

# Is Sociology Soluble in Cognitive Sciences ?

## A Case Study : The Concept of *Community*

Paolo Barbesino, Ph.D.

In collaboration with Salvino A. Salvaggio, Ph.D.

“If you want God to shake with laughter, tell Her what  
your plans are.”  
*Geek Proverb*

### I

Talking about community has an important communicative advantage: one can refer to it and discuss about it without feeling compelled to explain what one is talking about. Once a distinction is drawn between community and society, community and the idea it conveys of “smooth, peaceful, harmonious interaction” (Luhmann, 1987:124-25) is overloaded with a sense of nostalgia and regret for its loss. Although considered not to be in good taste among social scientists during the 1960s in the wake of its functionalist legacy and the sense of “conservative consensualism” it conveyed (Day & Murdoch, 1993:83), nowadays the concept of community is becoming popular again as a tool for social analysis, whereas a return to community is increasingly seen as the remedy against the impersonal features of modern society. However forceful this plea for a return to community may appear, one could still wonder whether the instructions it usually provide are sufficiently clear to lead us safely there.

This perhaps may help understand why the more one keeps track of the different ways the term is used and questions its very notion, the more community appears as a shorthand which makes communication easier but does not serve as concept. All too often, when making sense of the way the term is used it can hardly be decided whether one is referring either to social groups stemming from the direct relationship among their members on the basis of a shared identity, or to social categories defined by common external attributes. That is possibly why in the daily practice of community studies a community needs first to be postulated in order to then have to ask the people whether they feel part of that very community, and if not, why. As a result, a basic structural concern with ongoing interactions wherever located and however tight has often turned into a quest for local solidarity. Extrinsic mappings of the boundaries of a given locality were therefore taken as a starting point in order to later investigate the extent of communal interaction and sentiment within these boundaries. In so doing, the assumption had to be made that a significant portion of interactions are locally based. Such a territorial approach has been particularly prone to understanding community solidarity in terms of shared values. As a consequence, whenever a lack of locally organised solidary behaviour and attitudes was observed, this was enough to conclude that community was no longer in place.

Such a particular way to enframe the problematic of community may be possibly explained by the opacity of the term in everyday language. As Raymond Williams noted, community “can be the warmly persuasive word to describe an existing set of

relationships, or the warmly persuasive word to describe an alternative set of relationships” (Williams, 1983:66), making it increasingly hard to draw a distinction between “community - or lack of community” (John, 1912:129). One can think about the working community, the local community, the European community, the ethnic community or listen to the CNN talking about Northern Ireland as a profoundly divided community. Eventually one could think about a scientific community and, once coming to terms with the supposed inconsistencies between the representation of science as an entirely modern endeavour and the notion of community as a traditional social entity, ask whether those studying communities do actually constitute a community, no matter how dispersed, invisible or even virtual it may appear.

One would expect that social sciences could shed a new light on what lies behind such a use of the term ‘community’ as an omnibus label, this task being even more compelling in the age of on-line communities that can only be traced through posting, cross-posting, lurking, reading, and flaming. But such a hope is actually quite often misplaced, and if resorting to a notion of memory whatsoever seems to be the prevailing answer to the problem of defining community, one has still to acknowledge that memory is a deceptively simple word. No doubt memory helps understand how expectations are produced to make some interactions more likely to occur than others, so that boundaries can be set between the inside and the outside, and reproduced over time. Like tradition, though, memory cannot be understood as a static deference to that which has always been, as Max Weber would have it. Not only for in so doing the risk of reification would simply shift from community to memory, but also because time would be conflated with chronology rather than being dealt with on a different level. On the one hand, in order to prevent a shift in reification from occurring, one should start from the assumption that memory within social units cannot be dealt with as an extension of individual memory. On the other hand, distinguishing between chronology and time allows both to investigate the functions of the former entailed in its standardising performances and to approach the cultural constitution of the latter as a generalised dimension of meaningful reality. This would lead to realising that each historically located system of interaction has no other source of information about the possible interactions than the information it can retrieve from its own history. But the system can only generate knowledge internally from such uncertainty, if it manages to store information about its previous states and in addition if it is capable of taking this information into memory. Under these conditions, it may locate itself historically, and in relation to the multi-dimensional space of systems of reference at each moment in time, thereby being capable of producing meaning. Memory therefore has to be conceived of in terms of process which is akin to and overlaps with communication and should be thought in the same active sense in that it entails both remembering and forgetting, and this far beyond any conscious, goal-directed memory action carried out by an individual or a group.

It is not simply the chronological extension through which a practice has existed, as it would be easily taken at face-value, just as it is not the generalisation of communication by information and communication technologies that secures that the way a given message is understood by different people would lead to a communality in opinions rather than to a wider range of shared themes upon which they may go on to disagree. Rather, it is the production and reproduction of that practice through communication that makes it part of a memory. All this suggests that memory may offer some insight only if an approach is worked out to account for the fact that the

present state of memory depends upon the history of the previous inputs, rather on just its present input. This would lead to acknowledging that memories about the past can themselves change across time, but even when this is not the case, they will certainly be selected from a potentially infinite set of possible memories.

## II

In the last decades, it has increasingly become a sociological commonplace to stress the intrinsic weakness of the notion of community but little effort has been put into attaining a unity of the concept whatsoever. The more in fact one tries and grasps the essence of community, the more different types of communities need to be postulated and a host of subtle distinctions has to be introduced to the point of making the term itself devoid of any residual meaning. Nor could one hope that a sound understanding be gained by a painstaking review of the ever-lasting debate around community within social sciences, which should in fact also account for other painstaking reviews of the same kind that have increasingly become part and parcel of this very debate. Perhaps, the only chance to make sense of how to conceive of community lies in the unlikely event that a new agreement occurs within the restricted boundaries of a given community. No doubt, this statement would seem to have replaced reference by a tautology, or if you like an external reference by self-reference. But this should at least suggest that the concept of community has to be related to a self-referential domain. In order for this to become clear one has first to ask who observes with the aid of the concept of community, and above all, how it observes with the aid of this concept. As an exercise into a sociology of sociological knowledge, this would mean to investigate under which conditions the concept of community has been used as an analytical tool.

The debate around community has been ruled by two main assumptions. The first is of an epistemological nature and relates to the problem of observation. It is the result of the distinction between subject and object. The epistemology that for long has prevailed into this century thought of subject and object as separated and conceived of observation and description of the world from the outside as possible. Cognition was said to occur only when any circular interlocking with its object was avoided. But as community is quite evidently a self-describing object, the chance for such interlocking to occur has to be denied by the very means the observation is designed. A community can either be perceived as such by its members or identified from the outside by social scientists independently of the perceptions of those people whom the social scientist believe to belong to such a community. In this case a hierarchy is established whereby social scientists could claim to be in a better position to assess whether a community is actually around, though a correspondence between the feelings of the members of a community and the ideas of social scientist remains warmly encouraged. No room is here left for the likely discrepancies among different observers and their impact in prompting a wide range of responses on the side of those described as belonging to a community. To use a phrase from early anthropology, one can describe this situation by saying that the etic/emic distinction is here at work. Still, one may wonder whether this is a real distinction. A good starting point to answer this question would be to make the distinction re-enter itself, as George Spencer Brown would have it, and ask whether this is either an emic or an etic distinction. No doubt such a way of proceeding may sound unfamiliar, but I

suggest that it could at least be used to account for the increasing lack of confidence in this very distinction among social scientists over the last two decades. The linguistic turn in both anthropology and sociology, science studies, post-colonial studies as well as feminist theory have all contributed to show how the etic side can be easily turned into an emic one, quite often arguing that such a distinction can only be enforced by means of power and domination. In this respect, anthropologists talk about observed observers where the latter are anthropologists as well rather than the object of their etic observation. As a result, the very distinction emerged as historically contingent and highly localised, to the point of letting the question arise whether the communities which are described are but the results of the description of another community which constructs them by means of this very description.

### III

A second main assumption in the debate around community concerns the idea that no matter how one conceives it community has to be approached as a morphology capable of objective definition and description. In the early stages of sociology, community therefore was understood as consisting of human beings or of the relations among human beings.

More recently, as the emphasis in social theory shifted onto social practices ordered across time and space community turned to be conceived of as a social entity in which agency and structure are intrinsically related. Structures operate because actors act within them, and actors operate through structures.

No matter how this may sound as an appropriate description of social reality, here one is faced with both the problem of boundaries and the issue of their contingency, and one should therefore investigate how one can come to terms with these questions when dealing with the concept of community.

The problem of setting boundaries however is not only a theoretical question but also represents a serious concern in practice where the risk and the complexity of the field of expectations can no longer easily be dealt with. However it happens to be defined, one should safely argue that talking about a community makes sense only if this very community can be distinguished from something else. But as second-order cybernetics has shown, one should start from the consideration that each observer finds in her world particular 'objects' that themselves observe their world. The first observer cannot deal adequately with these objects by starting from the assumption of an univocal world, which would be the same for everyone at every moment in time. If she wants to observe the other observers as observers, she must consider that they themselves observe, and do it in their own way. Hence, whereas distinguishing a community can be carried out either from within (self-description) or from without (external description), a correspondence between these distinctions cannot be taken for granted. By considering just one among many external observers and comparing its description with the internal self-description, the correspondence between external description and self-description appears as an unlikely event. When such a lack of correspondence occurs an invisible community may be around or a reified one may prevent from upgrading the observation from the outside. Calling for a third observer and hope that a further external description could bridge the gap between the two is here not very helpful. For an assumption has to be made as to the possibility of an

objective meta-position which is no longer tenable since it is irreflexive to the bias which is necessarily brought into the analysis by original assumptions; whether this bias is an outcome of class, ethnicity, gender or power being an empirical question rather than another original assumption. A third observer would simply make the likelihood of further discrepancies increase. As soon as there are more than two modes of observation to synchronise, their interaction can in principle be decomposed in more than one way, and therefore any assumption as to a transcendental relation may itself become uncertain. Once the implications of a divergence between these two forms of describing community are extended to the domain of policy making, this point can be fully appreciated.

Unless it is accepted that anything goes, setting the boundaries still remains a pre-requisite for whatever discourse on community. Rather diverse though are the ways these have been drawn. Social scientists have always been familiar with the idea that “spatial and temporal contiguity [are] an essential basis of that order of coalescence which we call community” (Schmalenbach, [1922] 1961:332). As long as community is meant as a territorialised entity and understood as “a fixed and bounded locality” (Lee & Newby, 1983:57), there is apparently no problem with taking the notion of space for granted and marking the beginning and the end of a community as a social entity relatively stable over time. Once boundaries are drawn, social scientists can easily find a ‘where’ that they can observe before they can generate any understanding whatsoever.

One could also ask what happens when space and time are not taken at face-value, i.e. when place turns to be considered as not necessarily space-bound and time comes to be understood as a crucial dimension in, as well as a by-product of, the production and reproduction of community. One does in fact not need to turn to the debate around virtual or electronic communities to realise that space and time play a crucial role in the process of community production and reproduction, as well as in its disruption, and that therefore their definition cannot remain unquestioned.

In interactions involving physical co-presence, expectations about other people may for instance entail elements of place so that discrepancy or acceptance depend on the extent to which such expectations corresponds to the place in which these other people are located. Someone can be in the ‘wrong’ place if expectations locate her elsewhere, and this affects both the chances and the shape of the interaction that may occur. Within a given locality this can often be the case with peripheral and marginalised groups, as it has been explored in some detail by human geography. Human geographers have convincingly pointed out that exclusion is brought about by resorting to fairly diverse criteria - gender, ethnicity, socio-economic status being but a few examples. But this is only half of the story. For one can safely speak of exclusion only by distinguishing it from inclusion. Considered in its unity, the distinction between inclusion and exclusion can only occur in time, and has therefore to be dealt with by an historically sensitive approach. On the one hand, this would lead to asking why current criteria for including and excluding are these and not others: why for instance in Europe left-handed people are no longer taken as close intimates of the devil, or how the divide between inclusion and exclusion is reshaped once people are no longer sorted by ‘color’, but in reply to an ‘ethnic question’

combined with nationality.<sup>1</sup> On the other hand, this should lead not only to investigating how patterns of inclusion and exclusion are reproduced over time, but also to considering how their contingent nature is made invisible.

No doubt, these examples show how inclusion and exclusion are at work at a social level. But I suggest that the distinction between inclusion and exclusion can also be used to account for the way in which interactions set their own boundaries. Criteria for including/excluding are local and contingent, and should be interpreted dynamically by investigating how each system of interaction activates and reproduces them. This would enable to see whether and how physical presence is turned into communicative absence as well as whether and how physical absence is turned into communicative presence. Being in the 'right' place indeed not necessarily involves physical co-presence: parents do not necessarily have to stop loving their children simply because they have moved out. Theories of relational development have increasingly pointed out that physical proximity and frequent interaction are not necessary conditions for the development of relationships. Close relationships can be maintained without frequent face-to-face contacts once ways of coping with physical absence are worked out, either by means of technologically mediated presence or by using memory to turn physical absence into communicative presence.

Inclusion and exclusion therefore cannot be conflated with physical presence and absence. Rather, in their unity they have to be conceived of in terms of a mechanism establishing communicative relevance: "Not just anybody can be allowed to participate in the living dialogue", as Lyotard would have it (Lyotard, 1988:24). Leaving aside the question as to how to properly formalise such a model of parallel and distributed processing, it suffices to say that inclusion does not indicate any incorporation of individuals within interaction. Rather, it indicates that someone has to be taken as relevant within an interaction regardless of any consideration whatsoever as to her physical presence. To put it bluntly, human bodies are not human beings, an empirical question being how human bodies are taken as human beings and human beings turned into human bodies. In this light, membership cannot be thought of as a property of an individual. For it has nothing to do with the physicality of the body nor with a state of mind whatsoever, even if this does not prevent an individual from consciously thinking about it. Rather, it indicates a communicative pre-requisite whereby the communicative presence of such an individual is actualised within a particular system of interaction, and not necessarily in another. As an internal communicative construct of interaction, nothing prevents the communicative presence of an individual from being actualised in different interactions, even when no link can be established among them. Moreover, inclusion is just an event in time, and therefore has to be reproduced over time. Memory can no doubt help stabilise the reproduction of inclusion, but no a priori assumption can be made as to whether inclusion will be continued or discontinued. By the same token, whereas it does not indicate any physical absence, exclusion has to be reproduced over time with the aid of memory. But due to the dynamic feature of memory, no a priori assumption can be made that exclusion will not be discontinued and turn into inclusion.

It is then not surprising that as early as 1931 social scientists who were confronting the issue as to how properly conceive of the boundaries of a community

---

<sup>1</sup> The former can be found for instance in the first American census in 1791, the latter is the solution worked out for the British Census in 1991.

came to the conclusion that none of the attempts to describe even “the local community in accurate spatial terms is likely to prove satisfactory” (Lindeman, 1931:103-104)

#### IV

Unless it is accepted that community is used impressionistically as a tool for concealing a lack of theorising in analytical concepts, the problematical status of notions of space and time in defining community should call for a more abstract theoretical framework. In this perspective, the notion of time-space distancing as put forward by Anthony Giddens should be seriously considered in that it allows not only to account for the experience of globalisation in high modernity but to describe all the situations in which communication technologies from literacy onwards have allowed to uncouple interaction from physical presence whereas the time span between utterance and understanding increases without necessarily reducing the chance that communication occurs.

This suggests that telepresence is by no means a feature exclusively associated with new information and communication technologies at least for the emergence of written communication has introduced texts as potential interaction partners. Although one should be careful not to simplistically conclude that texts can exclusively be thought of as proxies of humans in communication. Non-linear texts (cybertexts, holy books of world religions) have shown the extent to which a sound understanding of communication cannot be entirely confined to human-to-human communication. The same occurs whenever non-human agents such as equipments, instruments as well as all sorts of devices are charged with the responsibility for producing representations. This is, for instance, the case with science where the coexistence of animate and inanimate agents in a locally constituted moral order of representation raises the rather crucial questions as to the relationships between different agents as well as their relative value and reliability which are usually dealt with by resorting to highly localised ways of attribution and assignation.<sup>2</sup>

The uncoupling of interaction from physical presence means that, by increasing the capacities of reproduction and storage, changes in the media and techniques of communication let “new structures become possible, and eventually necessary, to cope with new complexities” (Luhmann, 1990:100).

Within the framework of structuration theory, the notion of space-time distancing helps understand changes in systems of interaction brought about by new modes of communication. In its emphasis on adaptive procedures, though, it paradoxically confines concepts of time and space to a structural dimension, so that a dualism is stressed between structure and agency rather than its suggested duality. Technological determinism combines here with a social ontology: no doubt, the relevance of technology is perceived but it cannot be entirely appreciated for social reality is meant to be only indirectly affected by technology. As a consequence time

---

<sup>2</sup> One may question whether religious communities can have a communication with non-human agents as their own starting point in that the latter need prophets who write texts in order to be understood. But still there are communities whose membership starts only after the interaction with non-human agents such as self-help groups of HIV positive people where a communication with an inanimate agent has to come first: the test. Moreover, distinguishing between communities of ascent and descent (Morris, 1996) is not very much helpful here.

and space are viewed as given or fixed rather than socially constructed and contested. On the contrary, a constructivist approach suggests that new ways of representing time and space parallel the introduction of new modes of communication. The history of the modern understanding of time and its relations with the development of the printing press are quite telling as this regards. Future, for instance, as that which is not yet present in time is only a fairly recent invention. For long, in fact, its conceptualisation has been worked out through its externalisation to the domain of space. Although it is still controversial whether to trace back the modern conception of time either to the seventeenth or to the eighteenth century, in the early stages of the printing press that which is not present in time had to be thought as that which is not present in space. Utopias as the earliest representation of the future had to make invisible this lack in conceptualising that which is not present in time by externalising it to that which is not present in space, and by making clear that such not being present is actually a nowhere, something out of space. Only later nowhere became somewhere and no time became sometime. Quite interestingly, these transformations in the understanding of space and time went along with the historical change in the meaning of the word 'communication' and its association with the notion of physical presence. From the seventeenth century onwards, 'communications', along with its most general meaning of making common, imparting, was the generic term for physical facilities such as roads, canals and railways. It was only beginning with the development of the telegraph which made it no longer necessary to move humans or physical artefacts from place to place in order for communication to occur, that communication became more closely associated with information and ideas, in print and broadcasting, whereas transport meant the physical carriage of people and artefacts.

## V

Once the distancing of time and space is considered as a not exclusively high modern feature, and once time is distinguished from chronology just as place is from space new issues arise. The territorial approach and the assumption that actors network, and the networks act are seriously put into question. As a consequence the unity of the concept of community dissolves whereas its informative content decreases accordingly. One should for instance address the question as to whether there is a suitable turnover among members preventing community from either dissolving or disappearing. Moreover, one might wonder what is the amount of multiple memberships a community can stand to be still taken as such, let alone the question whom by.

As Stuart Hall pointed out modern people of all sorts and conditions have increasingly had as a condition of survival to be members simultaneously of a plurality of 'imagined communities', whereas the negotiations between and across these unstable borderlines are part and parcel of modernity itself. All this was already clear in the early stages of sociology, and borrowing a phrase from Simmel was usually described as the "intersection of social circles" (Simmel in Lawrence, 1976:101)

The membership of diverse social circles has important consequences. For Simmel, "membership of a large variety of spheres with widely varying proportions of competition and co-operation provides incalculable scope for individual permutations"

(Simmel, 1976:97-98, quoted from Frisby, 1984:85-86). Each individual is therefore a member of the unique personal networks of all the people she is linked with, whereas multiple membership enables to connect several social circles. Hence, complex networks of chains and clusters are ultimately connected through a shared common node. In this perspective, social solidarity is but the by-product of the co-ordination of activities through the network processes rather than of shared sentiments through common socialisation.

Even when community is conceived of as a territorialised social unit of high presence-availability, personal and total networks have still to be distinguished. Whereas the total network focuses on all existing connections among all persons, the personal networks consist of the set of persons connected to any particular individual (Ego). These persons can be connected either directly to Ego or through some intermediary person. Each person to whom Ego is directly connected is in turn directly connected to a set of her own contacts. If Ego knows A and A knows B, B is indirectly linked to Ego and can be potentially available to Ego to pass information or assistance. Moreover, the configuration of these networks is contingent and changes over time so that the idea of a continuity cannot be exclusively understood in terms of a persistence of their members. Rather, it has to be thought of in terms of a stabilisation of patterns of inclusion and exclusion carried out through memory. This by no means should lead to equating inclusion with consensus and exclusion with dissent. Inclusion only indicates that some interactions are more likely to occur than others, but this is not to say that interactions would necessarily lead to consensus. For they continuously composes and decomposes situations in which one can distinguish between consensus and dissent, and no a priori assumption can be made as to whether consensus would prevail rather than dissent. At stake here is rather how expectations are stabilised and their disappointment is handled, whether then disappointment would lead either to learning by upgrading former expectations, or to a new, though counterfactual, actualisation of the same expectations.

In addition, as network analysis has shown, relationships are not necessarily reciprocated. Therefore one may ask whether there is a minimal degree of congruence that allows to talk about community.

To these remarks, which represented a serious threat to the notion of community, it has often been opposed that

there is clearly no such single thing as community. Community has many meanings, it involves different sets of experience for different groups of people, and indeed for the same people at different times in their lives (Crow & Allan, 1994:183).

But here one could then ask why not to get rid of the old hat of an ontological understanding of community altogether, and leave its entire problematic to the historians of social sciences. To chase the plurality of sets of experience involved in what people mean when they talk about community one does not need to bother with defining community and could easily move to the position of a second order observer, observing what observers observe. For a second order observer there are indeed no facts, and the first order "what" questions turn into "how" questions. In this perspective, discourse analysis has provided a deep insight into the way social categories are produced and organised in discourse, that there won't be any problem even with reflexively applying its method to the social science discourse on

community once a congruence is assumed between the discourse and praxis of science. But due to a lack of reflexivity this is still to happen, and an ontological understanding of community is continuously preserved by coming to terms with the multifarious meanings of community.

That is possibly why the more the unity of the concept dissolved, the more it had to be reconstructed from scratch by resorting to functional equivalents. Once the territorialised understanding of community resulted considerably inadequate to account for an ever increasing distancing of time and space, new concepts had to be worked out to enable the observation of all the instances where a community is said to take place in a more contested space and within temporal structures that brings about the possibility of an ever increasing complexity. This is for instance the case with the idea of “community without propinquity” or “proximity” which emerged within social science discourse from the early 1960s (Webber, 1963:29).

However convincing it may appear, the sociological idea of “community without propinquity” let further issues arise. On the one hand, it may be quite an interesting sociological question to ask why it took so long to upgrade a sociological definition of community when equivalent definitions were already available in other discursive domains long before. As early as the 1890s, in fact an equivalent concept was used by American telephony experts who envisaged the coming of the “epoch of neighborhood without propinquity” (Taylor, 1891:109 quoted from Marvin, 1988:66). On the other hand, the question remains unanswered as to where the boundaries of such a proximity lie and how this can be measured. Or to put it in other terms, whether a continuity is arbitrarily established between a territorialised and a deterritorialised understanding of community. A similar ambiguity can be seen at work also in definitions of community worked out to account for discontinuities in chronological time.

As a result of all this, one may wonder whether it can still make sense to talk about communities once all the inconsistencies are perceived in the way notions of community have been allegedly used as an analytical tool in social research. This deconstructive side notwithstanding, one has still to acknowledge that any individual does experience “those fragments of cultural memory and information that compose the invisible information structure I consider my real home - my virtual community”, as Douglas Coupland would have it. This experience is by all means absolutely unique and can hardly be explained, unless one denies the individuality of individuals and reduce them to cultural dupes. But here the price one has to pay would be to trivialise individual experience, and to enforce such a trivialisation by means of power and domination, no matter whether they be located either in the daily practice of science or in politics. On the contrary, one may wonder how an understanding of community has to be worked out by taking the non-triviality of individuals as the basic starting point. A likely solution is to move from the etymological similarity sharply stressed by Raymond Williams between community and communication, and conceive of an approach in which nothing, neither the trivialisation of the individual nor the role played by information and communication technologies, could lie behind (Luhmann, 1994b:138). This would lead to acknowledging that community can be conceived of as a discursive artefact among many once communication is taken as the basic starting point. Though I cannot elaborate any further on how such an approach should be look like, here I hope to have at least suggested but a few hints.

## References

- Aarseth, E.J. (1994) "Nonlinearity and Literary Theory", in G.P. Landow (ed) *Hyper/Text/Theory*, pp. 51-86. Baltimore: The Johns Hopkins University Press.
- Anderson, C.A., Lepper, M.R. & Ross, L. (1980) "The Perseverance of Social Theories: The Role of Explanation in the Persistence of Discredited Information", *Journal of Personality and Social Psychology* 39: 1037-49.
- Barbesino, P. & Quassoli, F. (1996) *Community as Communication: An Ethnography of Migration in Milan*. Unpublished manuscript forthcoming in Spanish in *Migraciones* 1.
- Barbesino, P. & Salvaggio, S.A. (1996) "How is a Sociology of sociological Knowledge Possible?", *Social Science Information* 35(2): 341-62.
- Barbesino, P. (1997) "A Coffee-house Conversation on Those Observing Migration and Other Funny Things", to appear in H. Lutz & K. Koser (eds) *The New Migration in Europe: Social Realities and Social Constructins*. London: MacMillan.
- Bauman, Z. (1996) "On Communitarians and Human Freedom: Or How to Square the Circle", *Theory, Culture & Society* 13(2): 79-90.
- Bauman, Z. (1993) *Postmodern Ethics*. Oxford: Blackwell.
- Baumann, G. (1996) *Contesting Culture: Discourses of Identity in Multi-Ethnic London*. Cambridge: Cambridge University Press.
- Baym, N.K. (1994) "The Emergence of Community in Computer-Mediated Communication", in S.G. Jones (ed) *Cybersociety: Computer-Mediated Communication and Community*, pp. 138-63. London: Sage.
- Beniger, J.A. (1987) "Personalization of Mass Media and the Growth of Pseudo-Community", *Communication Research* 14(3): 352-71.
- Bennington, G. (1988) *Lyotard: Writing the Event*. Manchester: Manchester University Press.
- Boster, J.S. (1985) "Requiem for the Omniscient Informant: There's Life in the Old Girl Yet", in J.W.D. Doughert (ed) *Directions in Cognitive Anthropology*, pp. 177-97. Urbana: University of Illinois Press.
- Bourdieu, P. (1975) "The Specificity of the Scientific Field and the Social Conditions of the Progress of Reason", *Social Science Information* 14(6): 19-47.
- Bromberg, H. (1996) "Are MUDs Communities? Identity, Belonging and Consciousness in Virtual Worlds", in R. Shields (ed) *Cultures of Internet*, pp. 143-52. London: Sage.
- Calhoun, C. (1992) "The Infrastructure of Modernity: Indirect Social Relationships, Information Technology, and Social Integration", in H. Haferkamp & N. Smelser (eds) *Social Change and Modernity*, pp. 205-36. Berkeley: University of California Press.
- Calhoun, C. (1991) "Indirect Relationships and Imagined Communities: Large-Scale Social Integration and the Transformation of Everyday Life", in P. Bourdieu & J.S. Coleman (eds) *Social Theory for a Changing Society*, pp. 95-121. Boulder: Westview.
- Calhoun, C. (1980) "Community: Towards a Variable Conceptualization for Comparative Research", *Social History* 5: 105-29.
- Callon, M. (1987) "Society in the Making: The Study of Technology as a Tool for Sociological Analysis", in W.E. Bijker, T.P. Huges & T. Pinch (eds) *The Social*

*Construction of Technological Systems. New Directions in the Sociology and History of Technology*, pp. 83-103. Cambridge: MIT Press.

Carey, J.W. (1989) *Communication as Culture: Essays on Media and Society*. London: Unwin Hyman.

Cohen, A.P. (1985) *The Symbolic Construction of Community*. London: Routledge.

Conversi, D. (1995) "Reassessing Current Theories of Nationalism: Nationalism as Boundary Maintenance and Creation", *Nationalism and Ethnic Politics* 1(1): 73-85.

Cornell, D. (1996) "Enabling Paradoxes: Gender Difference and Systems Theory", *New Literary History* 27: 185-97.

Crow, G.P. & Allan, G. (1995) "Community Types, Community Typologies and Community Time", *Time & Society* 4(2): 147-66.

Crow, G.P. & Allan, G. (1994) *Community Life. An Introduction to Local and Social Relations*. London: Harvester Wheatsheaf.

Day, G. & Murdoch, J. (1993) "Locality and Community: Coming to Terms with Place", *Sociological Review* 43: 82-111.

Eisenstein, E. (1979) *The Printing Press as an Agent of Change: Communications and Cultural Transformations in Early Modern Europe*. Cambridge: Cambridge University Press.

Elias, N. & Scotson, J. (1965) *The Established and the Outsiders*. London: Frank Cass.

Engeström, Y. et al, (1990) "Organizational Forgetting: an Activity-Theoretical Perspective", in D. Middleton & D. Edwards (eds) *Collective Remembering*, pp. 139-68. London: Sage.

Esposito, E. (1996) "Observing Interpretation: A Sociological View of Hermeneutics", *Modern Literary Notes* 111: 593-619.

Fairclough, N. (1992) *Discourse and Social Change*. Cambridge: Polity Press.

Fentress, J. & Wickham, C. (1992) *Social Memory*. Oxford: Blackwell.

Foucault, M. (1977) *Discipline and Punish: The Birth of the Prison*. New York: Pantheon.

Frisby, D. (1984) *Georg Simmel*. Chichester: Ellis Horwood.

Fuchs, S. (1996) "The New Wars of Truth: Conflict over Science Studies as Differential Modes of Observation", *Social Science Information* 35(2): 307-26.

Game, A. (1991) *Undoing the Social. Towards a Deconstructive Sociology*. Milton Keynes: Open University Press.

Geyer, F. (1996) "Virtual Communities in Cyberspace", *Kybernetes* 25(4): 60-66.

Giddens, A. (1990) *The Consequences of Modernity*. Cambridge: Polity Press.

Giddens, A. (1984) *The Constitution of Society*. Cambridge: Polity Press.

Glanville, R. (1996) "Communication without Coding: Cybernetics, Meaning and Language (How Language, Becoming a System, Betrays Itself)", *Modern Literary Notes* 111: 441-62.

Goffman, E. (1961) *Asylums: Essays on the Social Situation of Mental Patients and Other Inmates*. New York: Doubleday.

Gordon, D.S. & Donald, S.C. (1993) *Community Social Work, Older People and Informal Care: A Romantic Illusion?* Aldershot: Avebury.

Hagstrom, W.O. (1965) *The Scientific Community*. New York: Basic Books.

Hall, S. (1993) "Culture, Community, Nation", *Cultural Studies* 7(3): 349-63.

Havelock, E. (1963) *Preface to Plato*. Cambridge: Harvard University Press.

- Hill, M.J. & Issacharoff, R.M. (1971) *Community Action and Race Relations: A Study of Community Relations Committees in Britain*. Oxford: Oxford University Press.
- Hillery, G.A. (1955) "Definitions of Community: Areas of Agreement", *Rural Sociology* 20: 111-23.
- Hofstadter, D. (1979) *Gödel, Escher, Bach: An Eternal Golden Braid*. New York: Basic Books.
- Hutchins, E. (1991) "The Social Organization of Distributed Cognition", in L.B. Resnick, J.M. Levine & S.D. Teasley (eds) *Perspectives on Socially Shared Cognition*, pp. 283-307. Washington: American Psychological Association.
- John, A.S. (1912) "The Community and Its Children: Their Co-operation in Their Own Training", *Sociological Review* 5: 125-39.
- Jones, S.G. (1995) "Understanding Community in the Information Age", in S.G. Jones (ed) *Cybersociety: Computer-Mediated Communication and Community*, pp. 10-35. London: Sage.
- Kaufer, D.S. & Carley, K.M. (1993) *Communication at Distance: The Influence of Print on Sociocultural Organization and Change*. Hillsdale: Erlbaum.
- Kolar-Panov, D. (1996) "Video and the Diasporic Imagination of Selfhood: A Case Study of the Croatians in Australia", *Cultural Studies* 10(2): 288-314.
- Law, J. & Mol, A. (1995) "Notes on Materiality and Sociality", *Sociological Review* 43: 274-94.
- Lawson, H. (1985) *Reflexivity: The Post-Modern Predicament*. Melbourne: Hutchinson.
- Lee, D. & Newby, H. (1983) *The Problem of Sociology: An Introduction to the Discipline*. London: Unwin Hyman.
- Leydesdorff, L. (1996) "Luhmann's Sociological Theory: Its Operationalization and Future Perspectives", *Social Science Information* 35(2): 283-306.
- Leydesdorff, L. (1994) "Uncertainty and the Communication of Time", *Systems Research* 11(4): 31-51.
- Leydesdorff, L. (1993) "'Structure'/'Action' Contingencies and the Model of Parallel Distributed Processing", *Journal for the Theory of Social Behaviour* 23(1): 47-77.
- Lievrouw, L.A. (1996) "The Geography of Self-Interest: Overcoming Proximity Using New Communication Technologies", paper presented at the annual meeting of the International Communication Association, Chicago, May 1996.
- Lindeman, E.C. (1931) "Community", in E.R.A. Seligman (ed), *Encyclopaedia of the Social Sciences*, Vol. 4, pp. 102-6. New York: MacMillan.
- Loftalian, M. (1996) "A Tale of an Electronic Community", in G.E. Markus (ed) *Connected: Engagements with Media*, pp. 117-55. Chicago: University of Chicago Press.
- Luhmann, N. (1996) "On the Scientific Context of the Concept of Communication", *Social Science Information* 35(2): 257-67.
- Luhmann, N. (1995) *Social Systems*. Stanford: Stanford University Press.
- Luhmann, N. (1994b) "'What Is the Case?' and 'What Lies Behind It?' The Two Sociologies and the Theory of Society", *Sociological Theory* 12: 126-39.
- Luhmann, N. (1994a) "Speaking and Silence", *New German Critique* 61: 25-37.
- Luhmann, N. (1990) *Essays on Self-Reference*. New York: Columbia University Press.

- Luhmann, N. (1988) "Familiarity, Confidence, Trust: Problems and Alternatives", in D. Gambetta (ed) *Trust: Making and Breaking Cooperative Relations*, pp. 94-107. Oxford: Blackwell.
- Luhmann, N. (1987) "The Evolutionary Differentiation between Society and Interaction", in J.C. Alexander et al. (eds) *The Micro-Macro Link*, pp. 112-31. Berkeley: University of California Press.
- Luhmann, N. (1976) "The Future Cannot Begin: Temporal Structures in Modern Society", *Social Research* 43: 130-152.
- Lyotard, F. (1988) *The Differend. Phrases in Dispute*. Manchester: Manchester University Press.
- Machin, D. & Carrithers, M. (1996) "From 'Interpretative Communities' to 'Communities of Improvisation'", *Media, Culture & Society* 18: 343-52.
- Maciver, R.M. (1917) *Community: A Sociological Study*. London: MacMillan.
- Marvin, C. (1988) *When Old Technologies Were New. Thinking About Electric Communication in the Late Nineteenth Century*. Oxford: Oxford University Press.
- Massey, D. (1991) "A Global Sense of Place", *Marxism Today* June: 24-30.
- Mayer, Ph. & Mayer, I. (1974) *Townsmen or Tribesmen*. Oxford: Oxford University Press.
- McGrath, J.E. (1990) "Time Matters in Groups", in J. Galegher et al. (eds) *Intellectual Teamwork: Social and Technological Foundations of Cooperative Work*, pp. 23-61. Hillsdale: Erlbaum.
- Meyrowitz, J. (1985) *No Sense of Place: The Impact of Electronic Media on Social Behavior*. Oxford: Oxford University Press.
- Morris, P. (1996) "Community Beyond Tradition", in P. Heelas, S. Lash & P. Morris (eds) *Detraditionalization: Critical Reflections on Authority and Identity*, pp. 223-49. Oxford: Blackwell.
- Murray Li, T. (1996) "Images of Community: Discourse and Strategy in Property Relations", *Development and Change* 27: 501-27.
- Parker, H., Bakx, K., Newcombe R. (1988) *Living with Heroin: The Impact of a Drugs 'Epidemic' on an English Community*. Milton Keynes: Open University Press.
- Parks, M.R. (1996) "Making Friends in Cyberspace", *Journal of Communication* 46(1): 80-97.
- Parsons, T. ([1932] 1991) *The Early Essays*. Chicago: University of Chicago Press.
- Platt, R. (1989) "Reflexivity, Recursion and Social Life: Elements for a Postmodern Sociology", *Sociological Review*, 37: 636-67.
- Polsby, N.W. et al. (1968) "Community", in D.L. Sills (ed) *International Encyclopaedia of the Social Sciences*, vol. 3, pp. 156-74. New York: MacMillan.
- Potter, J. & Reicher, S. (1987) "Discourses of Community and Conflict: The Organization of Social Categories in Accounts of a 'Riot'", *British Journal of Social Psychology*, 26: 25-40.
- Rachel & Woolgar, (1995) "The Discursive Structure of the Social-Technical Divide: The Example of Information Systems Development", *Sociological Review* 43: 251-73.
- Rakow, L. (1996) "The Return to Community in Cultural Studies", paper presented at the annual meeting of the International Communication Association, Chicago, May 1996.
- Rasch, W. (1994) "In Search of the Lyotard Archipelago, or: How to Live with Paradox and Learn to Like It", *New German Critique* 61: 55-75.

- Rasch, W. (1991) "Theories of Complexity, Complexities of Theory: Habermas, Luhmann, and the Study of Social Systems", *German Studies Review* 14(1): 65-83.
- Roberts, J. (1964) "The Self-Management of Cultures", in W. Goodenough (ed) *Explorations in Cultural Anthropology: Essays in Honor of George Peter Murdoch*, pp. 433-54. New York: McGraw Hill.
- Schmalenbach, H. ([1922] 1961) "The Sociological Category of Communion", in T. Parsons, E. Shils, K.D. Naeyele & J.R. Pitts (eds) *Theories of Society. Foundations of Modern Sociological Theory*, vol. 1, pp. 331-47. Glencoe: The Free Press.
- Shulman, N. (1976) "Network Analysis: A New Addition to an Old Bag of Tricks", *Acta Sociologica* 19(4): 307-23.
- Sibley, D. (1995) *Geographies of Exclusion: Society and Difference in the West*. London: Routledge.
- Simmel, G. ([1890] 1976) "The Intersection of Social Spheres", in P. Lawrence (ed) *Georg Simmel: Sociologist and European*, pp. 95-110. Sunbury: Nelson.
- Spencer, V. (1996) "Towards an Ontology of Holistic Individualism: Herder's Theory of Identity, Culture and Community", *History of European Ideas* 22(3): 245-60.
- Stäheli, U. (1996) "From Victimology Towards Parasitology: A Systems Theoretical Reading of the Function of Exclusion", *Recherches Sociologiques* 27(2): 59-80.
- Steiner, J.F. (1931) "Community Organization", in E.R.A. Seligman (ed), *Encyclopaedia of the Social Sciences*, Vol. 4, pp. 106-8. New York: MacMillan.
- Stichweh, R. (1996) "Science in the System of World Society", *Social Science Information* 35(2): 327-40.
- Stocking, W. ed (1983) *Observers Observed: Essays on Ethnographic Fieldwork*. Madison: University of Wisconsin Press.
- Taylor, R.S. (1891) "Epoch-Making Inventions of America", *Electrical Review*, Apr. 18: 109.
- Thompson, R.F. (1989) "A Model System Approach to Memory", in P.R. Solomon (ed) *Memory: Interdisciplinary Approaches*, pp. 17-32. New York: Springer.
- Tomlinson, J. (1994) "A Phenomenology of Globalization? Giddens on Global Modernity", *European Journal of Communication* 9: 149-72.
- Tönnies, F. ([1897] 1955) *Community and Association*. London: Routledge.
- Urry, J. (1991) "Time and Space in Giddens' Social Theory", in C.G.A. Bryant & D. Jary (eds) *Giddens' Theory of Structuration: A Critical Appreciation*, pp. 160-75. London: Routledge.
- Von Foerster, H. (1991) "Through the Eyes of the Other", in F. Steier (ed) *Research and Reflexivity*, pp. 63-75. London: Sage.
- Von Foerster, H. (1969) "What Is Memory That It May Have Hindsight and Foresight as Well?", in S. Bogoch (ed) *The Future of the Brain Sciences*, pp. 19-64. New York: Plenum Press.
- Walsh, J.P. & Bayma, T. (1996) "Computer Networks and Scientific Work", *Social Studies of Science* 26: 661-703.
- Watzlawick, P., Beavin, J.H. & Jackson, D.D. (1967) *Pragmatics of Human Communication: a Study of Interactional Patterns, Pathologies, and Paradoxes*. London: Faber.
- Webber, M.M. (1963) "Order in Diversity: Community without Propinquity", in L. Wingo (ed) *Cities and Space: The Future Use of Urban Land*, pp. 23-54. Baltimore: The Johns Hopkins University Press.

- Wegner, D.M., Raymond, P., Erber, R. (1991) "Transactive Memory in Close Relationships", *Journal of Personality and Social Psychology* 61: 923-29.
- Weick, K.E. & Roberts, K.H. (1993) "Collective Mind in Organizations: Heedful Interrelating on Flight Decks", *Administrative Science Quarterly* 38: 357-81.
- Wellman, B. (1979) "The Community Question: The Intimate Networks of East Yorkers", *American Journal of Sociology* 84(5): 1201-31.
- Wellman, B. Carrington, P.J. Hall, A. (1988) "Networks as Personal Communities", in B. Wellman & S.D. Berkowitz (eds) *Social Structures: A Network Approach*, pp. 130-84. Cambridge: Cambridge University Press.
- Wieder, D.L. & Hartsell, H.F. (1996) "Community as a Folk Concept in Public Health Planning", paper presented at the annual meeting of the International Communication Association, Chicago, May 1996.
- Williams, R. (1983) *Keywords*. London: Fontana.
- Winner, L. (1980) "Do Artifacts Have Politics?", *Daedalus* 109: 121-33.
- Woolgar, S. (1993) "What is a Scientific Author?", in N. Miller & M. Biriotti (eds) *What is an Author?*, pp. 175-90. Manchester: Manchester University Press.
- Woolgar, S. (1991) "Configuring the User", in J. Law (ed) *A Sociology of Monsters: Essays on Power, Technology and Domination*, pp. 57-99. London: Routledge.
- Woolgar, S. (1988) *Science. The Very Idea*. Chichester: Ellis Horwood.
- Woolgar, S. (1986) "On the Alleged Distinction Between Discourse and *Praxis*", *Social Studies of Science* 16: 309-17.