

Electronic Communities in an Information Society Communities: paradise, mirage, or malaise?

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Abstract

Communities and neighbourhoods are often perceived to be under threat in the information society, as technological developments accelerate economic and social change. Technological developments may also provide a solution: ‘virtual communities’. There has been much debate about whether virtual communities can exist, but in the midst of such debates there has been little recognition that ‘community’ is a complex phenomenon. Many varieties of community exist, which can be categorised as moral, normative or proximate. Evidence suggests that some varieties of community can be constituted via electronic communication, but it is probably not possible to replicate those features of community that many people find lacking in modern life. Such a lack, and the desire for virtual communities as a response to that lack, are symptomatic of individuals’ disengagement from social and political participation. If the process continues, this suggests an information society constituted by segmented diversity with isolated pockets of sociability.

The Demise of Community?

The label ‘Information Society’ means different things to different people. For some, the Information Society signifies individuals’ access to information on a vast range of topics, delivered using a variety of different communication media, and the greater diversity of

knowledge and experience that such new technologies permit. For others, the Information Society is an enhancement of individual autonomy, in both work and social life. One can determine where one works and how one works. One can also decide with whom and when one socialises, by using email and answering machines to filter communication, and by using on-line shopping or banking to avoid unwelcome social contact. For others, its significance is keeping in touch with family, relations, and friends scattered throughout the world. There is often debate whether these changes are part of an information society or a post-industrial society. However, there is an underlying concern, in all these diverse threads, that new information and communication technologies are linked with the fragmentation of social and economic life.¹

In the post-industrial work environment, employees move from one company to another and from one work location to another, leaving behind friends and co-workers. As organisations become larger, individuals in those organisations become more specialised in their work tasks, have less in common with their colleagues in the same office. They collaborate with others in similar specialised jobs who work elsewhere and with whom they have little face to face contact. As organisations become ‘virtual’ and work becomes dispersed as well as ‘outsourced’, there is less sense of a common set of values or experiences uniting members of an organisation, much less any common commitment to that organisation.

There have been similar changes in domestic life. There is a sense of remoteness or distance, as we all participate in large-scale systems and depend on individuals with whom we have no direct personal links. For many, there is no extended family in close proximity, and interactions with neighbours are fewer in number and more superficial in nature. A feature of post-industrial society has become proximate neighbours who are no longer embedded in cross-cutting networks of obligation and mutual assistance. This means fewer people who provide reciprocity, assistance, or reaffirmation. If you are a woman with a first

time pregnancy, from whom do you get advice, if there is a problem? There may be no neighbours whom one feels able to consult, and relations, from whom one would feel the right to claim assistance, may be geographically distant.

These changes seem to pose a threat to communities. A community is usually understood to be a group of people who share a common sense of 'belonging' (although belonging to what, and in what sense, is the complex issue which will be returned to later). Individuals have multi-faceted interactions with others [4-6], and their lives are embedded in a web of relations and commitments. Community is somehow an amalgam of the interactions, common experience, and collective commitment among individuals. Various economic, social, and cultural changes are undermining this amalgam.

The fragmentation of culture is a further threat to 'community'. Mass media provided a common framework on which to build shared identity, as did an education system that provided the same historical vocabulary for all students in a nation [7]. The limitations of non-digital technology were important, since television, newspapers, and radio provided a unifying daily experience of news and discussion for a geographically bounded population. Radio and television need local transmitters, and newspapers have to be physically moved from printer to consumer. While there was never any certainty that one's neighbour was reading the same newspaper or watching the same television program, there was limited choice and the content of different newspapers or television programmes was likely to be similar. The new digital modes of information undermine a geographical definition of culture, as digital technology facilitates non-geographically limited communication. There is a diminishing overlap between one person's information universe and that of his or her neighbour, removing the presumption that one's experiences are shared with one's proximate neighbours.

Physical experiences and face-to-face interactions sustain some sense of community amongst people who live in the same locality, yet, there remains a sense of emotional isolation for many people. There are three logical solutions to this problem. One solution is to move, physically, to be in a geographically defined group whose members have shared interests or commitments, and intentionally create the multiplex social networks of community. But most people are entangled in their current location; it is not easy to find new employment, or a new residence elsewhere, and so they are trapped in their fragmented community. Secondly, if one cannot move, one can foster increased common experience amongst neighbours. People engage in various voluntary activities to support community activities, seeking to maintain or revive a sense of local identity and participation. Sometimes, new technologies are used to support such activities, with community networks being used to share information and encourage co-operation [8].

The third option is to use new technologies to find others with whom to share common experience and social interaction. Rather than moving to a new place, or trying to recreate common experience amongst proximate neighbours, individuals can use new technologies to combine the two worlds. A woman who is pregnant for the first time, who has no relations or neighbours to consult, can use new information and communication technologies to find people in other localities to share common experience and social interaction. In so doing, such people create a shared set of experiences amongst themselves. For many, these experiences provide the sense of common experience and involvement that seems lacking in modern society. These are virtual communities, composed of people who know each other, and help each other out, with reciprocal exchange. There is give and take or a barter system, there are rules about how one behaves, what one should do for friends and neighbours. The overriding notion is solidarity and that people put the interests of others and the interests of the group above self interest, to create 'community'. Thus, new technologies,

which may be fostering fragmentation by undermining traditional forms of community and even national identity [9], may also counter this fragmentation by supporting a new form of community: the virtual community.

This, then, is the basis for so much interest in, and discussion about, virtual communities. Virtual communities are alternatives to the destruction of traditional communities. To support such a view, stories are recounted about the emotional support offered via electronic communication as well as the solidarity that emerges on the Internet. There is, of course, the contrasting view that virtual communities are ‘ersatz’ communities. In this view, virtual communities cannot be ‘real’ communities, and it is a symptom of modern society that individuals find solace in such ‘fake’ communities. It is often suggested that only people who are outside mainstream society would find such communities to provide satisfactory social contact.

These debates about ‘virtual community’ often lack any awareness of the ambiguous meaning of ‘community’ or the debates about these ambiguous meanings in the social science literature. The debates are often long on rhetoric and short on empirical data, and rarely refer to the long-standing literature on ‘community’ in the social sciences [10,11]. The conflicting views about virtual community arise, at least partly, because there are so many conflicting views about what are the crucial, essential elements of ‘community’ and whether virtual communities possess or lack such essentials. Thus, while a simple definition of community as ‘the interactions, common experience, and collective commitment among individuals in a particular location’ was advanced earlier, there are alternative definitions of community. Sometimes, community is equated with a moral commitment to a common purpose, often involving reciprocity and mutual assistance. In other cases, it refers to norms or values shared by individuals. These norms guide social interaction and may be linked to a sense of collective identity. In yet other cases, it refers to a collection of like-minded individuals who

are pursuing common interests. For others, community refers to the ego-centred support network that surrounds individuals. The definitions are often used interchangeably, and often, mode of communication, content of interaction, and type of common experience that emerges are confused rather than distinguished. There is no reason why one definition should take precedence over another; it is not necessary that there should be a single criterion of community, no more than there is a single definition of culture or society. However, if the discussion of virtual community is to be possible, there needs to be more agreement about the different types of community which may (or may not) exist in the virtual world.

‘Real’ Interaction

The first cause for confusion about ‘virtual community’ is an ambiguity about electronic communication versus face-to-face communication, which then spills over into ambiguities about ‘real’ versus ‘virtual’ community. Many people suppose that electronic communication isn’t ‘real’ communication (unlike face-to-face communication, which is), and that a ‘real’ community requires ‘real’ communication. In this view, electronic communication is a limited mode of communication which excludes the communication channels (e.g., non-verbal) that are necessary for ‘real’ communication. Efforts to add “smileys”, for instance, simply reaffirm the need for the non-verbal cues of physical presence for ‘real’ communication. Since ‘real’ communities require ‘real’ communication (which is, essentially, face-to-face communication), virtual communities are, by definition, impossible.

There has been much investigation by social psychologists into the limitations of computer-mediated communication (from as early as 1984 [12] and continuing since), often focusing on the lack of cues and social context, and the diminished ‘social presence’ afforded by technologically mediated communication. The limits of computer mediated communication are sometimes presumed to absolutely constrain electronic social

relationships, and this link between mode of communication (face-to-face versus electronic) and content of communication (community versus instrumental exchange) is problematic. Telephone conversations are technologically mediated communication, with less social presence than face-to-face interaction, yet most people would, intuitively, consider them to be capable of supporting 'real' commitment between and among individuals. Letters have long been used to maintain significant and 'real' relations between people who rarely have a face-to-face interaction. Family members who have not seen each other for twenty years and only communicate electronically may maintain a close emotional relationship. Office workers often report that they develop 'a relationship' with a customer, client, or co-worker whom they never met face-to-face but converse with only over the phone. Furthermore, national identity is often explained as an 'imagined community' [7], where solidarity is a projection by individuals, rather than a practice founded on face-to-face interaction or communication. Almost all communication has a learned component, and individuals can learn to interpret the communication content according to experience.

There is no necessary reason to assume that electronic communication, as a mode of communication, is incapable of supporting relations of reciprocity, common commitment and trust [13]. One should not confuse the mode of interaction with the content of the relationship; social relations do not depend on the mode of communication, but on social factors external to the communication content. Electronic communication does not, by definition, preclude relations of trust or solidarity.

Idealised Community

If a 'virtual community' then, is one in which technological mediated communication is the mode of interaction, what community is being so defined? This is the core confusion in debates about online community. Many discussions of virtual community focus on reciprocity

or solidarity as the defining feature of community. Such descriptions evoke images of the 'good old days' of small town rural life, or pre-industrial villages, where people shared common values and beliefs and worked together to assist each other. A return to such egalitarian communities, based on reciprocity, is the remedy to the anonymity, alienation and impersonalism of industrial society. In this scenario, electronic communication is one such means by which such communities can be achieved; individuals who are physically isolated can, through electronic communication, recreate this experience of solidarity.

This vision of egalitarian communities that once existed in rural or pre-industrial societies is not one that most anthropologists would recognise from their fieldwork in villages and small towns. In such villages and small towns, it is rare that social interactions are devoid of conflict, hierarchy and inequality, whatever elements of reciprocity and trust may also exist. In addition to the shared values of family, kinship, or ethnicity, there is also negotiation based on conflicting individual interests. Often, collective solidarity is a goal that is rarely achieved, and rituals create, temporarily, a shared commitment that quickly disappears [14,15]. Most communities are diverse, composed of people who like, but also hate each other, who co-operate and but also compete with each other. There are people who have one face for some, and another face for others. Although such communities possess elements of common commitment, they are only part of the overall social system. This is not to say, however, that relations of reciprocity and egalitarianism do not exist. Such systems have been described by Sahlins [16], amongst others, where economic exchanges exist in the context of reciprocal social obligations, rather than as part of a market economy.

The idealised community articulated by some proponents of 'virtual community' presume a core value system in which mutual benefit is emphasised above self interest. Following Paine [17], this can be described as incorporative exchanges between individuals, in contrast with transactional exchanges based on negotiation between individuals.

Incorporative exchanges are based on co-identity and sharing, in which values are sought jointly for all social actors, while transactional exchanges are between parties with differing interests and who share neither a common commitment to joint aims or a common identity. In a similar vein, Bailey [18,19] used the term 'moral community' to describe groups whose members share a moral bond. These are communities whose members are bound together by a strong commitment to each other and common goals.

Can such moral communities exist in a virtual environment? Firstly, moral communities are not restricted to territorial groups; there are many face-to-face voluntary groups whose members are geographically dispersed but which can be described as moral communities (e.g., local political activists, religious groups, sports clubs, to name just a few). Case study evidence, based on numerous ethnographic and biographical accounts, also provides clear evidence of such collective commitment in a virtual environment. In the early days of many electronic networks (such as Usenet, Bitnet, World Wide Web), individuals co-operated voluntarily for the achievement of common goals. Individuals expended long hours for very little personal return, sharing a commitment to common goals and ideology [20]. The same can also be said of many community electronic networks and bulletin boards. Such groups are similar to voluntary groups that exist within industrial societies: sports clubs, religious associations, neighbourhood assistance schemes (see [21] for an example of this, involving large-scale co-operation).

There are also support groups for a variety of illnesses and disabilities that provide important emotional support and assistance; some of these support groups meet only in face-to-face situations, others only via computer mediated communication, and some combine the two. Individuals frequently report their experiences of solidarity and mutual support with electronic groups (see [22,23] for such stories). There are also public interest groups whose members communicate electronically (such as environmental groups), as well as political

action groups composed of expatriate citizens living outside their country of birth, in which interactions could be described as incorporative and which, as groups, resemble moral communities. There is clear evidence that some groups constituted through the electronic interaction of members can be characterised as moral communities.

Yet, it is rare that any social group exhibits only incorporative relations and lacks elements of conflict, hierarchy and inequality. Local community bulletin boards can become dominated by short-term, instrumental exchanges, and Usenet discussion groups are often disrupted by individuals who display no commitment to, or concern for, common goals. Support groups may be disrupted by antagonistic behaviour amongst participants. Political support groups may split into factions, individuals' commitment to shared goals may diminish, and some individuals are committed to only a small portion of the shared goals of the group. Community as incorporate exchange is a variant or 'dialect' of community, but there are clearly other variants as well.

Proximate Communities and Foraging Societies

Geographically based communities are another version of community, and one that includes both incorporative and transactional exchanges. Such communities characterised by complex webs of social relationships which bind people together, and in which individuals interact with each other over a long period of time. In such groups, there are accidental encounters as well as intentional meetings, and long-term understandings and complex multi-faceted social relations develop, over time, as people interact with each other. To many people, these consequences of physical proximity are the essence of community. Often, the interaction is involuntary; people, constrained by economic and geographical factors, can not leave the locality and so must interact with those whom they would prefer to avoid. They

depend on each other and learn to interact with each other in a relatively harmonious way because they have little choice.

The social processes of many electronic groups differ considerably from processes in such proximate communities. Ethnographic evidence shows that, in electronic groups, there is often no sanction that can be used to compel adherence to collective norms of behaviour. If individuals don't like what is going on, they can engage in disruptive behaviour, and it may not even be possible to expel such people from the group. Others, if they don't like the behaviours, or if their interests or concerns change, simply leave the group by ceasing communication. Whereas social interactions and relations in a proximate community are structured and defined, replicating themselves over time, the social structure of electronic groups is amorphous and rapidly changing. If long-term involuntary association constitutes the crucial criterion of proximate community, then, since electronic groups are voluntary and usually short-term, a virtual equivalent of a proximate community is, by definition, impossible. The lack of commitment to any single group and ease of moving back and forth from one group to the next, characteristic of electronic groups, appears antithetical to 'community', which means that the multifaceted relations characteristic of proximate communities are also impossible in the virtual world. Thus, since virtual communities are not defined by long-term involuntary association, such groups must remain superficial and uni-dimensional.

However, this view assumes an equivalence between face-to-face proximate groups and long-term and involuntary association. It is only since the Agricultural Revolution that individuals can be 'tethered' by house, property, employment, land, to a specific location. With the domestication of plants and animals, land became a productive resource, to be controlled, allocated, and inherited. Since then, there has been an involuntary aspect to proximate communities because people are dependent on fixed resources in order to live, and

this involuntary participation contrasts strongly with ease of movement in and out of technologically mediated social groups. Thus, proximate groups are equated with long-term participation and electronic groups are equated with voluntary participation.

Prior to the Agricultural Revolution, societies were less dependent on fixed resources in specific geographical locations. Wild plants and animals were the source of food, and individuals, on a daily basis, had to travel distances to find sufficient food. There was rarely enough food in an area to permit people to stay in one location for very long; individuals moved from one location to another, often on a seasonal basis, to find new food sources. Because these societies were usually nomadic, there was very little investment in fixed resources and people owned only what they could carry.² Foraging communities were temporary aggregations of individuals, with little sense of collective identity (for a discussion of variations within foraging societies, see Smith [27]). Membership in a community was voluntary and temporary, and groups were in constant flux, depending on ecological and personal factors. The foundation, or building block, of band societies was the kinship network. Foraging societies had an egocentric kinship system, similar to industrial societies, in which kinship was traced from the person outwards. These kinship links became resources; kin were scattered geographically, and kinship links were the means for both gaining entry to a group and also structuring social relations within the group [28].

Such societies had disputes and conflicts, but there was no central authority with a monopoly over coercive force, and therefore no possibility of solutions being imposed on unwilling participants. In so far as there were leaders, whose opinions are respected, they led through example or persuasion, with an emphasis on their rhetorical abilities and their achievements and skills. What were the mechanisms of conflict resolution? Conflict was either avoided, or resolved through levelling mechanisms such as song duels or public joking that could verge on humiliation [29,30]. Relatively rarely, there might be recourse to physical

force. Most importantly, conflict could also be resolved by one or both of the parties simply departing. In foraging societies, people ‘voted with their feet’ if things got out of hand. Individuals could easily move, without losing access to any of the resources needed to survive. This was both a useful last resort, and also a motivation to avoid letting conflict get out of control. In foraging societies, the community might coalesce temporarily, split and reconfigure itself again.

The dynamics of foraging communities seem very similar to those of electronic groups³, and for the same reasons. Electronic groups can be communities, in the sense of proximate communities, just as much (or as little) as foraging groups. At point, there are two variants of community - moral community and proximate community with long-term participation. Are there additional variants, that would include foraging societies as well?

Normative Community

In a foraging group, all members of the group, however temporary and voluntary their membership, at least share a set of rules about ‘proper’ behaviour. They know how to behave, they know how to interpret other’s behaviours, and there is broad agreement on a common set of rules of exchange and obligation. Perhaps another variant of community, then, could be the existence of agreed rules of appropriate behaviour, regardless of population movements? In fact, community defined as a system of shared rules and meanings is not unusual. Definitions of pornography, for example, often define standards of ‘good taste’ based on the norms of a local ‘community’. To turn this around, the existence of standards of ‘good taste’ is the evidence of ‘community’, and the limits of common agreement on this standards maps the boundaries of the community.

Although foraging societies are one example of norm-based community, norm-based communities are not restricted to geographically bounded groups. Like foraging communities,

groups may have permeable borders, with individuals moving in and out of the group, while still constituting a norm-based community. For example, members of the same academic institution, or reporters assigned to the United States President may constitute a community in this regard. If a member of the journalist press pool breaks unwritten rules governing behaviour, other journalists may withdraw assistance. This is a powerful sanction, since such mutual exchange of advice and labour is important to effective work. Descriptive tags such as ‘communities of interest’ and ‘community of practice’ have been used to describe people who, as a result of common interests or experiences, develop a similar framework of shared understandings. In the case of ‘communities of practice’, this framework develops from interaction with others carrying out similar tasks [31,32]. A shared discourse emerges, and members can make ‘small talk’ with each other. Their common experience and values becomes the foundation for mutual understanding.

A norm-based community can be based on similar, but not shared, experiences. Doctors share common experiences, both during training and in their professional lives, which create common understandings. Such communities have no distinct boundaries, with people entering and leaving such communities on an ad hoc basis. Members of such communities may not even have any history of common interaction. Doctors who have been trained in different medical schools and have never met can still find a common vocabulary and common set of experiences and interests: they all have had similar experiences with patients, nurses, and hospitals.

Norm-based communities and moral communities are not mutually exclusive; indeed, as shared experiences and interactions foster mutual assistance and commitment, norm-based groups can develop the attributes of a moral community⁴. However, there is an important distinction to be maintained between the shared cognitive system of a norm-based community and the shared affective or emotional system of a moral community. Shared tasks and

activities can be the foundation for shared meaning systems, but shared cognitive systems do not require, or necessarily lead to, shared moral systems. Individuals can participate in a norm-based community, while lacking mutual commitment or even mutual regard. People may have instrumental reasons for their participation in a norm-based community; they have their own personal goals, which may differ considerably from the goals of others. People need only share rules, not goals, and there is no presumption that people participate for the same reasons. This lesson was learned in studies of personality and culture, when it became clear that people could share a common culture, defined as a shared cognitive system, without sharing similar motivations [34]. Individuals can have different interests and concerns, possess little emotional commitment to each other, share few aspirational goals, and yet still share a set of understandings that permits them to interact with each other.

A norm-based community may develop around shared practices (whether leisure or work-related) or shared experiences (such as a medical school); it is defined by its common practices and rules, without any necessity for the collective commitment of a moral community or the long-term, involuntary, and multiplex associations of a proximate community. Such a community can derive from people's 'categorical' similarity [35]; these people may have little or no interaction with each other, they simply share similar interests or a similar social or economic position vis-à-vis the wider society. Special interest electronic discussion groups, whether they focus on leisure activities or occupational specialist tasks, are obvious examples of electronic communication linking individuals who share common experiences and interests. Foraging societies, voluntary groups, and many electronic groups are composed of individuals who share a common set of practices and understandings, regardless of the type or amount of mutual interaction.

Since many norm-based communities depend on voluntary membership, they differ significantly from other communities regarding decision-making and conflict resolution. Even

when there is a shared resource which motivates individuals to cooperate and maintain group structure, the voluntary nature of participation makes such groups fragile [36]. As long as people share basic rules of conduct, they can interact: they understand the meaning of other people's behaviour and can respond appropriately in turn. Such groups may lack permanence, or even clear-cut structure, but may be considered communities none the less.

Virtual Communities and Fragmented Society

It is possible to identify three general strands of 'community' -- moral communities, proximate communities, and norm-based communities (including communities of interest and communities of practice):

moral	egalitarian and reciprocal relations
proximate	multiplex and dense social networks
norm-based	cognitive with shared rules and understandings

What are the implications for 'virtual communities' -- groups constituted by electronic communication among members? The first requirement is not to put the 'virtual' cart before the 'collective' horse by assuming that the mode of interaction ('virtual') determines the social relationships which are constituted (faction, moral community, community of practice, and so forth). Ethnographic evidence shows that a variety of 'communities' can be constituted via electronic communications technologies. Some electronic groups are temporary aggregations, in which disruptive behaviour can destroy the group. Then there are electronic groups with rules and expectations amongst members, which new members have to learn, and, in the event of conflict, individuals engage in conflict resolution strategies to prevent the dissolution of the group. There are communities whose membership is stable, and which develop a shared history of collective events and individual experiences. There are also communities where reciprocity and solidarity permeate all interactions. There are as many

examples of 'virtual communities' as there are types of communities. 'Community' is not fixed in form or function, but is a mixed bag of possible options whose meanings and concreteness are negotiated by individuals, as they cope with continuously changing sets of resources and constraints.

Perhaps the only strand of community which seems unlikely to find virtual expression is the proximate community with long-term membership. In such a community, there are the overlapping roles and nuanced interactions that are characteristic of dense networks of social interaction amongst individuals in the same area over a long period of time. An electronic version of such a community seems unlikely. In the small-scale rural groups that are exemplars for such a proximate community, the group was the individual's primary collective identity. In modern life, people do not have a primary or exclusive identity; they have multiple identities and they participate in multiple 'communities' (multiple in both membership and type). An electronic group is not an 'exclusive' identity, it is just another of the associations that permeate modern life. Such groups tend to be fragile, since they usually lack the cross-cutting ties that create intermediaries in whose interest it is that conflict does not split the community. The ethnographic evidence for dense social networks and multifaceted interaction amongst members of electronic groups is minimal, suggesting that virtual 'proximate' communities are unlikely.

In fact, many of the advocates of 'virtual community' would not really want to create the electronic equivalent of rural proximate communities, if they had had more direct experience of such communities. In such small-scale communities, social monitoring and consensus enforces collective norms. Diversity is not tolerated and uniformity is enforced, with little freedom for the individual. Dissent is a threat to the equilibrium of the group, and the issue is not right or wrong, but simply stopping the dissent. This is probably not the life that people wish to recreate; rather, they wish to recreate the embedding of economic

activities in social relations which has been described as egalitarian [16]. This is an attempt to reintroduce relations of reciprocity as a counterbalance to market exchange, and has elements of a moral community.

Can communities composed of reciprocal exchange and common commitment exist among people who communicate electronically? This is a social issue, not a technological, issue. Individuals have always been able to project a sense of emotional intimacy onto mediated communications. Indeed, it is becoming easier to constitute moral communities via new technology, as more aspects of face-to-face communication become embodied in digital transmissions. Recent technological advances (digitalisation of audio and visual information, improved user interfaces, and increased transmission speed), make the illusion of physical proximity more convincing. The lack of face-to-face interaction, the reduced cues of electronic communication are not, of necessity, barriers to such communities, though virtual moral communities may be more vulnerable to dissolution than non-virtual moral communities.

Although such egalitarian exchanges exist within a contemporary societies, in both virtual and face-to-face contexts, they are difficult to intentionally plan and maintain.⁵ Since they constitute only one strand in the webs of social relations among members of a society, and are embedded in a complex network of social ties and interactions, such embedded groups are fragile and vulnerable to external forces. Moral communities, whose members communicate electronically, are likely to be particularly fragile, as demonstrated by stories about the demise of such groups, and strategies for avoiding such demises [37,38].

So, some virtual communities are possible, some are not, some are possible but fragile. The debate about virtual communities may be a continuation, with new academic players, of the long-standing debate about how to define community [39,40]. However, it is also symptomatic of the perception that social life is becoming fragmented and, as a result,

people are seeking to create multiplex and overlapping social relations with like-minded people. This trend is not new; in urban life, people often choose to live in same-class or same-ethnicity enclaves and avoid interaction with people from different class or ethnic backgrounds. This has previously led to concerns about people opting out of participation in civil society; but, as others [41] have commented, new communications technologies can accelerate this process of disengagement, and such a disengagement has implications for the future of modern society. The consensus required for public policy decisions achieved amongst people with opposing views and interests is sometimes forged by unavoidable interactions with diverse and opposing views and interests. While some have argued that new technology will enhance political participation [8], the desire for virtual communities encourages segmented diversity, and is just as likely to be a threat to civic participation, and even national identity [9].

The virtual community debate is a reminder that issues of social transformation, and the relation between technology and social life arise in a variety of contexts. Many theorists have been making this point, about the Information Society, for some time (a few, almost at random, would include [41-44]), and the virtual community debate is another manifestation of social change masquerading as technological change. One hopes that virtual communities are not a retreat by individuals into solitary and imagined worlds, leading either to the collapse of society or its domination by particular interest groups. After all, despite the wonders of technology, human beings retain a physical existence and continue to have unintentional and unavoidable interactions with people and objects around them. Physical experiences provide countervailing pressures; after all, participants in virtual communities still have to keep themselves warm and fed. Regardless, the debate about virtual communities is an important reminder that the Information Society is about society as well as information.

¹ This has led to a large literature on post-modernism, of which [1-3] are simply the tip of a large iceberg.

² For more detailed discussions of foraging or hunter/gatherer societies, see [24-26].

³ Though not, it must be emphasised, all electronic groups. Groups composed of individuals who communicate electronically can have long-term memberships, with individuals who settle conflicts rather than simply leave the group.

⁴ This distinction between moral and norm-based community is not unlike the distinction between instrumental and sentimental conception of community discussed by Howard [33].

⁵ In organisations, managers who talk about developing an organisational ‘culture’ are often talking about developing a moral community within the organisation, and they have markedly little success to creating such communities.

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