Griffiths, P., and Stotz, K. (2013), Genetics and Philosophy: An Introduction (Cambridge: Cambridge University Press).

Gustaffson, C., Govindarajan, S., and Minshull, J. (2004), 'Codon Bias and Heterologous Protein Expression,' Trends in Biotechnology 22: 346-53.

Hacking, I. (1983), Representing and Intervening (Cambridge: Cambridge University Press).

Haldane, J. (1931), The Philosophical Basis of Biology (London: Hodder and Stoughton).

Jefferey, C. (1999), 'Moonlighting Proteins', Trends in Biochemical Sciences 24: 8-11.

Knuuttila, T. (2005), 'Models, Representation, and Mediation', *Philosophy of Science* 72: 1260-71.

Leonelli, S., and Ankeny, R. (2013), 'What Makes a Model Organism?', Endeavour 37: 209-12.

Mitchell, S. (2003), Biological Complexity and Integrative Pluralism (Cambridge: Cambridge University Press).

Nicholson, D., and Gawne, R. (2013), 'Rethinking Woodger's Legacy in the Philosophy of Biology', Journal of the History of Biology 47: 243-92.

Sober, E. (1997), 'Two Outbreaks of Lawlessness in Recent Philosophy of Biology', Philosophy of Science 64 (Supplement): S458-67

Weisberg, M. (2007), 'Who is a Modeler?', British Journal for the Philosophy of Science 58: 207-33.

The Making and Maintenance of Social Order

Eleonora Montuschi and Rom Harré

attempts to make physics the all-explanatory super-science. KW entirely naturalistic, even less so mechanistic, and thus throw doubt on which require their own distinctive forms of explanation which are not emergent, local, historically developing and holistic forms of order to or predicted from physics, chemistry or biology alone. These are societies gives rise to new forms of order which cannot be reduced the existence of conscious beings in evaluative and symbol-using in local cultures. There are 'no universal laws of social order'. Thus persons are embodied conscious beings (moral entities) embedded theory in the social sciences is concerned. And we must see how of the informal systems of rights and duties with which 'positioning occur in physics or biology. We must have a grasp of moral evaluations, new dimensions of symbol-using relationships, to understand which nation in the purely physical sciences. The emergence of persons adds different scientific explanation is when applied to societies from explato the existence of persons in society. Here the emphasis is on how takes us further up the 'hierarchy' of sciences to scientific approaches we must have a grasp of semantic information, which does not even Editorial Link: The contribution by Rom Harre and Eleanora Montuschi

Social order: The very idea

What is social order? And where do the ideas of order we use to describe social order come from?

One of the oldest suggestions invites us to look at 'the orderliness of nature' as a possible source. The succession of the seasons, the repetition of the forms of animals and plants over the generations, is striking. However, the earliest attempts at an explanation of natural order were driven by the threat of the eruption of disorder – as if, were nature to be left to its own devices, it would disintegrate into unmanageable chaos. This could be prevented only by divine decree, or by human management such as gardening and animal husbandry. When nature is subdued to a rule, for example by divine decrees, it becomes an orderly system. When animals and plants are managed by a farmer it becomes a controlled environment. The Garden of Eden was an orderly place under divine management until Eve and the serpent messed it up and thereafter people had to create order for themselves. Fortunately, Adam had already named all the plants and animals in the Garden!

Is something similarly true of society? If human life is bereft of those constraints that ensure orderly person interactions, what prevails is a 'state of nature'. It was under these conditions that Hobbes declared 'the life of man: nasty, poor, brutish and short' (Hobbes 1651). There would be no orderly polity without an imposition of the power of a sovereign to maintain order. By accepting norms, human life becomes instead regulated by some form or another of a social contract – as in a democracy – or by contrast falling under a dirigiste government such as a theocracy. Whichever way it is created and maintained, social order depends on people following rules and conventions, though these important guiding devices may become visible only when infractions occur, and rules and conventions are needed to display some actions as infractions.

The natural world displays order under certain conditions, so – the oldest suggestions go – society should imitate the orderliness that is displayed in nature.

What does any order worthy of the name, be it natural or social, demand then?

One feature is predictability. Were we not able to project past and present over the future, we would have no guide for action, nor would we know how to adjust means to ends or situate ourselves in the course of events. We would not be able to describe what happens either in nature or in social relations because description requires the use of common, general terms, and these must have more than a one-off application. Our descriptions of natural events and our dealings with each other require some measure of stability of expected responses (or of effects).

A second element is 'organic integration', based on the belief that each part has a functional role in a whole. In order to be fit for its task, each part needs to respect a hierarchy of functions – be it the structure of a beehive, the functioning of a clock or the tax collection system.

A third feature, and one that perhaps best defines the essence of order, is regularity. The idea of universal natural laws, as developed by late-seventeenth-century natural philosophers, best represents this essential aspect of order as regular (i.e. constant, or at least significantly frequent) co-occurrences of similar sets of events.

Newtonian physics and evolutionary biology are two well-known descriptions of the orderliness of nature that were used to view social order. They indeed provided political, religious and economic sources for the creation or confirmation of particular forms of social order. Let's briefly recall how.

Natural/social: The roots of comparison

Modern physics assimilated the universe to a gigantic machine – a cosmic clock. That meant a number of things. First, once set in motion a clock will behave always in the same way (and so will its constitutive parts). Second, to understand the behaviour of a clock

we need to understand how the interactions of its parts will give rise to the behaviour of the machine as a whole. Each part is related to the others according to a fixed hierarchy – from the simple to the complex. Third, the fact that something is, say, a clock depends on what its contituent parts are and to what kind they belong. The same goes for the world, if it is thought of as a machine.

The powerful simplicity of Newton's three mechanical laws of motion fired the imagination of several social, political and economics thinkers between the sixteenth and nineteenth centuries to try and discover the basic principles of social life. From Hobbes to the empiricist philosophers John Locke (1691) and John Stuart Mill (1859), the economist Adam Smith (1776) and the psychiatrist Sigmund Freud (1929), in describing the state, society, the market, human history or the presumed mysteries of the unconscious, they all drew from the same source, physics (and chemistry). The father of sociology, Auguste Comte (1861), called his newly born science 'social physics', and the model of physics he had in mind was indeed Newtonian.

By the end of the nineteenth century, Darwinian science was also seen as offering substantial clues to understanding society. Herbert Spencer (1862) conceptualized society as a 'social organism', developing according to the universal laws of evolution and aiming at the 'survival of the fittest' (an expression he coined to describe the leading principle of human relations in social interactions). Social Darwinism, as it came to be associated with the name of Spencer, was both a theory of society and a moral perspective concerning how a good society should function. It had a deep effect on both the ways social institutions were conceived, and the ways public policies were formulated.

Systems of government were conceived as centralized, hierarchical and controlling from the top down (as for example in the so-called British Westminster political model) and policies were conceived

in such a way that they could rely on 'rational' procedures in the processes of decision-making. This entailed a series of assumptions: that they addressed stable systems and well-defined problems, that they targeted unitary actors (e.g. the government) and that these actors make (or tend to make) rational choices. Besides, it is assumed that all institutions, all economic interactions, all processes and textures of society, have an end state or final equilibrium towards which each of them converges while the totality of social moieties develops towards an end state. The nineteenth-century German philosopher G. W. F. Hegel (1821) and the contemporary American political scientist Frances Fukuyama represent two versions of this conception. Policies should be conceived with a view to reaching that final stage.

These images, however, also proved their limits when confronted by the large and complex variety of aspects that a description of order in the social realm seems to entail. For example, there is little in systems of communication among animals and plants that could serve as models to inform the very complex and sophisticated systems in use among human beings. Rather the modelling goes the other way – what we have been able to discover about animal and plant communication depends on deploying models derived from human systems. Also, as we will show later in detail, the use of symbols to manage our interpersonal relations and the main means for our individual cognitive practices does not seem to be adequately captured by either a mechanical or gene-led description.

When saying that humans and animals are close, how close is close? For example, to the questions: 'why should people help one another?' and 'who should we help most of all?', should we be happy with the answer that altruistic behaviour is a function of kin selection? That is, we tend, like any other animal, to favour kin over non-kin, and to favour close kin over distant kin (in ways that can be calculated in terms of percentages – 50 per cent interest in its parents,

offspring and full siblings; 25 per cent interest in half siblings, grandparents, grandchildren, uncles, aunts, nephews and nieces; 12.5 per cent interest in first cousins, half nephews, great-grandchildren, etc.).

If this were to be the case, we might still wonder, how can we explain social altruism, for example altruism among strangers, or altruistic acts towards people we do not know and will never meet, the recipients of gift aid and other charities? Why should we help the aged (or now infertile), if the aim is genetically successful reproduction? Are kin individuals always 'deserving' individuals (is a great-grand-child less 'deserving' than a brother simply because the genetic interest of the giver in the former is half if compared with the latter), etc.?

Even the old school of sociobiology (the early supporters of genetic altruism) would admit that cultural evolution has produced a wide variety of modifications on the basic biological model. Though the sociobiologists continued to argue that the fundamental explanation of social behaviour rests on genes, this still points to the fact that a genetic-type explanation does not, after all, have the answers needed in particular circumstances such as the effect of scientific discoveries, linguistic changes, cultural innovations, volcanic eruptions and climate change. Societies make their own adaptations to these irruptions into a standing social order.

Evolutionary psychology, by shifting attention from behaviour to the inner constitution and functioning of the human brain, has been aimed at offering a more satisfactory, causal explanation of why individuals act in certain ways within certain environmental circumstances. At best it can explain how some people are disposed to act in certain ways – even when the environment is not conducive of those features that activate their dispositions. There may be an innate propensity towards religious belief but it is realized in many sects and versions, and these may be adhered to when the social circumstances for their existence have become hostile. How can there be a Coptic Church in contemporary Muslim Egypt?

However, this recent perspective fails to catch the detail of social order, its creation and maintenance. For example, we might admit, though the claim is disputable, that some individuals have a capacity for rape, a brain 'module' that drives violent acts against women, but this does not explain how such attacks occur in certain specific social contexts, how society reacts to complaints, and so on. In other words, there might be a natural reason that predisposes individuals to act in certain ways, do certain things, but that very reason might be neither sufficient nor relevant to account for what we want to understand: actual people doing specific things in quite definite circumstances. Social behaviour comes in a great variety of forms of social acts, rarely explicable in terms of their biological roots alone.

reducing social science to genetics. It rather effectively addresses core not require arguing analogically from physics to social science, nor Coming from social psychology, it has developed a set of tools that do chose to focus on a different, perhaps lesser known, perspective can be easily found in the literature (EGT has indeed become a most and social norms. As applications and discussions of this perspective aspects of human behaviour, such as altruism, morality, empathy economists and anthropologists as a way to explain a number of contexts, and it has become particularly interesting for sociologists, application of the theoretical apparatus of game theory to biological goes under the label 'evolutionary game theory'. It consists in the procedures of natural science. One such perspective is that which that do not require borrowing from the concepts, theories and and exciting ways to describe and explain order in social domains former. Instead we will show how nowadays there are informative to reduce the concepts and methods employed in the latter to the science with social science, nor on whether it makes any sense to try widely discussed arguments on how to compare or combine natural fashionable and popular theory of social order), in this chapter we In this chapter we do not intend to focus on well-rehearsed and

aspects of social order by means of its own, well-equipped (literal) language of description.

Social order: The study of 'positions'

However influential our genetic make-up may be in the generic forms of human social order, such as the nuclear family, the dominating feature of human life is the use of symbols to manage our interpersonal relations. There are flags, road signs and dress codes, and there are the innumerable ways we talk to each other apropos of how our relations should be. The expression of a local social order takes place largely through the meanings that are understood or assigned to the social icons that are scattered around the environment. Think of the vast statue of Abraham Lincoln that presides over the Washington Mall, and think also of the fate of the statues of Saddam Hussein in the expression of the fracture in social order that occurred during the second Iraq War.

Recent work in social psychology has turned to how beliefs about rights and duties are distributed among a group of people and serve as a key feature of the evolution of patterns of social life, from the intimate to the international (Harré and van Langenhove 1999). The cluster of ways a person, group or nation takes its rights and duties to act in certain ways has been called a 'position'. The study of positions, and how they are established, challenged and implemented, is 'positioning theory'. Positions are not the same as 'roles'. 'Role' is an upgraded commonsense notion – what you need to do to be taken to be a person of a certain sort. What sort? Well, there are roles like 'mother', 'son' and so on which can be qualified as 'good', 'bad' or 'indifferent' depending on local and historically particular conventions. Then there are roles like 'judge', 'doctor', 'priest', 'executioner', 'surveyor' and so on that are the active aspect

of recognized professions. Each role includes a pattern of taken-for-granted, although sometimes explicitly formulated, rights and duties with respect to the performance of repertoires of social acts. The killing of someone by an executioner is the consequence of the fulfilment of a duty and the exercise of a right by the institution that has decreed it. Killing someone in a fit of rage, to get the treasure map and so on, is not embedded into a long-standing normative pattern, though at that moment the assassin may believe that he or she has a right to the treasure. The boundary between rightful and dutiful killing is culturally contingent: witness the way that Islamic honour killings are treated as murder in the UK.

A social psychologist might find it useful to study the distribution of rights and duties in relation to the roles that are recognized in a certain culture, eschewing any presumptions about the spillover of such patterns elsewhere and at other times. However, more significant for the understanding of the unfolding of the episodes of everyday life is the informal, often ephemeral distribution of rights and duties among a small group of people in close and even intimate contact. This is indeed the focus of the recent developments of positioning theory in a wide variety and scale of research projects. Who has the right to speak, when and to whom in the course of a conversation? Who has the duty to put out the refuse bins for collection?

There are three relevant background conditions for understanding those episodes as instances of social order. The first background condition is the local repertoire of admissible social acts, which are the social meanings given by the local people to what is said and done in any particular episode. The same verbal formula, gesture, flag or whatever may have a variety of meanings depending on who is using it, where and for what. Saying 'I'm sorry' may, in certain circumstances, be an apology. It may also, in the UK, be a way of asking someone to repeat what has just been said. It may be a way of expressing incredulity or even a way to reprimand someone.

The second background condition is the implicit pattern of the distribution of rights and duties to make use of items from the local repertoire of socially meaningful acts and utterances. Each assignment of positions creates a distribution of rights and duties. A mother has the right to discipline her child in whatever way laws and customs allow, but a visiting neighbour does not. Catholics have a duty to confess their sins individually, while Protestants do not. Human beings in general are not required to make confessions, only Christians.

The third background feature to social order is the repertoire of storylines which are usually taken for granted by local social actors. Autobiographical psychology, the study of how, why and when people 'tell their lives' and to whom, also draws on repertoires of storylines. A train journey may be told as a 'heroic quest', and what would have been complaints about lateness according to one storyline become obstacles to be bravely overcome in another. A solicitous remark can be construed as caring according to one storyline, but as an act of condescension according to another. Besides, the orderliness of sequences of events in social episodes is seen in the way stories repeat themselves endlessly. However, there are other ways that order is predetermined. There are customary ways of carrying out everyday tasks that shape and maintain social order but they are too variable and contingent to be assimilated to the psychology of roles. How we eat our food is registered in etiquette books, but mostly 'diner' is not a role.

The three background conditions that are constitutive of a local social order mutually determine one another. Presumptions about rights and duties are involved in fixing the moment-by-moment meanings of speaking and acting, while both influence and are influenced by the taken-for-granted storylines realized in an evolving episode. An example will illustrate the value of using positioning theory to analyse the underlying structure of presuppositions that affect the unfolding of an episode.

An example of positioning analysis

A central feature of the way that liberal democracies create and maintain social order is the devices by which an orderly transition from one ruler to another is accomplished at regular intervals without recourse to bloodshed. The pattern of rights and duties that sustain our most valuable form of social order involves a sequence of positioning moves in which rights and duties are contested in debates and elections.

to stand for another post. It also helps that a candidate should at positioning, but of conformity to laws enacted by the nation where way, say by a selection committee or board. This is not a matter of public office in countries with systems that pit two or more parties a sequence of contests by means of which, step by step, candidates standing. Now we enter the realm of positioning theory. no whim, nor is he or she who claims it being pushed or forced into least pretend that he or she feels a duty to stand. This candidature is select just this person for the post in question, even if it is the right and 'characterological' assets would make it overwhelmingly wise to who will choose among the contestants whatever skills, knowledge the contest is to take place. The candidate must also display for those enter into a context, be it democratic or for decision in some other tions. The candidate must make clear that he or she has the right to against each other involve two related main threads in their presentathe election. The discourses offered by those who are standing for begin with, a candidate needs to establish the 'right to stand in acquire the right to govern. However, the process is complex. To The systems that have evolved in 'Western democracies' involve

Recent developments in positioning theory have brought to the fore the importance of the pre-positioning processes by which people justify or undermine the rights of themselves or others to take up a

post, begin a course of action, claim the possession of something and so on. A formal version of pre-positioning goes on in courts and tribunals concerned with property ownership, for example by inheritance. Who has the right to the bulk of the old man's fortune? If the matter has not been settled by the authority of the will, then positioning disputes will be likely to occur, in the here-and-now establishment of a right. The tycoon's trophy-wife will pre-position herself by asserting that she made his declining years a joy, while his estranged daughter, upset by the advent of the trophy-wife, might insist on ties of blood.

These pre-positionings bear more or less directly on the distribution of rights, but it is not for the court to decide the distribution of rights among the relatives. Pre-positionings are notoriously contestable – the daughter calling on the housekeeper to testify to the shrewish tongue of the wife, and the wife calling on the same person to testify to the daughter's neglect of her poor old father. Rights to matters that lie outside the jurisdiction of the courts are contested via the contesting of the pre-positionings just as they are in the formal proceedings of the probate hearings.

The system of primary and general elections in the United States is structurally similar to the format of this kind of dispute, in which conversational exchanges may finally lead to an agreement. We can see this in the primary campaigns of the Democratic party's would-be candidates for the presidency, two aspirants who are now President Obama and former Secretary of State Clinton.

At the beginning of the long process of choosing a party candidate it seemed that Hillary Clinton was, as they say, 'a shoo in'. However, a challenge quickly emerged from a dynamic and charismatic senator. Barack Obama, not then known to the American public. By early 2008 his challenge to Hillary Clinton for the right to be the candidate of the Democratic Party looked increasingly powerful. This led to the proposal of a series of debates in which the leading candidates.

Senators Clinton and Obama, would meet face-to-face to debate the issues of the day. The point of these events was to establish a prior right – the right to be the Democratic candidate. Achieving the right to rule was not a process to be analysed by the use of positioning theory – that right was determined by a formal procedure, the general election.

These debates were ideal exemplars of the use of positioning theory in social psychology. The debates involved the three components of any positioning analysis –the admissible repertoire of social acts, the establishment and distribution of rights and duties, and storylines (Harré and Rossetti 2011).

Both Obama and Clinton drew on autobiographical material as pre-positioning moves. In response to the charge that he criticizes people for 'clinging to their religion', Obama responds with the following: 'I am a devout Christian ... I started my work working with churches in the shadow of steel plants that had closed on the south side of Chicago, [I claim] that nobody in a presidential campaign on the Democratic side in recent memory has done more to reach out to the church and talk about what are our obligations religiously ...' (CNN Democratic Candidates Compassion Forum, 13 April 2008). Here Obama is making a reactive pre-positioning in response to an implicit positioning move that would undermine his right to be a candidate for the formal right to rule in a Christian country.

Obama laid claim to a special attribute, the ability to bring people together: 'what was most important in my life was learning to take responsibility not only for my own actions, but how I can bring people together to actually have an impact on the world' (ABC News, 26 February 2009).

Responding to a neutral query, Clinton makes a pre-emptive pre-positioning move by introducing an autobiographical snippet: You know, I have, ever since I was a little girl, felt the presence of God in my life. And it has been a gift of grace that has for me been

incredibly sustaining. But, really, ever since I was a child, I have felt the enveloping support and love of God and I have had the experience on many, many occasions where I felt like the holy spirit was there with me as I made a journey' (CNN Democratic Candidates Compassion Forum, 13 April 2008).

There is a striking contrast in how Obama and Clinton discuss their experiences with religion – Obama addressing churches as points of community connection and religion as a duty; Clinton approaching her faith as a matter of personal experience and feelings. This contrast plays into significant narratives for each candidate, supporting Obama's self-proclaimed role as a paternal community organizer and reinforcing Clinton's image of an emotional and strong maternal character.

In the context of a back-and-forth series of accusations and responses over the details of their different proposals for a universal healthcare plan, straightforward accusations of character effects appear as Clinton and Obama move from a discussion of the merits and demerits of their schemes to a discussion of the merits and demerits of their characters.

Clinton needed to disperse the impression that she was a different kind of person, indeed a superior kind of person, from the bulk of Democratic voters whose support she was canvassing. She had to produce a story of her life that showed her in that light. We could call it the 'Ich bin eine Berliner' storyline that Jack Kennedy deployed with good effect: I am not some person from a distant place whose interest in your welfare is merely theoretical – I am one of you and your interests are my interests.

Obama then uses the autobiographical story quoted above as storyline to show that he too is 'just one of you. ... working as a chirights attorney and rejecting jobs on Wall Street to fight for the who are being discriminated against on the job – that cumulative experience is the judgment I bring' (ABC News, 26 February 2004).

In trying to run both storylines, Clinton jeopardizes the integrity of between her silver spoon upbringing and the everyday American. understand and represent the poor even while recognizing a distance that her experiences with struggle make here a viable candidate to to what I see happening in the lives of Americans every single day between privilege and struggle. In the Texas debate, she remarks that to account for her benevolence. However, in claiming that she has a she is not less sincere than Obama in positioning herself thus - but having a duty to serve the poor and underprivileged - but it is as Lady addressing. Clinton has to account for her positioning of herself as graduate does he have the resources to serve the people whom he is also claim that he is not really an underdog - only as a Harvard law of the underdog - he was an underdog! At the same time he must (ABC News, 26 February 2008). In one breath, she has tried to assert right and duty to serve the poor, Clinton runs into a narrative tension she must do some pre-positioning digging into her religious history Bountiful that she is making her claim. She must demonstrate that with all of the challenges that I've had, they are nothing compared Obama does not have to apologize or explain why he is on the side

What is most interesting about positioning theory is that it examines how people, as a matter of fact, distribute rights and duties among the members of a group in all those everyday contexts that lie outside the formal distributions of rights and duties normally enacted by socially acknowledged roles, or by court judgements.

Closer to the interest of this book, the relevance of positions to the establishment and maintenance of social order is very direct. An interlocking network of beliefs about people's rights and duties, with respect to each other and to the public good, provides the psychological foundation for people to live in relative harmony. The psychology in question is moral rather than scientific: it requires the willingness to debate the assignment of rights and duties and to

accept that assignment, at least until another occasion for contesting should arise.

Persons as the root concept of any social order

repeat the claim with conviction. We are blamed for hasty claims to Reporting a recollection in this form entitles another person to is a social act and subject to moral as well as empirical judgement an intimate connection, such as 'being there'. To say 'I remember ... be correct, ceteris paribus, and something to which the speaker has once happened. To be an act of remembering, that description must offer a statement in the past tense as a description of something that person does. It is not just to contemplate a recollection of the past, or or the auditory cortex 'hears'. Remembering is something the whole declaring that the hippocampus or the entorhinal cortex 'remembers its use for the whole person (Bennett and Hacker 2003): for instance conscious being, a predicate the meaning of which is determined by a case of the fallacy of ascribing, to a part of a person as embodied porary 'neuropsychology', the error is a mereological fallacy, that is that is, a conceptual error. In some cases, especially visible in contemcultural practices of human beings is not just a mistake, but a fallacy. However, to impose the metaphysics of a generic natural order on the beings qua higher animals are 'minded' parts of a natural order. without remainder by the use of genetics and neuroscience. Human into a mere organism the behaviour of which can be explained we must protect the core concept of 'person' from being downgraded understanding of the core conditions for there to be a human society If we are to maintain the ineliminability of moral orders from our

How should we qualify 'human being' for the purposes of defining the field of such a suitable psychology? What sort of 'order' is

> mean case by case depends in part on the details of that culture. To is that their uses are embedded in local culture, and what they psychology, exemplified in the writings of Lev Vygotsky (1975), core of conceptions of social order. As the concept is used in hybrid elaborate the concept of 'person' in more detail as it appears in the in the psychological and social activities of human beings, we must develop our understanding of the kind of order that is exemplified the prisoner "guilty" and so on. What makes these phrases special friends, 'chooses from the menu,' hopes for a fine afternoon, 'finds rather to the human being qua person, such as 'reminisces with old human beings, but not qua higher animal, the whole living animal, Jerome Bruner (1986) and others is concerned with the attributes of what 'person' means in cultural-discursive psychology and as the and in the default condition is morally protected relations to other persons, is held responsible for his or her actions as embodied beings. A person is also embedded in a world of moral space-time, embedded in a web of material relations to other persons psychology, a person is a singularity having a unique trajectory in foundations of these studies. We can attempt only a brief sketch of that encompasses human life as it is lived? Cultural-discursive

Psychology is or ought to be a 'moral science' - that is concerned with research into implicit and explicit norms and rules for the conduct of life - moral (taking care of the sick); prudential (exercising in moderation); and practical (remembering not to add water to hot fat). In using positioning theory to disentangle the fine structure of local orders, there are many contexts, such as farming or playing tennis, in which personal embodiment is a relevant consideration, but by no means in all.

To defend the idea of this type of psychology we need to propose and defend the utility of some metaphors with which to shape research programmes where personal embodiment is the relevant feature. One such metaphor is that of the 'site for a person' as distinct

from 'person'. For example, Michael Schiavo defended his decision to terminate the life support for his 'brain dead' wife, Terri Schiavo, despite the protests of her family and the disapproval of the President of the United States, by claiming that the body in the hospital bed was uninhabited by a person, and only persons are fully morally protected (Grattan 2003). Terri Schiavo's body was a necessary feature of the original establishment of a person Vygotsky-wise, but the skills and abilities that were distinctive of personhood had ceased to be displayed at that site. Using the body-as-site-for-person metaphor, the person had disappeared. Perhaps the relation 'site of' captures this melancholy history somewhat better than any other. A site and the building erected on it are strongly related, for example they have the same street address, but the site is not part of the building. Demolition of the building can occur without destroying the site.

and easy firewood splitting are dependent on the right working of of sharpening. Youthful remembering, acceptable modes of action off the log to be split. The woodman proposes that the blade is in need of society that appear in the activities of people going about their something abnormal about the brains of such people. An axe bounces everyday lives. Here we have the important insight that social order is table actions. The psychiatrist proposes the hypothesis that there is to hear voices urging him to carry out socially and morally unaccepno longer recognizes the members of his/her family. A man claims most visible when we are confronted with disorder. An elderly person the nature of mental disturbances, as defined by the current norms science and cultural-discursive psychology are both used to explore of the problem of devising research programmes in which neuro-The utility of the task-tool metaphor should be tested in the context body and its parts as a tool kit for accomplishing some of them. consideration is that of 'person as agent undertaking a task' and the cultural-discursive psychology in which embodiment is an important Another metaphor for managing research programmes in

> the equipment, where 'rightness' is determined by the propriety or standards of the activity being performed in the relevant form of life.

The delineating of a cognitive task such as remembering one's family, and the standards that must be met for it to be well done in a certain cultural-historical context, are independent of neuroscience. While failures to perform 'correctly' are sometimes due to ignorance or misunderstanding or wilful rejection of the local normative framework, they are sometimes due to a defect in the 'machinery', some aspect or part of the person's body that we can consider the tool or one of the tools by means of which the proper task is to be carried out. Adopting this metaphor is a way of shaping hybrid research projects, such as those that have revealed the role of the chemical serotonin re-uptake inhibitor in the management of the socially and the culturally defined form that depression currently takes.

However, if we are to follow up the metaphor of the brain and its organs as tools for carrying out culturally defined tasks, we must deal with the objection that while we attend to the lawnmower while mowing the lawn, we don't attend to the auditory cortex while playing the clarinet. While we are attending to what we are writing, say as a calligrapher, we are not attending to the pen, just using it in a skilled way. We could say the same of the auditory cortex. While attending to the task of staying in tune we are not attending to the goings on in the cochlea, hair cells and so on, but using that piece of equipment to manage our performance. We create social order as we go along, pausing for reflection only in planning the future and dealing with present moments of disorder.

A further boost for the task-tool metaphor comes from the way we use apps on mobile phones. One could use one's arithmetical skills directly, activating a brain region somewhere in the frontal lobes, or we can perform the task by switching on the phone and activating the appropriate app. There is little conceptual difficulty in taking the phone/app combination to be a tool, so by parity of reasoning there

should be no difficulty in taking the brain region as a tool. In neither case need we attend to the workings of the tool, only to its overt use.

Conclusions

While the general structure of those social microsystems, like families, that make the emergence and maintenance of social order possible is ubiquitous, the details of such systems are extraordinarily varied. This variation is due partly to the exigencies of acquiring the local language and other symbolic systems, and the skills to make a life in the local environment. Compare growing up in a family of camel herders in Tajikistan with acquiring the necessary life skills in the family of an international banker.

Positioning theory has this character of a basic universal structure, in the root concepts of 'having a right' and 'having a duty', with the means for researching into the crucial differences that mark out distinct social groups. We learn what positions there are in our circle, and we begin to grasp the interactional character of the reciprocity of rights and duties and its limits. The core concepts of positioning theory come out of vernacular moral philosophy while the human family unit and its extensions into the tribe are shaped by the limitation of the possibilities of personal interaction revealed by such studies as those of Dunbar (2007).

While there are at least some universal concepts with which we think and act in social life, there are no universal laws of social order. Just think of the wide variety of devices humanity has invented for managing the relations between the sexes, and how they have changed even in the last few decades. In the last analysis, the world of human social order is a world of persons, as embodied, conscious symbol using, and morally protected and accountable individuals.

References

Bennett, M. R., and Hacker, P. M. S. (2003), Philosophical Foundations of Neuroscience (Oxford: Blackwell).

Bruner, J. S. (1986), Actual Minds, Possible Worlds (Cambridge, MA: Harvard University Press).

Comte, A., (1909 [1861]), A General View of Positivism, trans J. H. Bridges (London: Routledge).

Dunbar, R. (2007), Evolution and the Human Sciences (London: Sage). Freud, S. (2002 [1929]), Civilisation and its Discontents (London: Penguin).

Grattan, K. (2003), "The Dispute over the Fate of Terri Sciavo", in R. Harré and F. M. Moghaddam, The Self and Others (Westport, CT: Praeger), 113–45.

Harré, R., and van Langenhove, L. (1999), Positioning Theory (Oxford: Blackwell).

Harré, R., and Rossetti, M. (2011), 'The Right to Stand the Right to Rule', in F. M. Moghaddam and R. Harré, Global Conflict (New York: Springer).

Hegel, G. W. F. (1967), [1821] Hegel's Philosophy of Right, trans T. M. Knox (Oxford: Oxford University Press).

Hobbes, T. (2012 [1651]), *Leviathan*, ed. N. Malcolm (Oxford: Oxford University Press).

Locke, J. (1698), Two Treatises of Government (London: Amersham & Churchill).

Mill, J. S. (2003 [1859]), On Liberty, ed. G. Kateb (New Haven, CT: Yale University Press).

Smith, A. (2008 [1776]), The Wealth of Nations (Radford, VA: Wilder).
Spencer, H. (1900 [1862]), System of Synthetic Philosophy: First Principles

(London: Williams and Norgate).
Vygotsky, L. S. (1975), Thought and Language (Cambridge, MA: MIT Press).