

# Networks, Interactions and Relations

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As this book shows there are many varieties of relational sociology. In this chapter I outline the approach that I have been cultivating in recent years (Crossley 2011, 2014, 2015b, 2016), briefly sketching certain central claims of that approach whilst also developing a few new strands. Specifically I want to: (1) further open up the philosophical underpinnings of my approach; (2) consider some of the mediations which extend social interactions and relations through time and space; (3) stress the need for relational theory to be complemented by relational methodologies (and empirical research); and (4) consider briefly what this might entail. The chapter tackles each of these aims in turn. I begin, however, with a summary of the central claims of my approach.

## 1 RELATIONAL ONTOLOGY

Relational sociology conceives of the social world as a network of interaction between (in the first instance) human actors. Interactions can be ‘one shot’, that is, between actors who have never previously met and, as far as they know and can realistically anticipate, will never meet again. In many cases, however, actors have a history of interaction and anticipate that they will interact again, and this affects their present interaction. In this case we may speak of a relation or tie between them. A tie or relation is a lived history of interaction between two actors, coupled with mutual anticipation of future interaction, which affects current interaction between them.

Most positive interaction involves an exchange of ‘goods’, albeit often intangible.<sup>1</sup> Actors benefit from contact with one another, they enjoy interacting, and this incentivises future contact between them. This, in turn, generates interdependence and thereby a power balance, in Elias’ (1978) sense, between

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them. Each depends upon the other for certain goods and is inclined to accede to the will of the other if they believe that not doing so might lead to the withdrawal of these goods. The strength of this power depends upon the value of the goods in question and the ease with which they might be found elsewhere. Where the value is low and/or the goods are easily procured elsewhere the power is slight. Similarly, the degree of asymmetry can vary considerably. When each depends equally upon the other power is balanced. However, it is still present. Most if not all social relations are characterised by a balance of power (*ibid.*).

I have prioritised interaction between human actors. However, certain patterns of interaction and relations between human actors can give rise to higher order, ‘corporate actors’, such as governments, trades unions, pressure groups and business corporations. Relations between such corporate actors are also integral to the relational conception of social life. Corporate actors qualify as actors to the extent that they generate decisions in a way which is irreducible to the human actors involved in them, have mechanisms for the implementation of those decisions and (in many cases) enjoy a legal status and possession and control of resources which are, again, irreducible to their human members (Hindess 1988).

Actors interact with objects in their material environments, use and transform those objects/environments and are constrained by them. Human relations are, as Merleau-Ponty (1971) puts it, ‘mediated by things’ and we must take account of this. Given that sociology is the study of human societies, however, and given both the importance that we attach to meanings, culture and points of view and the fact that we only have access to human meanings, culture and points of view, I do not conceptualise such non-human objects as actors, in the manner of actor-network theory (e.g. Latour 2005). Rather, I view them as resources, tools, obstacles and/or environments which mediate inter-human interactions and relations. Certain animals may constitute liminal cases, if and where they interact in meaningful ways with human actors, but such relations constitute a specialised area of sociology rather than a focus which sociologists in general need to incorporate. For the most part our interest is in networks of interaction and relations between human and/or corporate actors, in material environments, with the constraints and opportunities they afford, and involving material objects which serve variously as tools, resources and so on.

A relational ontology is a processual ontology. Interactions unfold through time and so too, therefore, do the relations and networks which they generate. Relations and networks may remain relatively stable over time but only relatively and only as a result of ongoing interactions which reproduce them—interactions which might equally transform them. New relations are formed and existing ones sometimes modified or broken. Active ties become latent and latent ties are reactivated. Change is sometimes dramatic but gradual change is a constant. The social fabric is always in process—always in a state of becoming.

## 2 INDIVIDUALS AND SYSTEMS

Networks of interaction and relations might be conceived, for some purposes, as 'systems' and we have much to learn from systems theory. However, there are dangers in systems theory, to which sociology has proved vulnerable in the past and which relational sociology opposes. The key danger is the tendency to hypostasise 'the system', attributing it with pre-requisites or a historical telos and the means and agency to achieve such ends. Functional explanations, which claim that certain institutions exist or events happen *because* they serve 'the system', provide one example of this. Certain versions of Marxism, which postulate 'laws' of historical development and believe that the communist society alluded to by Marx is a historical inevitability, provide another. Such teleological explanations are problematic because they rely upon an unexplained and indefensible notion of 'inherent purpose' in history and society and/or invoke a causal process which works backwards through time: later events or states of affairs are invoked to explain others which preceded and brought them about. 'The system' is reified in such accounts, assumed as a starting point of analysis and granted a degree of inevitability.

Proper systems thinking, by contrast, conceptualises a system as an emergent outcome of interactions which is contingent upon those interactions and sensitive to variations within them. It may be possible to identify 'functional prerequisites' which must be met if the system is to survive in its recognised form but the existence of such prerequisites in no way guarantees their fulfilment and there is nothing special or inevitable about the present form of the system. Systems may be more or less robust but their existence is always contingent upon the interactions from which they emerge and they are always vulnerable to change or collapse. Likewise 'direction' in history; interaction may drive a society in a particular direction for a time but there is no inevitability to this and no necessary denouement. Societies can and do 'lose the plot', sometimes taking up another, other times languishing without direction.

A second problem with many sociological approaches to systems, from Althusser (1969) to Parsons (1951), is their tendency to exclude flesh-and-blood human actors from their inventories of the parts of their systems. They focus rather upon roles and norms or modes of production, base and superstructure and so on. We need to be cautious in relation to humanism and critical of some variants of it. However, if we put flesh-and-blood actors out of the picture altogether, as certain structuralists, holists and systems thinkers are inclined to do, many aspects of systems become very difficult to explain, not least the changes and conflicts which are endemic within them. Norms, roles, modes of production, practices and so on are abstractions based upon observation of stabilised patterns of human interaction and we cannot explain either how they emerge, how they change or how they decline without reference to the human actors involved in them. Furthermore, to return to the above point, without an account of human actors we are more inclined to reify or

hypostasise ‘the system’, failing to see it for what it is, namely an emergent and contingent product of human interaction. Abstractions can be very useful but they become misleading when we lose sight of the messy realities from which they are abstracted.

There is a danger in appealing to flesh-and-blood actors, however, that we resort to a form of individualism, ontological or methodological, which is no less problematic from a relational point of view. There are many problems with individualism, too many to summarise here. It must suffice to sketch two broad problem areas.

Firstly, individualism, in all its forms, ignores emergence. A society is not a mere aggregate of individuals. Interactions, relations, networks and culture are real. They have effects and require investigation. Interaction between two actors has properties and dynamics which are irreducible to either of them. The actions of *i* affect those of *j* and those of *j* affect those of *i*. They form a system whose properties are distinct from those of either party taken in isolation. Moreover, the addition of a third actor changes the system again, structurally, adding new properties, dynamics and possibilities, which are again irreducible (Simmel 1902); likewise when more actors are added and a social network, involving multiple actors, takes shape. Social networks have a wide range of properties which are irreducible to their actor-nodes, and a large number of studies have pointed to the importance of those properties in shaping interactions and their outcomes (Borgatti et al. 2013; Scott 2000; Wasserman and Faust 1994).

Furthermore, individualism ignores the culture which exists *between actors*, connecting them. Culture is crucial to relational sociology, as to sociology more generally (Crossley 2015b; McLean 2016). We must explore the formation, reproduction and transformation of culture in human interaction, unpacking its relational essence. What Wittgenstein (1953) says of language, namely that it would have no purpose for a solitary individual, if it is even conceivable that a solitary individual could create it (which is doubtful), is true of all aspects of culture. Cultures are properties of collective life. They arise within collectives, mediate and in some part constitute relations within those collectives (McLean 2016).

These are arguments against ontological individualism. They point to aspects of the social world which are irreducible to individuals. They are also arguments against methodological individualism, however, because they suggest that we cannot limit the focus of our analyses to individuals and their actions but must also find ways of capturing and analysing interactions, relations, networks and culture.

The appeal of individualism is bolstered by ‘common sense’ empiricism. Individuals seem real because, qua bodies, they are directly perceived. Relations, networks and even interactions seem less real because they are not (Crossley and Edwards 2016). We can see flesh-and-blood individuals directly but we cannot see relations or networks, at least not in the same way. Empiricism has been overturned in other sciences, however, and sociologists must take this

step too. Interactions, relations, networks and culture are no less real than individual human bodies even if, strictly speaking, they cannot be directly observed. They manifest empirically by way of their effects and these effects must be studied (*ibid.*).

My second criticism of individualism is that it takes the individual actor as a given upon which all else is built: a prime mover. I suggest, by contrast, that social actors, at least in the form that we generally think of them, are themselves emergent properties of social interaction. The actor assumed in most variants of individualism, even those which claim to return to ‘the state of nature’ in order to explain society, enjoys capacities which are clearly cultural and therefore dependent upon interaction for their very existence; capacities which are acquired by social actors through interaction with others. Human beings are largely helpless at birth, completely dependent upon others for their material welfare and survival, and even if some of their subsequent development is a natural process, only conditional on the protection and care of others, much of it involves learning from others. From practical skills and ‘body techniques’ through language use and the reflective thought it enables, from moral and aesthetic sensibilities to the formation of a sense of self and identity, the individual actor is as much an emergent property of social interaction and relations as the culture their agency depends and draws upon.

Even ‘the organism’ which predates (and becomes) the social actor must be conceptualised relationally, and not only because it originates in (sexual) interaction and forms within the womb of its mother, nor indeed because its status as a living being depends upon a continuous process of exchange with its material environment: taking in oxygen, food and water; expelling waste. Evolutionary theory suggests that many of our hardwired attributes, particularly those relating to sociability, were shaped by an evolutionary process in which our primate ancestors lived in relations of interdependence with others, that is, networks (Wilson 2013). Living in groups or networks conferred an evolutionary advantage. It afforded protection and the opportunity to, for example, hunt bigger, protein-rich prey. Those of our primate ancestors who lived in groups stood a much better chance of surviving, reproducing and therefore becoming our ancestors. Group life also made demands, however. Individuals had to be sociable to live amongst others. Those who were not would have been cast out and thus very likely perished. Furthermore, more cooperative, more sociable groups enjoyed a better chance of survival and therefore of passing on their genes to their offspring. Fitness improves survival and reproduction probability in the evolutionary process and in our case that meant fitting into a collective mode of life. In other words, social relations shaped the evolutionary process which gave rise to the human species and thereby played a role in making us what we are at a basic biological level.

It is important to add here that the social actor, as generated within social interaction, is not created once and for all but rather, returning to process, continually nourished and reproduced (or not) in ongoing relations and interactions. Her thoughts, as Mead (1967) observes, are effectively dialogues with

others or at least internalised representatives of others. Her self-hood and identities, themselves processes, are reproduced and supported in relations of mutual recognition (*ibid.*). And her sense of reality is routinely reproduced in everyday interaction (Berger and Luckmann 1971). Furthermore, as Durkheim (1952) suggests in his discussions of egoistic and anomic suicide, meaningful contact with others is integral to an individual's sense of purpose, and the relatively stable norms generated through such interaction play a key role in maintaining realistic individual expectations, thereby contributing to the individual's happiness and psychological balance. Individual psychological balance is a function not only of processes internal to the individual but also of the many forms of support, stabilisation and control they receive from others in the networks to which they belong.

### 3 SUBJECTIVITY AND INTERSUBJECTIVITY: A PHILOSOPHICAL DIGRESSION

The critique of individualism presented above can and should be extended beyond the sociological and into the philosophical realm. Specifically, a thoroughgoing relationalism requires that we reject the flawed but popular conception of human subjectivity and consciousness as a private 'inner world', a view dating back to Descartes (1969) at least, which grants the individual certain and immediate knowledge of their own self and mental life whilst questioning whether they can ever enjoy access to the mental life of others. From this point of view the social world is an aggregate of individual monads, each, qua monad, closed to the others. I do not have space to offer a full critique of this view here (see Crossley 1996, 2001, 2011) but it would be instructive to sketch out a few important points.

Firstly, consciousness is not a substance but rather a relation. As Husserl (1991) argued, it is always consciousness-of something other than itself and thus comprises a connection between two poles: intentional awareness and that of which it is aware. Methodological caution prevented Husserl from embracing the implication that this involves connection to a world beyond consciousness (he famously brackets the question of the reality of the world beyond our consciousness) but others, such as Merleau-Ponty (1962) and Mead (1967), who hold that perception is at the root of consciousness, have no such equivocation. Each argues that perceptual consciousness arises from an interaction between body and world and comprises a sensual relation of one to the other. Consciousness attaches the actor to the world.

Furthermore, (perceptual) consciousness is not an inner representation of an outer world, an 'inner theatre', as Descartes also suggests. I do not see the tree before me 'in my head'. I see it before me, over there. The space of my perceptual consciousness is not between my ears but rather between myself and the tree. Consciousness does not set me apart from the world, as Descartes' analysis suggests. It projects me outwards towards and attaches me to the world. Indeed, to reiterate, it is attachment to the world.

All thought and emotion are intentional from this point of view and should be conceived as ‘threads’ connecting us to the world, to borrow Merleau-Ponty’s (1962) imagery. Love, anger, hate, fear and so on each have an object and connect the individual to that object, projecting the individual outward into the world. They are modalities of attachment to the world. Furthermore, whilst they may involve sensations and feelings these are only elements in a bigger structure in which the whole body is involved. Love, anger and more cognitive states such as understanding and knowing are not ‘inner events’, separate from the wider life of the body. They are forms of conduct—ways of handling, being-in and connecting to the world.

This argument parallels that of Wittgenstein (1953) and Ryle (1949). Both argue (against Descartes) that the meaning of ‘love’, ‘envy’, ‘understanding’ and other such mental predicates cannot rest upon reference to private inner states because they belong to a public language which is acquired within and from a community. If the meaning of a word entailed reference to a private state then it could never be taught or learned because a teacher could never point that state out to a learner. Each would have access to their own states only. Our psychological language is public and the conditions of its use and meaning (including any referents) must be public too therefore. Merleau-Ponty (1962) adds to this that whatever ‘private sensations’ might be involved in our mental lives derive their meaning from the overt behaviours which accompany them and the public contexts in which they occur. On its own a racing heart is not fear. It only becomes fear when accompanying a situation defined as frightening and other perceptual and behavioural responses which define that situation thus. In other situations it might signify love or the exhaustion following hard exercise.

The significance of this argument is that our subjective lives are embodied and therefore public or rather intersubjective. Minds are not, as they were for Descartes (1969), inaccessible from ‘the outside’. My confusion, excitement or joy do not exist only for me but for others too, who perceive them directly. Indeed, they might be more obvious to others than to me. Being excited, to take one example, does not necessarily entail reflexive awareness that one is excited and one might be too immersed in the excitement to notice or correctly diagnose it—whilst to others it is obvious. We can fail to understand and be wrong about ourselves as surely as we can successfully understand and be right about others. We subject both ourselves and others to observation and interpretation and we use much the same methods in both cases. Understandings of self and other, both of which are subject to periodic revision, are woven (and rewoven) from the same cloth. They are not, as Descartes’ suggests, different in kind.

Not that our relations to one another are relations of contemplative knowledge, at least not in the first instance. The gestures and wider behaviour of the other are, as Merleau-Ponty (1985) suggests, communicative. They register for me, at least in the first instance, by way of my response to them. The other’s smile does not exist for me, in the first instance, as an object of reflective

contemplation. Rather it draws a reciprocating smile from me. I am affected (perhaps infected) by their happiness prior to and independently of any reflective awareness I may achieve of it. To reflect upon and think about the other is to step back from a more primordial encounter of mutual affecting—what Mead (1967) calls a ‘conversation of gestures’.

It might be objected that, as Goffman (1959) shows, we routinely manage our impressions, selecting which aspects of our subjective states to make public. This is true but the ‘private self’ involved is an emergent product of earlier interactions and intersubjective relations. It is a product of privatisation. Children learn both how to keep certain things to themselves and that they should do so. They speak/think out loud before learning how to do so silently and to themselves. Moreover, the self-consciousness that motivates and informs ‘impression management’ is itself acquired through interaction with others, as Mead’s (1967) important work shows. Self-consciousness is coupled with consciousness of the other (Schutz 1966); to be self-conscious is to be conscious that others are conscious of one; and the origin of this twofold structure is social interaction in childhood (Mead 1967).

In addition, as Cooley (1902) argued, the actor is often her own blind spot and is dependent upon feedback from others in the process whereby they build a sense of self. Selves are formed, reproduced and transformed in ongoing processes of interaction in which alters feed their impressions of the actor back to her; the so-called ‘looking glass self’. Selfhood, to reiterate, is an emergent property of interaction, social relations and networks. Social life is not the effect of a coming together of individual selves. Rather selves take shape in the hurly burly of social life (that is, interaction).

#### 4 TIME AND SPACE

These discussions may seem to suggest that relational sociology is a variant of what is sometimes referred to as ‘micro-sociology’, dealing exclusively with dynamics and structures of small scale interactions and networks. The social ‘macro-cosm’ is relational too, however. Relational sociology scales up and reflecting upon how it does so is a useful way of challenging the assumption, evident in some accounts, that ‘micro’ and ‘macro’ are somehow different in kind.

I have already suggested that networks of human actors, in some cases, combine to form corporate actors, such as trades unions, firms and national governments, which interact with one another, forming their own relations and networks. This is one way in which the micro scales up. The global order is, in some part, constituted by interaction between corporate actors: for example, trade deals between governments and trading across national borders between firms; military treatises between governments; and so on. The micro is nested within the macro on this account: human interaction and networks (in some cases) generate corporate actors who, in turn, interact and form relations and networks at a ‘higher level’.



Secondly, as ‘small world’ studies show, networks, including networks of human actors, can involve hundreds of millions of nodes and still have sufficiently short path lengths to enable coordination and other observable systemic properties (Barabási 2003; Crossley 2008; Newman et al. 2006; Watts 1999). However ‘big’ in terms of nodes, the structure of such networks keeps their paths short and integration therefore high. A breakout of a deadly virus in one corner of the world causes fear in every other corner because we know that the world is sufficiently connected, with short enough paths within its network for those viruses to diffuse very quickly through the entire global population. And what is true of viruses is true of information, gossip, fashions and other such mobile aspects of social life. The network concept and many of the network-related processes and dynamics of interest to relational sociologists do not necessarily lose their application when we scale up to the national or even international level.

Thirdly, beyond corporate actors, the collectives of interest to social scientists, including social classes and ethnic groups, can and should be defined in relational (network) terms. They are, to put it crudely, distinct network clusters or positions. Social class, for example, is not an individual attribute but rather a ‘position’ within a system of social relations (i.e. network). Different theories of class conceptualise this differently. To take the classics, for example, Marx defines the proletariat by reference to their relation with the bourgeoisie (to whom they sell their labour) and vice versa; Weber (and also Bourdieu 1993), by contrast, focuses upon the process of differential association which clusters individuals with similar levels of resources and life chances within (class) groupings. In both cases, however, patterns of social relations are central. Moreover, Weber’s approach is generalised to all forms of status differentiation by Blau (1974, 1977) in his conception of society as a multidimensional ‘social space’. Differences count as statuses and axes of social space, for Blau, insofar as they can be shown to exert an independent effect upon patterns of interaction and relationship formation.

The final means of scaling I will consider centres upon media of interaction. Reference to interactions and relations suggests micro-sociology to many, I suggest, because interactions are conceived as localised and short-lived in both their execution and their consequences. Back in the depths of history this may have been so but amongst the many inventions which have punctuated that history are some, from transport and communication technologies to money and recording technologies, which extend the reach of social interaction through both space and time. To do full justice to this argument is beyond the scope of this chapter but a few examples would be instructive.

Money is an interesting example. In a pre-monetary economy based upon exchanges of favours the reach of social interaction is relatively short and short-lived. If John does a favour for Jane then he may expect a favour in return but it will have to be Jane who returns the favour, or somebody else close to her, and this will limit the timing and place of repayment. It is possible that Jane has done a favour for Joe and can call upon him to repay her favour to John for her

but the circle is unlikely to spread much wider and John is only likely to get his favour repaid if he remains in close geographical proximity to Jane. Her debt to him means nothing outside of their limited social circle. Likewise, there is a time limit to the repayment; at the very least the debt will die with Jane and it may perish sooner if the parties forget about it or fall out. If Jane pays John for his services with money, by contrast, then he can spend the money whenever he wants, wherever his currency is accepted (or can be exchanged). He can add it to money earned elsewhere, enabling a bigger purchase, or he can save it. His favour to Jane does not bind him to her but rather opens up the possibility of further transactions far removed in time and space from her. Moreover, it connects his interaction with her to further interactions in which he spends the money she paid him. Indeed, the exchange and circulation of money creates a vast network in which events localised in a particular time and space can cascade through both, having significant effects at a considerable distance from their origin. Money, in this respect, modifies human relations, extending their reach through both space and time (this is discussed at length by both Giddens 1990 and Habermas 1987).

The time dimension of communicative acts is similarly extended through various recording devices, from the written word, through photography, film and audio recording to new digital storage technologies. Such devices allow what might previously have been fleeting communications to achieve a potentially permanent existence and to continue to have effects long after their moment, and indeed to have effects across a much wider geographical range. At the same time, however, they permit greater scrutiny and, as Walter Benjamin (1968) says of art in ‘the age of mechanical reproduction’, perhaps reduce the aura of communicative acts.

Likewise, there is space: improved transport links and communication technologies, from carrier pigeons to Web.2, all remove the barriers which once confined social relations within relatively small spatial limits, permitting truly global links and collapsing the world to much a greater extent into a single network ‘component’.<sup>2</sup>

I have only offered the briefest of introductions here to these various forms of scaling up from micro to macro. They are a crucial focus, however, if relational sociology is to succeed because it is necessary for sociology to span both the macro- and the micro-cosm and, more importantly, to challenge the idea that there is any hard and fast distinction between them.

## 5 METHODOLOGICAL RELATIONALISM

Sociology is regularly subject to new theoretical challenges and paradigms but most leave the practice of empirical research untouched. The labels and language change but everything else remains the same. Relational sociology must go further. It can and should have methodological implications. If we accept the claims of relational theory then we should endeavour to act upon those claims in the ways in which we design and execute our research, finding

methods which allow us to explore interactions, relations and networks in all their complexity.

This is all the more important when, as Andrew Abbott (1997, 2001) has argued, contemporary sociology is hampered by a disconnect between theory and empirical practice. For Abbott, the primary disconnect is between theories focused upon human action and methods focused upon variables. This critique is important and could be extended (beyond Abbott's quantitative focus) to a great deal of qualitative research, but I want to extend it here by focusing more explicitly upon relationality. If we believe that interactions, relations and networks are important then we need methods that allow us to capture these relational structures.

The main problem we must confront is the individualising tendency of many of our current methods, especially questionnaires and interviews. They not only elicit information at an individual level but elicit information about individuals: their perceptions, beliefs, behaviours and so on. Even where social structures, such as class or gender, are captured they are typically treated as and reduced to individual-level variables. Class is not captured or treated as a structure of relations but rather reduced to an attribute of the individual, something they 'have'. Information about individuals is important, of course. However, if we only ever gather information about individuals then, by default, we reduce the social world to a mere aggregate of individuals. The interactions, relations and networks which relational sociology prioritises drop out of consideration.

It is important to distinguish between data gathering and data analysis in this context, and also between data elicited at the individual level and data regarding individuals. Questionnaires and interviews are not the only ways of gathering sociological data and it is important to encourage use of other means. However, they can be used to gather relational data—data which can be analysed in relational ways. And they may often be the best or only means available to a researcher. More important than the way in which data are gathered, however, is the nature of the data itself. Relational sociology demands relational data, that is, data which bears upon 'relations' (including interactions and networks) and which can be analysed relationally.

Much of my own work has used social network analysis (SNA) and I will take this as my key example. Before I do, however, I want to briefly review a number of others. This is by no means an exhaustive list of relational methods. I introduce these methods simply to illustrate what I mean by relational method and to (hopefully) initiate and facilitate debate on this topic.

There have been relatively few attempts within sociology to devise a systematic method for studying social interaction empirically but one obvious and successful approach is conversation analysis (CA) (Hutchby and Woofit 2008). Informed by ethnomethodology, CA explores, in minute detail, the ways in which partners to (usually linguistic) interaction coordinate their activities. Analysts typically transcribe exchanges, using a very detailed coding system specific to the approach, then analyse the interaction as it unfolds, moment by moment. The two main foci of analysis in much of the published work in this

area have been the ways in which turns are negotiated (sequencing) and the use of ‘membership categorisation devices’ (ways of categorising individuals). For present purposes, however, what is of interest to me is the fact that CA analyses real-life interaction as it unfolds, treating it as a contingent accomplishment of those party to it. Conversation doesn’t ‘just happen’ and its course is not determined or neatly mapped out by social norms. Interlocutors engage interpretively with one another, negotiating not only the substantive topic of their interaction but also the organisation of the interaction itself. The interest of many conversation analysts is narrowly technical. This arguably limits its relevance, as it stands, for relational sociology more generally. However, to reiterate, it is one of relatively few attempts to empirically analyse social interaction and it is therefore important.

One of the objections that some have made to CA is that it tends to focus upon relatively brief stretches of interaction, focusing only upon those factors informing interaction which are directly visible (or audible) within it (those factors captured in the aforementioned transcription). CA advocates sometimes respond that theirs is an empirical discipline and that they cannot ‘factor in’ factors for which they have no empirical evidence. They have a point but there are perfectly legitimate ways of identifying the effects of ‘unobservables’, by way of triangulating different methods. Furthermore, in many cases we can advance our understanding of even small stretches of conversation by considering them within the wider context of interaction to which they belong, a context better explored by way of one or more of the observation approaches used by some sociologists, including participant observation (PO).

PO takes many different forms. Many of the very early ‘classics’, such as William Foote Whyte’s (1943) *Street Corner Society*, remain particularly instructive for relational sociology in my view, however, as they afford particular attention to patterns of interaction (Who interacts with whom? When? How? For what purpose? etc.) and the ways in which they concatenate into local social structures (without losing sight of the impact of more distant interactions, such as government decisions and economic dynamics, on their local sites). Whyte and other others writing in the tradition from which he comes were fascinated by issues of social structure, which for them meant patterns of interaction and relations. Their studies are therefore important exemplars of relational observation in practice. The claims to naturalistic observation made by some participant observers may be problematic but there is no doubt that the method allows us to capture the ‘doing’ of society as an interaction order. As with CA, the focus is upon what happens between people—upon interaction and relations.

Similarly, historical archives often capture traces of interaction and relations (e.g. in letters, minutes of meetings, rosters of attendees at meetings and newspaper descriptions). We generally encounter actors in action and embedded in situations and relations in archives, which is more useful from a relational point of view. And, of course, archives sometimes allow us to track interactions over longer periods than we can typically manage with PO, focusing upon significant

events, turning points and outcomes that an ethnographer of the time would have to have been very lucky to capture. We can pick our moment and are not limited to one moment. Like PO, however, archival analysis captures social life as it is done, and therefore necessarily in a relational mode.

PO and archival analysis aren't necessarily relational. As with interviews and questionnaires it depends upon how they are carried out. They have good relational potential, however, because unlike questionnaires and interviews they do not abstract actors from the situations of interaction that are of interest to relational sociology but rather observe them within those interactions. Or at least, to reiterate, they create this possibility.

PO and archival analysis potentially generate rich relational data. However, when these data concern multiple actors in complex networks they quickly become unwieldy. A network involving a mere 10 actors potentially involves 90 directed or 45 undirected ties,<sup>3</sup> for example, and the many complex configurations that might form within such a network are very difficult to spot or describe, let alone explain with any degree of rigour by qualitative means. This is where and why SNA can be very useful.

The variants and possibilities of SNA are far too extensive to even hint at here. It must suffice to say that SNA is a set of mathematically based techniques for recording, visualising and analysing relational structures (networks). It can be used as an aid in qualitatively focused narrative accounts. It can, at least in some of its forms, be incorporated into standard quantitative, survey approaches. But the analysis of networks, their impact, formation and dynamics can be the central focus of research study itself.

SNA illustrates the ways in which interaction and relations give rise to structures with properties which are irreducible to the actors involved in them and which have impacts upon those actors, individually and collectively, which create both opportunities and constraints for them. Networks can be bigger or smaller, for example; more or less dense; more or less clustered; more or less centralised (according to a number of different measures of centrality); with a bigger or smaller diameter. They may be more or less divisible into distinct factions. All of these properties have been shown to create opportunities and constraints, in certain contexts, for those involved in them. Likewise, individual nodes can be more or less central, in accordance with a variety of different measures of centrality, can find themselves in different regions of the network and might have a more or less dense network, all of which again creates opportunities and constraints for them. Networks are not givens, however. They form, change, decay and only remain stable, when they do, in virtue of interactions which perpetuate their structures. SNA also allows us to capture and explore this fluidity.

By way of illustration consider the graph in Fig. 24.1, which maps the network of key players (musicians and support personnel) in the UK's Two-Tone music world (as of 1981) (this graph was drawn and the various measures which follow derived using Ucinet software (see Borgatti et al. 2002)). There are 178 nodes in the network and therefore potentially 15,753 undirected ties (if each node had a tie to every other node). In fact, however, each node is tied to 15 others, on

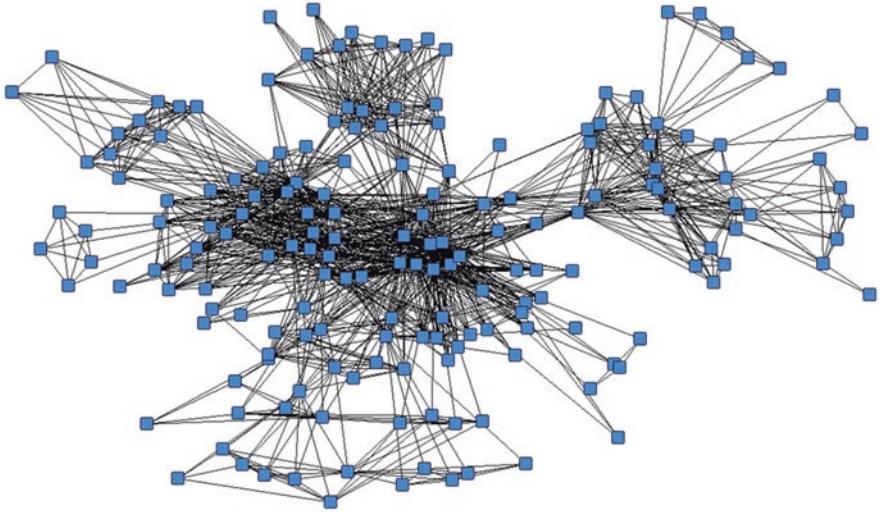


Fig. 24.1 The UK Two-Tone music world

average (average degree = 15) and only 8% of all potential ties are realised (density = 0.08). This might sound low, which would be interesting and perhaps theoretically troubling as I have suggested elsewhere that the successful formation of music worlds is more likely where density is relatively high (Crossley 2015a). However, we can see from the graph that the network appears to be formed from a number of quite dense clusters, an observation which is reinforced by a relatively high clustering coefficient (0.77). Whilst only 8% of all potential ties are realised that figure is 77%, on average, for the personal networks of each of the individual nodes. At an individual level, therefore, each node is likely to have experienced the various constraints and opportunities associated with high density and, on my account, with the mobilisation of new music worlds.

In addition, there is strong evidence of a core-periphery structure—that is to say, we find a small number of nodes (33) with a relatively high density (0.64), which form the core of the network, and a much larger peripheral subset of nodes only sparsely connected to one another (0.05) and slightly more densely connected but still not very densely connected to the core (0.1). This both suggests that there are dense patches within the network, where we might expect more of ‘the action’ to happen and, in doing so, hints at inequalities in the network.

I am only scratching at the surface here. There is a great deal more that one could do to analyse this network. My intention has merely been to illustrate something of what a network analysis might involve, and thereby to demonstrate one possibility for what a relational approach to sociology might look like in practice.

Where CA seeks to explore the details of specific interactions, SNA captures the broader structure of relations within which such interactions typically occur. Both are important, neither should be privileged over the other and

ideally we would capture both in a relational analysis, alongside the context which PO and/or archival analysis could furnish. Whichever ‘slice’ of this relational configuration we are able to capture in practice, however, the central point is that we are focusing empirically upon the relational configurations which comprise the social world, translating relational theory into empirical practice. If relational sociology is to be anything more than another passing theoretical fad then this is what we must do.

Before I conclude this section on methodology I want to make a brief point about simulation and specifically agent-based modelling (Gilbert and Troitzsche 2005; Railsback and Grimm 2012). One of the key methodological challenges which relational sociology faces arises from the difficulty of capturing interactions, relations and networks, or perhaps of capturing the specific interactions, relations and networks which we would like to analyse. We can’t always be there, at the right moment, and there may be hundreds or thousands of more or less simultaneous ‘theres’ which we need to capture. The popularity of questionnaire surveys and interviews undoubtedly rests upon the fact that it is usually possible to assemble a sample of respondents from a target population who are willing to be temporarily extracted from the usual contexts of their lives in order to speak to a researcher or tick the boxes of their questionnaire. This may not be ideal but it is practicable.

However, if we have an idea about the way in which particular types of interaction, within particular network configurations, concatenate to generate particular outcomes, something that it is very unlikely that we would be able to actually observe, then we do now have the possibility of testing our idea by way of simulation models. Agent-based models allow us to create virtual populations in which specific types of interaction take place and to observe their (often unexpected) outcomes. There are reasons to be sceptical of such models but that is true of any research method and, used appropriately, agent-based models provide a further tool for the implementation of a properly relational research programme.

## 6 CONCLUSION

There are many versions of relational sociology (some more compatible with one another than others) and each raises a host of complex issues. In this chapter I have offered a brief introduction to several key issues associated with one particular version (see Crossley 2011 for an elaboration). Theoretically this approach prioritises interaction, relations and networks, arguing that both ‘actors’ and ‘structures’ emerge from these more primordial elements. In the final section of the chapter, however, I have argued that relational sociology must move beyond theoretical arguments if it is to make a real difference, changing the way in which we practice sociology, methodologically, and thus the type of research findings that we generate. I have suggested a number of methods which might be useful for this purpose but there are more and I would hope that the development of relational sociology over the next few years will involve, amongst other things, an effort to identify, adapt and use them.

## NOTES

1. I limit my focus here to positive interaction, excluding relations of conflict and outright domination, and bracketing out Simmel's (1906, 1955) important observation that most relations involve a mix of positive and negative elements. The negative aspect is important, as Simmel (1955) suggests, but I do not have space to do justice to it here.
2. A network component is a subset of nodes in a network, each of which is at least indirectly connected by a path. If  $i$  has a tie with  $j$ ,  $j$  with  $k$ ,  $k$  with  $l$  and  $l$  with  $m$ , for example, then  $j$ ,  $k$ ,  $l$  and  $m$  all belong to the same component because any one of the them is connected to any other by a path (of other nodes and their connections). In some networks we might find a cluster of nodes each connected to one another but having no ties outside of the cluster. They would form a distinct component in the network, as would any node who enjoyed no ties to anybody else (an 'isolate'). A country whose population members enjoy no contact with anybody beyond their national border would be a distinct component in the global network but it is unlikely that any such country exists today (perhaps there are a few communities in the Amazon rainforest) and the ratio of within to between country ties is constantly shifting in favour of the latter.
3. Undirected ties are mutual by definition and thus only counted once for each pair of actors: for example, if  $k$  'lives with'  $j$  then  $j$  necessarily 'lives with'  $k$ , or rather  $j$  and  $k$  live together. Living together is an undirected tie. However,  $j$  may like  $k$  without  $k$  necessarily liking  $j$ . Liking is a directed tie, it may flow in one direction ( $j$  to  $k$ ) without flowing in the other ( $k$  to  $j$ ) and we must independently observe both directions.

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