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The new agoras: ‘Wikis’ as a form of collective intelligence

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Successful Wikis, such as Wikipedia make ’smart’ decision, argues Kingsley Dennis. They embody forms of an emerging hybridised collective intelligence, where the weaknesses of the individual are compensated by the contributions of the many.

The Internet has shifted through various phases since the early appearances of web browsers in the 1990s and has fundamentally altered the way people can, and do, interrelate, communicate, think, link, and act. As the Internet increasingly becomes a space where people are becoming the creators, co-designers, and feedback mechanisms of many-to-many software applications, a new form of complex interconnectivity is forming. This was initially termed the Web 2.0 , with Tim O’Reilly describing one of the key lessons of the Web 2.0 era as being ‘Users add value’. Emerging scapes of mobility and social connectivity largely driven by user-created applications are fostering what can be called ‘amplified shared knowledge’ through shifting patterns in technological applications and user participation.

Content-led development of the Internet, involving knowledge webs and knowledge sharing through digital social networks and collaborative tools such as Wikipedia, and Cellphedia, lead the way towards ‘mass amateurisation’. This can be further seen in such practices as folksonomy/tagging, blogging, podcasting, and now vlogging (video blogging). These new online collaborative tools facilitate a collective way of organising massive amounts of information. In effect they are collaborative tools designed to augment human collective intelligence by allowing, and making visible, storage of data designated to be meaningful, i.e. transparent to other users in order to share links and information. And they are being referred to as forms of an emerging hybridised collective intelligence. Yet the term ‘collective intelligence’ can mean many things.

It has been used to denote – in no particular order – bacterial, hive or insect intelligence; artificial intelligence; military strategy; cyberspace connectivity; the spiritual ‘noosphere’; the ‘global mind’; ecology; and political governance. Whether in biological, computational, strategic, or social terms, the capacity for what is defined as ‘collective intelligence’ involves the ability to transmit, receive, utilize, and ultimately share, flows of information. This does not claim that social forms of collective intelligence are derivatives, or formed from, biological roots; rather it points to the similarities within various forms of operation and function.

It is possible to conceive of this as positive ‘groupthink’ in action, made manifest by mediated forms of technological communication. Yet because the people/agents involved are not in constant physical contact with each other they are less susceptible to the

traditional groupthink caveat – that of homogenous peer-pressure thinking. The complex collectives of information sharing networks over physical distance – distributed intelligence – eschew the group dependencies that have been known to form in more restricted physical spaces, such as offices and boardrooms. When the information sharing and interactions within a complex system of participants becomes sufficiently dynamic yet coordinated, properties that may be deemed 'smart' or 'intelligent', and which show capacities beyond that of the individual components, emerge. James Surowiecki noted this in his study of 'wise crowds' in his look at why the many are smarter than the few. Surowiecki showed that 'the more personal contact they have with each other, the less likely it is that the group's decisions will be wise ones. The more influence we exert on each other, the more likely it is that we will 'believe the same things and make the same mistakes' (p. 42). Thus, individual goals distort the collective result. Yet Surowiecki noted that if you could connect together a diverse group of people who possess varying scales of knowledge and potential then such a grouping would be more liable to come up with 'smart' decisions; further, that 'technology is now making a global collaboration not just possible but easy and productive' (p. 163). This is now being seen as the operative strategy behind successful Wikis, such as Wikipedia. For Surowiecki then, crowds can be 'wise', yet they need to be diverse and beyond physical homogeneity in order to be so. Decentralized crowds make for 'wise crowds' according to Surowiecki. This seems to suggest that there are degrees of 'intelligence' to be found in collectives that are distributed, diverse, heterogeneous, yet connected enough to share affiliations to similar information flows.

Such shifts toward smarter collectives of information-sharing individuals are, using sociologist Pierre Levy's words, an 'attempt to make human groups as conscious as possible of what they are doing together and provide them with practical means of coordination' (p. 177 – italics in original). In the work of Pierre Levy there is a conviction that technological infrastructures will combine with materiality to create a virtual space – an agora – where collective and smart formations can manifest: 'My hypothesis is that it is both possible and desirable to construct technical, social, and semiotic means that will effectively incarnate and materialise collective intelligence' (p. 105). Levy goes on to articulate the meanings within what he terms collective intelligence: 'What is collective intelligence? It is a form of universally distributed intelligence, constantly enhanced, co-ordinated in real time, and resulting in the effective mobilisation of skills' (p. 13). This is expanded to include the ideas that this 'universally distributed intelligence' constitutes the enhancement, optimal use, and fusion of skill, imagination, and intellectual energy, regardless of their qualitative diversity. This idea of collective intelligence obviously involves the sharing of memory, imagination, and experience through the widespread exchange of knowledge, new forms of flexible organisation and co-ordination in real time. Although new communications technologies enable human groups to function as intelligent collectives, they do not automatically determine them. (p. 147)

This growth in communicative aggregations (such as Wikis) and informational networking combines both digital networks of communication as well as material actions, to form collectives of individuals that are more aware and reflexive to global, local, contemporary, and future needs. Collectives are also able to operate in near instant real-time.

What is suggested here is that the embedded networks and technological infrastructure that in-forms almost all cultural practices, whether it be telephone cables, the railway and other transport networks, satellites, radio and various wireless spectrums, in local and global space, is already a systemic 'mesh' that binds and coordinates social presence and action.

The ‘new agora’ that Wikis and similar collaborative tools offer is informed through a synchronization of material physicality in coordination with communicative and digital technologies. Levy prefers to call this the ‘virtual agora’, yet perhaps this emphasises too heavily non-physical presence.

One of the major benefits of such ‘collectives’, whether they be informed through Wikis, blogging, folksonomy or tagging, is the ability to become aware of problematic events/situations much sooner, and to articulate a response to such problems using a combination of both digital and physical actions In other words, to provide a ‘practical means of coordination’ in a self-reflexive manner. The ‘new agoras’ that are being set up online use feedback mechanisms whereby participants keep a check on one another, thereby hoping to escape the pit of peer-pressure ‘dumb decisions’ by moving towards the ‘wisdom of the crowds’. In this analysis the weaknesses of the individual are compensated by the contributions of the many. And maybe this is a workable form of ‘collective intelligence’ worth developing.

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