrow, 2021). One explanation for this unique capacity is that human ancestors were organized primarily around mostly *weak ties* and episodic encounters to keep a low density in arboreal areas in African forests similar to what Fox observed in chimpanzee coalitions (Fox et al., 2023). Once the climate became more arid, these hominids were forced to develop strong ties and communities in open habitats to face new predators without a strong biological basis. In the words of Abrutyn and Turner (2022, p. 22):

Consequently, all social structures among hominins and then humans ... do not have a strong biological basis. They are constructed and built around the power of emotions to create social bonds and commitments to others and to socio-cultural formations. Thus, the first institutions, including kinship, were not driven by biologically based drives but, rather, by other capacities, traits, and behavioral propensities that, when enhanced by emotions, allowed early hominins and then humans to get sufficiently organized to survive the rigors and dangers of open- country habitats.

These first institutions were the segmented band and the reciprocity (Molina et al. 2017) that lasted for millennia. The typical nomadic hunter-gatherer band is a fluid bilateral grouping of nuclear families based on a sexual division of labor that shares periodic rituals and exhibits a strong pattern of cooperation and food-sharing. Its typical size is about 150 individuals. There are two complementary explanations for this phenomenon: organizational and cognitive. Regarding the former, Russ Bernard and Peter Killworth came up with the number 140 as the threshold that any group bears before splitting into subgroups and developing a formalized hierarchy (1973).

The latter explanation for the typical size of these bands may be related to the cognitive capacities mentioned above that set the number of active social ties to 150 (Dunbar, 2018; Hill & Dunbar, 2003). In addition, the tendency to fission depending on the availability of resources (Lee & DeVore, 1968), combined with the nomadic pattern and the orientation to cooperation, produced large interaction networks of genetically unrelated adults spread over vast geographical areas (Bird et al., 2019; Lee, 1972).

Once this first institutional arrangement of human populations was created, it provided the structural scaffold for subsequent developments, encompassing thousands of individuals and the further development of complex societies.

2.2 Kinship as a sociopolitical organization

Lévi-Strauss (2002) famously posited that the prohibition of incest was the first cultural institution that allowed the transition from “Nature” to “Culture” (the human world as we know it presently). Actually, the restriction on the choice of a mate based on the propinquity of relationships (Lowie, 1920) is a positive rule to marry outside the group, typically the nuclear family, a rule known as exogamy. This principle, along with the rule on residence (matrilocal or patrilocal, with many variants), the unilineal descent (the identification of kinship line to form lineages and segmented groups as clans and moieties), and the organization of power and authority around elders and tribal territories (Fortes & Evans-Pritchard, 2015) gave birth to the kinship sociopolitical organization, typical of stateless societies. This complex structure of prescribed relationships influenced other institutional spheres like the economy (through the control of the workforce and access to proprietary natural resources), polity (through the marriage exchanges managed by elders), and religion (through the cult to ancestors, the rites of passage, and the mythology). Without denying the individual agency, initiation rituals, prescriptive or preferred partners, and dependence on kinship groups to access economic or symbolic resources like secret knowledge, among others, limit personal freedom (Murphy, 1980). Likewise, ego’s position is also classificatory, meaning that other egos, often from different groups and generations, share part of their obligations and rights. In conclusion, kinship systems are more suited than personal networks in these societies to understand the ego’s world of social relationships (Figure 1, where “mothers” and “fathers” may occur in two generations, or “brothers” and “sisters” can be also “cousins”).

2.3 Three examples of culture-structure correspondence

To illustrate our proposal about the correspondence between cultural phenomena and social structures based on kinship, we will present three cases: the bushmen of the Kalahari Desert, the Iatmul people of Papua New Guinea, and the Rabari, a semi-nomadic pastoralist people in Western India.

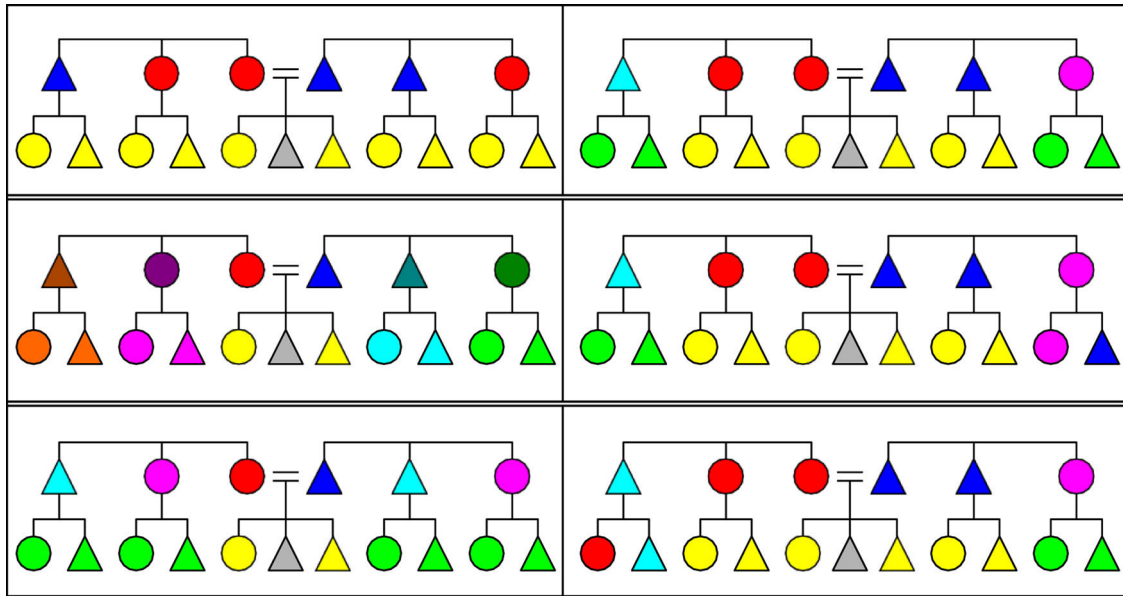


Figure 1. Several kinship terminology systems (Creative Commons resource).

Source: <https://www.coursesidekick.com/sociology/study-guides/boundless-sociology/family> [visited 7-1-2024].

The G/wi Bushmen inhabit the central desert of Kalahari (Silberbauer, 1961, 1981). During the 1960s, some of the G/wi spent the rainy season and the following months hunting and gathering vegetables in the desert and the dry season working for European cattle ranchers. The rest of the G/wi stayed in the desert and lived in their bands' formal territories. The only water supply was rainwater collected in pans or ponds that evaporated quickly. This fact explains why the people of the band lived in smaller groups around nuclear families only reuniting when water availability allowed it. The G/wi cultivate strong cooperation and leadership control. In this regard, marriages within the band and alliances through marriages with other bands should be present to ensure the band's reproduction and assistance by other bands in case of need. Divorce or widowhood is frequent (probably about $\frac{1}{4}$ of the marriages), and in these circumstances, the elder brothers should marry these women in a polygynous marriage. The kinship system provides the means to achieve this balance through the automatic adscription of joking and avoidance relationships among all members. In the words of Silberbauer (1961, p. 354):

All kin are in either a joking or avoidance category. Joking partners may swear at and insult each other; speak quite freely obscenely and play with and tease each other and may freely use each other's property. If of the same sex they hunt or gather plants together. A young man and a girl who are joking partners are considered preferential

marriage partners. The principle of the combination of alternate generations operates as the general rule; if I joke with an individual then his grand-parents and grand-children will also be my joking partners but his parents and children (i.e. his senior and junior proximate generations respectively) will be in the avoidance category. Persons in this category are spoken to with some reserve and respect (the honorific dual being used when addressing older persons) and their possessions are not even touched without prior permission. Marriage to such a person would be considered incestuous and is unthinkable.

This kinship system provides a sophisticated framework adapted to the desert hardships, allowing a great deal of friendship while leaving room for marriage and, depending on the circumstances, levirate (the widow marries the deceased husband's brother) and sororate (the husband marries the deceased wife's sister). Drawing on this case, Hage (1976) analyzes the structural traits of the system by considering a set of overlapping triads of ego-centric networks that involve ego and two other kinsmen, also related among them, with both joking and avoidance relationships among their members. The conclusion is that despite the overall balance, a tendency to clustering does appear (for a critical review of this paper, refer to Martin, 2009: Chapter 2).

Another example of a direct correspondence between cultural phenomena and social structure may be found among the Iatmul people of Papua New Guinea (Bateson,

1958). At that moment the Iatmul were agriculturalists, proud head-hunters, living along the Sepik River in big villages ranging from several hundred to a thousand. The kinship system is patrilineal, forming two totemic moieties subdivided into phratries and clans, complemented by cross-cutting initiatory moieties subdivided into age grades. In this context, the Naven ceremonies are a periodic celebration of the *laua* achievements (sister's child, either boy or girl, man or woman) by its *wau*. These achievements may be the first killing of a game, the assassination of a foe, the birth of the first child in the case of a woman, or changes in social status in general. A striking trait of these ceremonies is that the *wau* and his occasional helpers disguise themselves with poor women's dresses and perform hilarious behaviors, like stumbling over a canoe or awkward imitation of women's activities. The special relationship between *laua* (nephew or niece) and the *wau* may also be extended to classificatory partners. Gregory Bateson, in the Epilogue written in 1936, reflects upon the Naven ceremonies (1958, p. 261):

The matter became more serious when I asked why it should be the mother's brother who performs those antics and not the father. Again I took refuge in the terms "formulation" and "structure". The kinship system, "built up" of formulations was part of the structure of society, and the *naven* was "built upon" this structure. It appeared, then, that there was another "thing" called "structure" which mattered in the culture. ... I even went so far as to think of the structure as a network of channels which guided the ethos, and were shaped by it.

In this excerpt, Bateson reflects on the co-constitution of culture and structure when looking at kinship as the scaffold of a cultural phenomenon like the Naven ceremony.

The semi-nomadic pastoralist Rabari offers us the final example of the correspondence between social structure and culture (Salpeteur *et al.*, 2015, 2016). The Rabari community, around 600,000 people, is primarily located in Rajasthan and Gujarat, India. In recent decades, this pastoralist group has undergone significant changes due to various factors, including the India–Pakistan border and the Indian Green Revolution. These shifts have made their traditional semi-nomadic pastoralist lifestyle more challenging. Nowadays, the Gujarat Rabari exhibits varying levels of settlement and types of occupations. While traditional camel-keeping has declined, many have settled and diversified economically, with small livestock-rearing prevalent in Kutch and Saurashtra. This often involves seasonal migrations influenced by the monsoon climate.

The social structure of the Rabari community changes depending on the migration phase. During migration

periods, which can range from 1 to 12 months annually, their social organization revolves around two primary units: the household, consisting of the nuclear family and some temporary workers, and the migrating group, or *dang*. The *dang* is a larger unit that combines several households under the guidance of a leader, known as the *patel*. Typically, the *dang* is the aggrupation of households from the same patrilineal lineage segment. Lineages form part of geographically dispersed clans. In this context, the authors explore the factors explaining the distribution of the Traditional Ecological Knowledge (TEK) among the Rabari. Among the different factors, the social structure based on the *dang* explains this variation (2014, p. 482):

As *dangs* are mainly formed by kin, the bodies of knowledge set during the migration process, be it experiential or socially transmitted knowledge, are mainly shared across kin-related individuals. The migration groups are stable through years and rarely split. Thus, through these long-lasting relationships bodies of knowledge are likely to be transmitted from one generation to the next following a patrilineal descent. Our results suggest that this process leads to the emergence of diverging bodies of knowledge between descent groups (lineages and segments of lineages). Thus, across an apparently homogeneous community in which most individuals are involved in similar uses of natural resources, patterned variations of TEK related not to individual-level characteristics but to social organization might emerge.

Again, the variation of cultural contents like traditional knowledge about the environment is strongly related to social structure, in this case through corporative kinship groups. There are many other examples.

We have established the correspondence between kinship structures and diverse manifestations of cultural traits (either joking/avoiding patterns, transversing ceremonies, or distribution of ecological local knowledge). We now turn to the interplay between culture and social structure in complex societies where kinship is no longer the best way to study the ego's sociocultural context.

3. The emergence of the "personal network" concept

In the 1940s, the British anthropological "Manchester School" led by Max Gluckman developed the concept of the "personal network" as a way to capture the complexity of relationships (kin and non-kin-based) that occurred in the new mining cities of the Copperbelt in Africa, where millions of people from a multitude of different tribal origins lived in vast shantytowns under colonial rule

(McCarty et al., 2019). The methods developed by the British structural-functionalists to study tribal societies as a set of interrelated institutions in a territory were no longer suited to explain this new reality. Building on kinship analyses, these anthropologists developed a new set of “complementary” tools to capture the complex interactions across kinship and linguistic boundaries in urban settings. Clyde Mitchell published these early theoretical and methodological advances in his influential book *Social Networks in Urban Situations: Analyses of Personal Relationships in Central African Towns* (1969). In the introductory chapter, Clyde Mitchell introduced the concept of “ego-centered networks” to describe the social complex surrounding a focal individual, no longer centered on kinship. Interestingly, this perspective allowed for a new understanding of communities as combinations of these ego-centered networks more than the co-existence of normative groups.

To our knowledge, the first personal network visualization was produced by Arnold Epstein in a chapter of the same book about gossip as a combination of kinship symbols and a set of relationships among neighbors with the same or different cultural backgrounds (Figure 2).

Epstein placed the ego and his wife at the center of the diagram, distinguishing between the inner circle and the “extended network,” also instrumental in the gossip chain. Some years before, John Barnes, building on the same idea of multiple affiliations, was the first to employ the term “social network” to describe the set of informal social relations in a Norwegian village that bridged the different

organizations to which individuals were affiliated (Barnes, 1954). These theoretical and methodological developments made apparent that kinship systems and classic institutional analyses could no longer describe the ego’s social world in complex societies but that it was necessary to adopt a different approach.

While many egocentric networks focus on a single social setting (like social support) or as a part of a whole network (Perry et al., 2018), personal networks capture the diverse social settings in which the ego is active (e.g., family, work, church, sports, and so on). As an illustration, Figure 3 displays the 45-alter personal network of a Dominican male in Barcelona Spain.

These rich structures, including the clusters loosely related to social settings or foci of interaction (Feld, 1981; Small & Adler, 2019), can be understood as the outcome of various factors, including the imprint left by cultural institutions.

4. Personal networks as imprints of both cultural and social factors

In contrast with the ego’s position in a society organized around kinship structures, personal networks are unique. In complex or organizational societies ego has kinship ties but also is affiliated with a variety of groups or

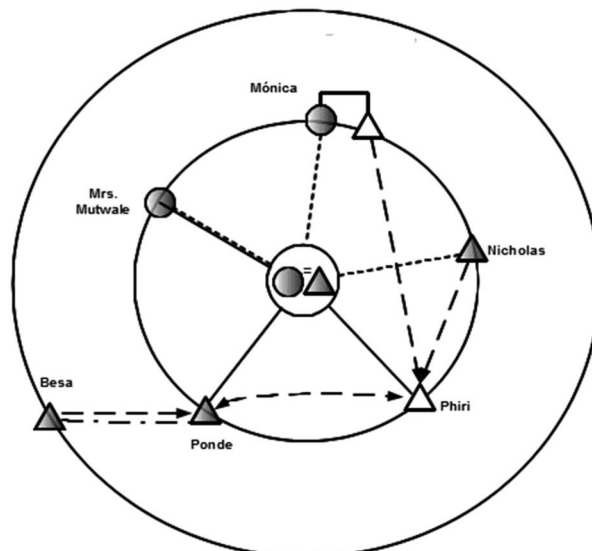


Figure 2. Network of gossip. Color = same linguistic group. Dashed line = same church. Solid line = same school. Arrows = gossip direction.

Source: Data from McCarty et al., 2019.

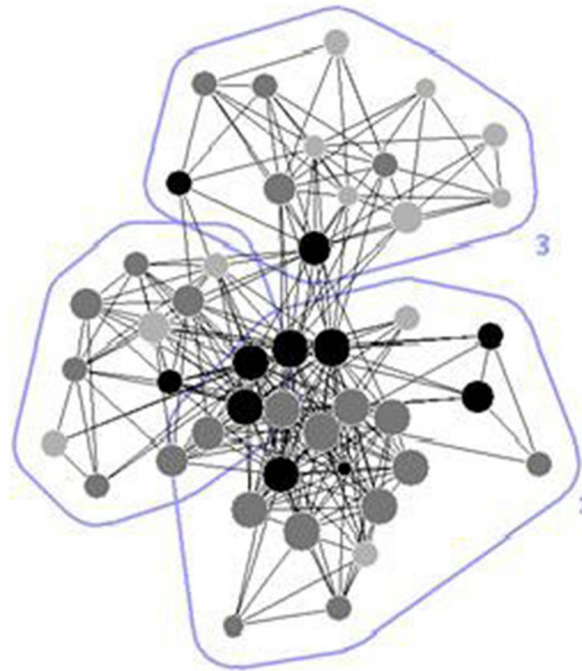


Figure 3. The personal network of a Dominican male in Barcelona. Color gradation refers to the emotional closeness, and the different clusters numbered to different social settings (family ties, job, and softball).

Source: Data from McCarty et al., 2019.

institutions, which in turn, are connected among them through interorganizational ties. These networks of individuals and organizations are layered with different subcultures associated with each of them. Thereafter, the rich social structures found when measuring personal networks can be conceived as the outcome of various factors, represented parsimoniously in Figure 4, namely, (1) cultural institutions, (2) the ego's position in the socio-economic structure, (3) the ego's biography and agency, (4) alters' personal networks dynamics, (5) network dynamics, and finally (6) societal structural changes. Let us now discuss these factors.

4.1 Cultural institutions

We mean by “cultural institutions” the mainstream set of values, models, and rules shared by people from a national group in all its diversity. These institutions persist for a long time, reproduced by the enculturation of new generations, laws, customs, and other means. A key element of cultural institutions is people's emotional attachment to the core values that these institutions represent (Inglehart, 2018; Kilby, 1993; Rokeach, 1973). Comparative studies of

“national cultures” (Berry, 1969; Taras et al., 2009) typically produce classifications along “cultural dimensions” (Hofstede, 1984). In particular, these studies classify cultures into “individualistic” and “collectivistic” categories, including “tight” and “loose” cultures (Gelfand, 2019; Gelfand et al., 2011, 2021), among others. Interestingly, cultural institutions influence the personal network composition and structure in a way that makes it possible to find a “cultural signature” or typical patterns from a given nationality (Molina et al., 2022). Tylor's original definition of Culture as “that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society” resonates deeply in this conceptualization. We suggest that these institutions constitute a primary layer of what we know as “Culture.”

In addition to these cultural institutions, individuals in complex societies interact in different spheres of activity through schemata (Boutyline & Soter, 2021), frames (Goffman, 1974), and cultural repertoires (Swidler, 1986) that give meaning to the social interactions in everyday life (Fuhse & Gondal, 2024; Patterson, 2014). These elements constitute a secondary cultural layer, loosely related to the first one, which informs action in spheres of activity labeled as

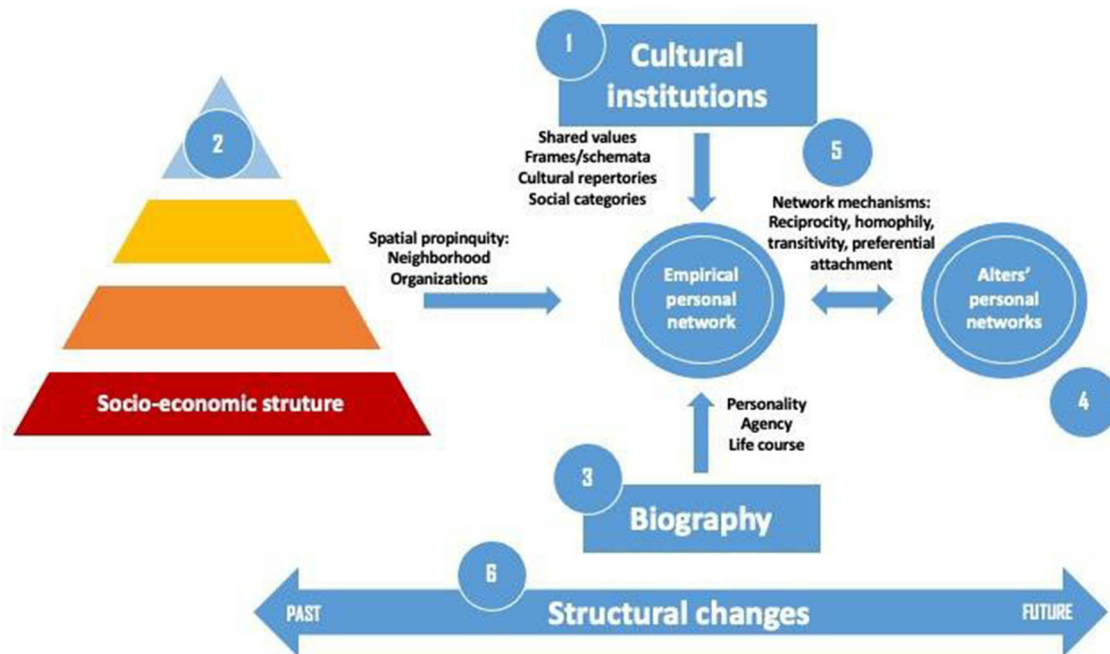


Figure 4. Factors affecting empirical personal networks.

Source: Author's contribution.

“social fields,” “action fields” (Fligstein & McAdam, 2011), “netdoms” or “networks,” among others. From here on, we will use the generic “social field” denomination to indicate a set of connected people or organizations with some degree of coordination and often with a specific set of schemata shared by their members that allow internal communication or negotiation.

4.2 Socio-economic structure

The second source of influence on personal networks is the socio-economic structure. Ego's emplacement in that structure will influence the economic, human, social, and cultural resources available for social action. The concepts of social class (Savage, 2015), human capital (Coleman, 1988), and the theory of social capital (Lin, 2001), among others, describe the unequal structure of opportunities, organizational fields, and social groupings available to the ego. Socialization within neighbors, schools, organizations, churches, and other domains will influence the composition and structure of ego's personal network (forming for instance clusters of classmates or job partners). Interestingly, specific cultural configurations attach to these positions, like class “tastes” or “organizational cultures” (Bourdieu, 2006; Chao, 2000).

4.3 Biography

Personal networks change through the life cycle through personal choices and a series of events labeled as “transitions,” both normative and non-normative (Bidart et al., 2020; Weiss et al., 2022), like getting a job, marriage or divorce, having a child, or experiencing health issues. From a social support perspective, Robert Kahn and Toni Antonucci (Kahn & Antonucci, 1980) posited the *social convoy model*, a company of coetaneous alters that adjust their supportive roles depending on the ego needs along the life cycle. This literature emphasizes the relevant changes in size, structure, and composition provoked by life-course transitions, some of them critical, like the loss of contacts provoked by unemployment (Jackson, 1988), widowhood (Hollstein, 2023), or chronic illnesses (Fernández-Peña et al., 2020).

4.4 Alter's personal network dynamics

In addition to the variety of sources that influence ego's personal dynamics, the concept of “Linked lives” (Elder, 1994) posits that life events impact egos' personal networks and also influence the people (“alters”) connected to them. This fact implies that life events experienced by

these alters, such as relocation, entering partnerships, becoming parents, or death, have consequences on the individual's network of relationships. These events can lead to the inclusion of new connections (like in-laws), the necessity to coordinate care for dependents across borders, or the severing of ties due to the passing of a family member, among various other scenarios.

4.5 Network mechanisms

Networks also change through network mechanisms like reciprocity, transitivity, or preferential attachment (Fuhse, 2021; Snijders *et al.*, 2010). For instance, strong ties with former schoolmates may lead to introducing them to family members, creating new ties. These mechanisms should be taken into account when analyzing personal networks.

4.6 Societal structural changes

Last but not least, societal structural changes like new political regimes, internal or external conflicts, or economic crises, leave a profound footprint on personal networks. For instance, the process of European Integration and the Erasmus program, which was oriented to foster student exchanges among the different countries, led to profound changes in the personal networks of the students participating in the program (de la Rúa, 2004). The Islamic Revolution in Iran (1979) enforced strict gender segregation in public areas, and compulsory *hijab* for women, among other measures. These policies enforced the role of family and the home as safe spaces for open interaction and leisure activities, increasing the proportion of kin in the personal networks of both men and women (Bastani, 2007).

In sum, personal networks, understood as samples of social structures, are the dynamic outcome of multiple factors. As we argued before, personal networks, compared with kinship structures, cannot easily be connected with cultural phenomena, except maybe by the imprint left by institutions. Before discussing how this link can be made, it is necessary to understand the multilevel nature of the culture–social structure duality.

5. The multilevel nature of culture and structure

So far, we have described personal networks as flat structures connecting a set of alters with attributes such as

gender, level of education, type of relationship, or emotional closeness. A more realistic way to conceive of personal networks is by distributing these alters in a multilevel structure based on status to account for inequalities. Figure 5 depicts a personal network with a centrality layout (based in this case on emotional closeness to ego) and a status layout, with alters arranged in different layers.

In complex societies, ego and alters play a role in different and layered social fields (school, workplace, religious community, clubs, and associations, among others). Personal networks exhibit a crosscutting nature, intersecting with the social fields.

Among the different social fields that constitute the social world, professional occupations, often integrated into organizational bureaucracies (Perrow, 1991), represent a key element. In this vein, Emmanuel Lazega developed the concept of “vertical linchpins” (Lazega *et al.*, 2013), or persons that simultaneously play different roles in two-layered organizational fields. An example of this may be the representative of a research center in the network of research institutions, a field that may develop policies for the sector. Through this dual role, the person may develop strategies to “synchronize” the aims and dynamics of both levels to take advantage of the situation (Lazega, 2016). Drawing on this concept, we can conceive alters in personal networks as members of different social fields, like formal or informal associations or organizations, which may overlap or rank in layers.

Regarding the cultural dimension, we can also distinguish between two main layers: the cultural institutions' layer and the layer of schemata, frames, or cultural repertoires activated for specific situations. While the layer of cultural institutions provides the social categories and legitimate types of relationships for primary groups (family, friend, co-worker) along with their corresponding set of mutual expectations (Fuhse, 2009), the layer of schemata, frames, or cultural repertoires provides the means for meaningful interactions *within* social fields. Interestingly, both layers can be conceived as networks of items in themselves. These networks of values, schemata, or rules can be activated selectively depending on the situation in specific “configurations” (Patterson, 2014). However, it is reasonable to expect a higher density in the former layer and more fragmented networks in the latter. The reason is that cultural institutions build around a set of core values (e.g. freedom, family, and ethnicity) leaving, at least in theory, small room for contradiction. Conversely, the schemata, frames, and cultural repertoires activate and adapt to ad-hoc situations, giving room for clusters oriented to inform the action not necessarily coherent among themselves.

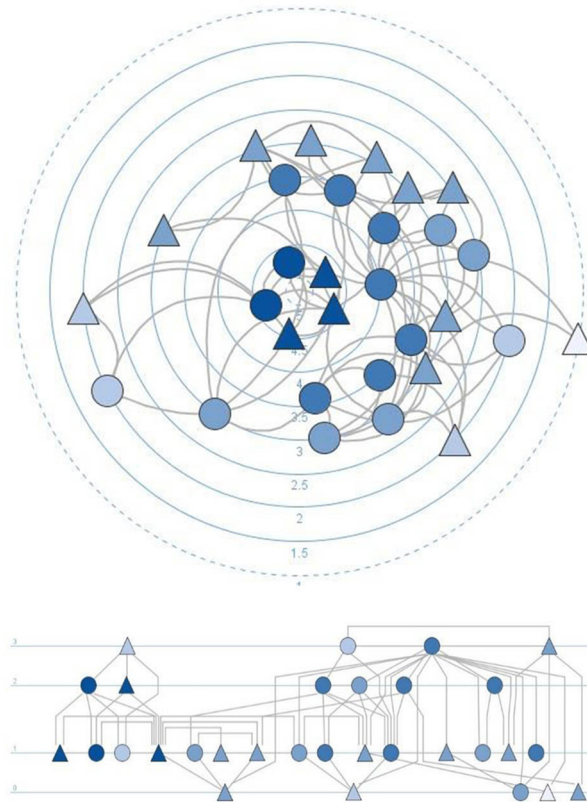


Figure 5. *Top:* Personal Network in a centrality layout with the degree of emotional closeness perceived by ego. *Bottom:* the same personal network arranged in different levels corresponding to a ranking of statuses. In both cases, color graduation also represents closeness, with triangles and circles representing males and females, respectively (drawings produced with visone.info).

Source: Author's contribution.

Both “Culture” layers are related to some extent, but because of the pragmatic orientation of the latter layer, the correspondence may be weak, except for legitimation purposes. One possible explanation for this weak integration is that social fields are framed by regional and global socio-economic factors and regulations, like finance, commerce, transportation, technology, audiovisual global industry, and tourism to mention some of them. This double tendency to reproduce cultural institutions and, at the same time, to react dynamically to the practical demands of the global environment may explain why cross-cultural research finds stable configurations of regional cultures (Obradovich et al., 2022), at the same time that communication technologies, organizational standards, sports, and arts may give the impression of living in a “Global Village” (McLuhan & Powers, 1989).

6. Conclusion

Looking at the culture–social structure duality through a personal network lens helps to understand the relevance

of the foundational ideas of Social Sciences, like the transition from “mechanic” to “organic” solidarity of Durkheim, and maybe also the Ferdinand Tönnies distinction between “*Gemeinschaft und Gesellschaft*” (*Community and Society*, 1887). Looking at the human social organization from an evolutionary perspective, we could argue that the culture–social structure duality is more apparent in societies organized around kinship than in complex societies. We argue that the same concept of “personal networks” was developed by the Manchester Schools as a way to study the complexity that kinship systems could no longer capture. In this new reality, ego participates in diverse social fields while cultural institutions reproduce primary grouping and normative sets of relationships. We further argue that empirical personal networks can be conceived as the outcome of a variety of factors, including cultural institutions. Interestingly, the fact that it is possible to find a “cultural signature” on these networks suggests that cultural institutions may play a different role than social fields in the culture–social structure duality. Drawing on this idea, we suggest that the multilevel nature of social structures also applies to culture.

We finally address the issue pointed out by Mclean at the beginning of this paper, arguing that, indeed, in complex societies, it is not possible to find a direct correspondence between culture and structure but that this may not be the case for societies organized around kinship. In addition, we agree with his statement that it is possible to find “culture in networks”: in our proposal, the specific configurations of schemata, frames, and cultural repertoires activated for pragmatic interactions within the diverse social fields that characterize our societies.

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