COLLECTIVE INDIVIDUATION: THE FUTURE OF THE SOCIAL WEB

/

YUK HUI AND HARRY HALPIN

SOCIAL COLLECTIVE FACEBOOK NETWORKS INDIVIDUATION WEB DIGITAL DATA WORLD USERS RELATIONSHIPS INDIVIDUAL

We are in the epoch of networks. The world is now rapidly being perceived as a vast space of interlocking networks of seemingly infinite variety: biological, productive, cybernetic, and – most important of all – social. The *image of the network,* with its obvious bias towards vision, has become the paradigmatic representation of understanding our present technological society as a holistic entity that would otherwise escape our cognitive grasp. Yet no image is ideologically neutral, for the image of the network is also a mediation between the subject and object that inscribes – or pre-programs – a certain conceptual apparatus onto the world, namely that of nodes and links (or in graph-theoretic terms, vertices and edges). This is not without consequences: due to its grasp over our imagination, the network constitutes the horizon of possible invention, as Simondon showed in *Imagination et Invention.*[1] Yet where did the concept of the network itself come from? Despite the hyperbole over the dominance of digital social networks like Facebook, the concept of the quantified social network pre-dates digital social networks, originating from the work of the psychologist Moreno in the late 1930s, and we argue that what the advent of the digital computer has done has primarily been the acceleration of the pre-digital conceptual apparatus of networks. Although no one can deny its now global influence, the fundamentally ontological presumptions of the social network have yet to be explored despite its present preponderance. To borrow some terms from Bernard Stiegler, how does the *what* of Facebook constitute our *who?*[2]

The Industrialization of Social Relations
J.L. Moreno (1889-1974), psychologist and the founder of sociometry was one of the first sociologists to demonstrate the value of graph-theoretic approaches to social relationships. The work of Moreno in the late 1930s and 1940s descends directly from psychology, historically preceding both cybernetics and the internet. The most-often quoted example is Moreno's work at the New York State Training School for Girls Hudson where the runaway rate of the girls was 14 times more than the norm. Moreno identified it as a consequence of the particular network of social relationships amongst the girls in the school, and he followed up on that by creating a simple sociological survey to help him 'map the network' or create what he considered a 'sociogram', which is nothing other than the familiar mapping of persons to nodes and relation-

---

1.   Gilbert Simondon, *Imagination et Invention*, Chatou: Editions de la Transparence, 2008.
2.   Bernard Stiegler, 'Who? What? The Invention of the Human', in Bernard Stiegler, *Technics and Time, 1: The Fault of Epimetheus*, trans. Richard Beardsworth and George Collins, Palo Alto, CA: Stanford University Press, 1998, pp. 134-180.

ships to links. The survey consists of simple questions such as 'Who do you want to sit next to?' Moreno found from the map that the actual allocation plan of the girls in different dormitories created conflicts; he then used the same model to propose another allocation plan that successfully reduced the number of runaways. This belief in the representation of social relations by 'charting' prompted Moreno to write that 'as the pattern of the social universe is not visible to us, it is made visible through charting. Therefore the sociometric chart is the more useful the more accurately and realistically it portrays the relations discovered'.[3] To Moreno, the charting of social relationships was no longer a mere representation of social relationships, these maps of social relationships could re-engineer social life, dubbed by Moreno as a new kind of social planning that would reorganize 'organic' social relationships with the help of pre-planned and technologically-embodied social networks. Already in 1941, Moreno had proposed that the superimposition of technical social networks upon pre-existing social networks 'produces a situation that takes society unaware and removes it more and more from human control'.[4] This loss of control is currently the central problem of the technical social networks, and in order to address this phenomenon, we propose to question some of the ontological presuppositions that have been hidden in the historical development of social network analysis.

Despite their explicit mapping of social relationships, social networking analysis is actually an extreme expression of social atomism. This proposition has to be understood sociologically and philosophically: the presupposition of the social network is that individuals constitute the network, and hence individuals – which in traditional sociology tend to be human individuals although they could also be other fully individuated actors such as animals or nation states – are the basic unchanging units of the social network. If there is any collectivity at all, it is considered primarily as the sum of the individuals and their social relationships as represented by the map of the quantified 'social graph', which gives mathematical precision to the concepts of social networks. This view is at odds with what has been widely understood in anthropology: namely that a society, community, or some other collectivity exist beyond the mere sum of individuals and their relationships, and are deeply embedded in their technical, historical, and even zoological world. It can be noted that the development of collectives has historically existed in the form of families, clans, tribes, and so on, and even pre-dates the notion of the autonomous individual.

At the same time, the combination of the social and the network also reactivates the spirit of industrialization, which can be traced back far before Moreno to the 19th century French socialist philosopher Henri de Saint-Simon. Pierre Musso showed that Saint-Simon was the first philosopher who fully conceptualized the idea of networks via his understanding of physiology, which Saint-Simon then used to analyze vastly different domains, albeit more imaginatively and not in the mathematical terms done later by Moreno. Saint-Simon indeed envisioned networks for communication, transportation, and the like, holding the idea of a network as both his primary concept and tool for social transformation. Saint-Simon believed that through industrialization, it would be

---

3.   J.L. Moreno, *Who Shall Survive? Foundations of Sociometry, Group Psychotherapy and Sociodrama*, New York: Beacon House, 1978, p. 95.
4.   J.L. Moreno, Foundations of Sociometry: An Introduction in Sociometry', *American Sociological Association* 4.1 (February, 1941): 15-35.

possible to create a socialist state by reallocating wealth and resources from the rich to the poor as well as from the talented to the less talented via a system of networks, like an organism attains its inner equilibrium by unblocking all the circulations.[5]

Today we know from history that Saint-Simon's sociology was blind to the questions of political economy (and thus, inevitably, the question of class) that was later analyzed by Karl Marx in *Das Kapital*.[6] However, there still appears to be a hint of liberation in the spread of digital social networking, as it seems that the frictionless mediation of networks also releases the imagination of a new kind of democratic society. By 'frictionless' we mean the conceptualization of a more flattened social structure that lets previously isolated components of society engage with each other – even on a global level. This phenomenon has been characterized by slogans such as 'Here Comes Everybody'; one can use Facebook and other social tools, such as Twitter, to autonomously organize events, movements, and even revolutions. For Moreno, the sociometric revolution never gets rid of its own shadow.

The graphical portrayal of social networks as nodes and links reinforces the philosophical assumption that social relations always exist in a reified manner as 'links' between one atomic unit and another. One can imagine that the image of a social network as merely lines between dots constrains the horizon of innovation, as such a primitive image cannot understand how to graphically represent any collectivity beyond the individual as primary, and instead always takes any collectivity as a consequence or byproduct of the map of interconnected atoms. Seeing each individual as a social atom already implies an extreme form of individualism that intrinsically dismisses the position of collectivity.

Social networking sites like Facebook stay within this paradigm by providing only digital representations of social relations that often pre-exist in some richer social space, and allows new associations based primarily on different discovery algorithms to emerge. Yet how many genuinely new friends has one met through Facebook without first meeting in either another non-digital or digital realm? As these, as Adorno might put it, 'non-identical' (*das Nichtidentische*) social relationships are flattened into the identical space of 'friend', Facebook's very existence relies largely on the presupposition of individualism, as the primary unit in Facebook is always the individual's Facebook profile.[7] Thus, the nodes on Facebook began first as people whose only relationship could be 'friends'. More recently, certain linear modifications of Facebook's concept of friendship have bifurcated into other categories such as 'close friend' or 'acquaintance' (although concepts such as 'hostile' and 'enemy' are of course forbidden except on satirical social networking sites such as Hatebook[8]). Recently Facebook has subsumed new types of objects, such as places and brands, as nodes in their network, this time connected by 'like' relationships.

5.   Pierre Musso, 'Aux origines du concept moderne: corps et réseau dans la philosophie de Saint Simon', *Quaderni* 3 (Hiver 87/88): 11-29.
6.   Karl Marx, *Capital: Volume 1: A Critique of Political Economy,* trans. Ben Fowkes, New York: Penguin Classics, 1992 (1867).
7.   Theodor Adorno, *Negative Dialectics*, trans. E. B. Ashton, New York: Seabury Press, 1973 (1966).
8.   See, http://www.hatebook.org/.

Despite their optimization for gathering marketing data on atomized individuals, one cannot deny that these digital social networks are able to bring people together and form groups whose activity ranges beyond shopping to spreading censored news and even political protest. Yet we have to be careful to praise social networking platforms like Twitter.

When users are considered as social atoms superimposed onto a technological network, the spontaneity and innovation within their possible collective intelligence is deformed by the control of the networks, driven as it is by intensive marketing and consumerism aimed at individuals rather than the development of the potential of the group. Within the social network, the individual subject is an atom and subjectivation becomes an engineering process under intensive monitoring and control. Thus, social networking would be considered by theorists like François Perroux as a source of a new form of alienation via denial of collectivity.[9] There is no formation of a group conditioned by a common project that designates an investment of attention, libidinal energy, and time. What happens today on Facebook, Twitter, and the like, is the reverse, which in spite of being the virtual home of a truly massive ensemble of humans, never form a collective project of 'being-together'. In an almost cruel mockery of being together, the time and the attention of each social atom is chopped into smaller pieces and dispersed on social networks by status updates, interactions, advertisements, and the like. Bernard Stiegler would hold that these constructed social atoms are not actually 'individuals', but disindividuals, as they seem to have lost their ability to act out except within the apparatus of an atomistic social network, whose social reproduction is guaranteed by its peculiar technical form.[10]

Decentralization and the Social Web

If Facebook, as the predominant example of a centralized digital social networking platform, is to be considered the apex of the industrialization of social relationships, can users escape their reduction to social atoms by simply decentralizing Facebook? Indeed, it is this simplistic response to the problem of social networking that has been taken on by most hackers, ranging from well-known Diaspora to more successful projects built on standards for open social networking like Status.Net. However, these hackers and social 'startup' companies may be forgetting the history of the social web and centralization. While there were at first a large variety of digital social networking sites, such as LiveJournal, Tribe.net, Friendster, and Orkut, these sites eventually began consolidating. Compared to its predecessors like MySpace, the primary advantage of Facebook was its consistent user interface along with its initial targeting of exclusive colleges like Harvard, thus capitalizing on the placement of its users within digital social networks as a way to judge social status. Furthermore, in order to prevent itself from being disrupted by the next social network, Facebook created the Facebook

---

9. The French economist François Perroux took up the question of industry and social transformation from Saint-Simon and developed a vision of collective creation in which humans and machines act on each other, and through the standardization of objects, human beings can renew their life style, and produce a system of 'auto collective creation'. Notably Perroux was also influenced by Joseph Schumpeter, especially the concept of creative destruction. François Perroux, *Industrie et création collective, tome I: Saint-simonisme du XXe siècle et création collective*, Paris: Press Universitaire de France, 1964.

10. Bernard Stiegler, *États de choc: Bêtise et savoir au XXIe Siècle*, Paris: Fayard/Mille et une Nuit, 2012.

Developer Platform for building apps that could run on top of Facebook, which cleverly violated the classical model of 'creative destruction' attributed to economist and political scientist Joseph Schumpeter.[11] In this way, Facebook could capture developers and trap them in its 'walled garden' while allowing them to build their own business on top of Facebook, thus transforming Facebook from a mere social networking website into an all-encompassing social platform.

From the beginning of digital social networking, there was also a spreading realization that the centralization of social relationships carries dangers. Perhaps the first case in point came in 2005, when Orkut was shutdown by the Iranian government, followed shortly by other social networking sites. As Dan Brickley, at the time a staff member of the World Wide Web Consortium (the W3C, world's foremost standards body for the Web, which maintains HTML as well as other standards), wrote, 'There go 65,000+ Iranian blogs (per blogcensus) and 7%+ of Orkut's user base, in a flip of a switch'.[12] At that time Dan Brickley was working with Tim Berners-Lee, who is widely acclaimed as the inventor of the web, on creating what Berners-Lee termed the 'Semantic Web', the ambitious transformation from a web of documents to a semantic web of linked data, where data would be given a 'well-defined' meaning. Tim Berners-Lee felt that by releasing not only the world's text, but also decentralizing the world's data from various closed databases would lead to a giant explosion of innovation. The first step was RDF (Resource Description Framework), an open and extensible data format meant to describe metadata about literally anything in a simple knowledge representation language based on the form of a network: namely nodes and links, where the nodes represent subjects and objects, and the links predicates between them.[13] Using RDF, Brickley decided to create the *Friend of a Friend* (FOAF) project in order to '[create] a Web of machine-readable pages describing people, the links between them and the things they create and do [...] FOAF defines an open, decentralized technology for connecting social Web sites, and the people they describe'.[14] Dan Brickley hoped that by having such a standard for data portability, users could move their data with them wherever they wished, escaping the problem of having their data destroyed when their digital social networking site disappeared.

Brad Fitzpatrick, founder of the social networking site LiveJournal, was the first champion of opening the social graph. At first he started allowing users to 'export' FOAF profiles from LiveJournal so that they could control their own data and move it to other FOAF-supporting sites. In his essay 'Thoughts on the Social Graph', co-edited by (at the time) fellow employee David Recordon of Six Apart, Fitzpatrick stated that,

> There are an increasing number of new "social applications" as well as traditional application[s] which either require the "social graph" or that could provide better value to users by utilizing information in the social graph [...] Unfortunately, there doesn't exist a single social graph (or even multiple which interoperate) that's com-

11. Joseph Schumpeter, *Capitalism, Socialism and Democracy*, London: Routledge, 2003 (1943). For more on 'creative destruction' see, http://en.wikipedia.org/wiki/Creative_destruction.
12. Dan Brickley, 'Re: Twitter and Iran Elections', posting to W3C mailing list, 16 June 2009, http://lists.w3.org/Archives/Public/public-xg-socialweb/2009Jun/0096.html.
13. For more on RDF see, http://www.w3.org/TR/2004/REC-rdf-concepts-20040210/.
14. See, http://www.foaf-project.org/.

prehensive and decentralized. Rather, there exists hundreds of disperse social graphs, most of dubious quality and many of them walled gardens.[15]

So Fitzpatrick declared that society should 'ultimately make the social graph a community asset' in order to 'make graph data as portable as documents are on a personal computer'.[16] A flurry of work began to create the specifications needed to create a decentralized social web. Under the slogan the 'Federated Social Web', various companies such as Status.Net (formerly identi.ca) began producing working code demonstrating the potential for creating a genuine decentralized and social open web built on standards, where data such as status updates and profiles could be seamlessly shared between multiple servers – an impressive technical feat to say the least.

Little of this work to decentralize the social web had any impact beyond the world of hackers and social web enthusiasts, although it did land a few of the decentralized social networking pioneers jobs at companies such as Facebook and Google. Fitzpatrick's co-author David Recordon left Six Apart and became the first standards manager at Facebook, in part at least to his original work around Open Authorization (OAuth), OpenID, and his work on the decentralized social graph. At Facebook, Recordon became interested in Berners-Lee's Semantic Web, discussing the matter with FOAF inventor Dan Brickley, and rumors spread that Facebook might 'open' up its social platform. Yet what happened was even more interesting: the Like Button was released, officially called the 'Open Graph Protocol'.[17] Facebook cleverly used the open standards of RDF to allow webmasters to describe their web page as one of a finite number of commodities (movie, person, book, place, etc.) and then combine that with Javascript to send the data from any website off to Facebook. Unlike the hyperlinks crawled by Google, the information about which user 'likes' a commodity are not revealed to the owner of the website and not even kept by the users themselves, but instead shipped off to a centralized database in Facebook. Ironically enough, Facebook used the open standard Semantic Web to build a genuinely closed platform consisting of a single relationship, 'like', throughout the entire Web! In a panic at Facebook's growing dominance over the social web, Google hired many of the key players behind the decentralized social web, such as Brad Fitzpatrick and Dan Brickley, Joseph Smarr, Chris Messina, and the like, some of whom went on to build their own Google+ product. But so far, Google+ has yet to become the heart of a decentralized social web.

The key is that the decentralization of social networking simply is the spread of social networking, and as such is actually compatible with the spread of the 'open' business models of centralized platforms that do nothing to challenge the ontological presuppositions of social networking itself. The decentralized nature of the Semantic Web led to the creation of the massively centralized Like button, which shows that it is not as simple as putting centralized digital social networks against a decentralized social web. Decentralization is never fully complete and often contradictory. Even though we can say the internet is decentralized in terms of IP addresses, at the present moment,

15. Brad Fitzpatrick and David Recordon, 'Thoughts on the Social Graph', bradfitz.com, 17 August 2007, http://bradfitz.com/social-graph-problem/.
16. Brad Fitzpatrick and David Recordon, 'Thoughts on the Social Graph'.
17. For more on 'Open Graph Protocol' see, http://ogp.me/.

the extraction of monetary value through the servers and database of Google and Facebook remain centralized.

The term 'decentralization' demands further scrutiny, for the crux of the philosophical matter at hand is that even in decentralized systems, there is never a challenge to the ontological reduction of humans to atoms and relationships to links between atoms. The failure to move beyond this gives real human users little reason to adopt alternatives to centralized digital social networking platforms and their management of the social. We admit that decentralization is often a desirable characteristic, yet we must remember that decentralization doesn't necessarily imply a positive reading of the term, which would simplistically lead to a certain fetishism of peer-to-peer systems. That being said, the reverse move, to believe that decentralization is always negative, would paint us into a corner where we could only point out like Galloway how networks imply control.[18] Instead, rather useful to us is Bernard Stiegler's term where the technology of decentralization is always a *pharmacon,* something that is simultaneously positive and negative, a remedy and a poison.[19] Thus, it should come as no surprise that the mass adoption of centralized digital social networking platforms implies both the spread of democracy as witnessed by the role of Twitter and Facebook in various protests in 2011, and social control, as witnessed by the surveillance and destruction of some of these movements via the very same technology. The point of exploring how the 'new' phenomenon of social networking is embedded within a larger ideological apparatus that is more than half a century old, is not merely some critical revealing of 'truth content', for we also hold that the possibilities of imagination and invention can still open a new space for individuation by consciously analyzing and moving beyond the rigid and paltry ontological assumptions of the classical representation of social networks by graphs. Decentralization is not, and never will be, enough.

Collective Individuation
Is it possible to rethink the notion of collectivity as a remedy to the individualized atomism of the current digital social networks? This doesn't mean that we want to erase the individual and replace its singularity by some kind of mystical and reified collectivity with potentially dubious political implications as witnessed by Stalinist collectivism. Rather, we want the collective and individual to co-create each other, like the necessary relationship of propagation between certain flowers and honeybees. Sociometry demands a mapping that is ever more precise in order to accurately reflect and predict the probabilities of connections and interactions so the profit margins of the platform itself can be maximized via marketing; and thus technological individuation within digital social networking easily slips back into *disindividuation*. Can we think of a new kind of individuation that neither glorifies nor rejects the possibilities of digital social technologies? A model of individuation that can be therapeutic to the current disindividualizing concept of the social presupposed by networks – and socio-technically engineered by them in practice! – is precisely what Gilbert Simondon proposed in his book *L'individuation Psychique et Collective.*[20]

---

18. Alexander Galloway, *Protocol: How Control Exists after Decentralization*, Boston: MIT Press, 2006.

19. Bernard Stiegler, *Ce qui fait que la vie vaut la peine d'être vécue: De la pharmacologie*, Paris: Flammarion, 2010.

20. Gilbert Simondon, *L'individuation Psychique et Collective*, Paris: Editions Aubier, 1989.

Simondon suggests that individuation is always both psychic and collective. What Simondon means by psychic individuation is the formation of the psychology of individuals, as can be exemplified by their being in the situation of anxiety, grief, anger, and so on. By collective Simondon points out that the formation of these individual states are inevitably linked to the wider social and technical world. Yet the binary of the psychic and collective are not enough, but have to be thought simultaneously. Individuals and groups are not opposing, the individual and the collective constitute a constant process of individuation. Psychic individuation to Simondon is more a simple individualization, which is also the condition of individuation, while collective individuation is the process that brings the individual into a state of constant transformation.

The formation of the collective is often reduced to considerations such as 'why the individual wants to participate', a typical question for those who do marketing or plan startup ventures. This question only views social norms and collectives as predefined structures, supposing falsely that in order to create a collective, an engineering methodology needs to immediately set up the social categories and 'mold' the involved individuals according to these pre-configurations. Simondon considers individuation as a process akin to that of crystallization. Likewise, one can see the genesis of a group as a kind of individuation, so that each individual is at the same time both an agent and a milieu. One may ask: isn't what we have seen on Facebook already a psychic and collective individuation? It is true that the philosophical approaches of Simondon can become tools to analyze social relations, but one must go beyond the limit to grasp that these theories are not merely tools of analysis, and recognize that these concepts are also tools for transformation. As we have seen, Facebook individuates primarily atomistic individuals. Thus, a genuine alternative to Facebook would not copy its features, but begin from somewhere completely different: namely starting from the collective in order to redesign the relation between the individual and the collective. Instead of asking how atomized individuals form collectives, we must find out how a collective social network changes and shapes individuals, and take this phenomenon as primary.

Hence, we want to reflect on the question of the group, and propose that what distinguishes a collective from an individual is the question of a common project pertaining to the groups that then shape the process of collective individuation. Take for example Ushahidi, a website that provided a crowdsourced mapping service built on top of Google Maps that originated as an attempt to monitor violence around the Kenyan elections. After the earthquake in Haiti in 2010, in order to help recover from the catastrophe, Ushahidi enabled both local and overseas volunteers to collect SMS messages via a special hashtag in order to map the crisis, saving people in Haiti who might have otherwise been lost. After the earthquake and tsunami that hit Japan in 2011, engineers from Japan developed a map of the damages caused by the tsunami and the emergencies that needed to be taken care of by analyzing tweets and other social media. The dynamics of these projects go far beyond simply posting individual status updates, and allow people to actively work together on common goals, thus developing a collective projectuality. It is the moment of the formation of projects that allows the individuals to individuate themselves through the collective, and so gives meaning to the investments of individuals. On Facebook, one can establish a group, a page, an event, but neither Facebook nor Google+ and Twitter provide the tools for collective individuation based on collaboration. In other words, on Facebook a group is no dif-

ferent from an individual, yet another atom in a network. We want to go beyond atoms and links, beyond nodes and vertices!

Collective Social Networking
Let us be clear: our argument is with the philosophical assumptions that social networks make concerning individuals and their relationships, so that precisely by changing those assumptions, we can imagine social networking to be transformed into a technology for collective individuation. Passing from a glimpse of a new kind of philosophical model of collective individuation to its realization in a technical system, we propose that the social networking sites should exist as a dynamic and open-ended set of tools to enable the creation and administration of collective projects. Collective intelligence can then become actual insofar as the group successfully uses its biotechnical abilities to accomplish whatever goals arise from the process of collective individuation. So, a user must always belong to a particular collective project, without which he or she will not be able to fully utilize the features and data defined by such a platform. Each collective project could be defined by an agreed upon goal, and requirements of fulfillment are collectively initiated and updated by 'members' of the group, those that go through collective individuation together. Tasks can then be assigned either in the form of individual actions or subgroups, and the progress of the tasks should be monitored and indicated. However, the collective should be dynamic rather than static, groups can be merged together to form larger projects at any time, and a project can also be split into smaller collectives. In this manner, collectives can discover each other and communicate to seek possibilities of collaborations and information sharing.

Interestingly enough, the only successful examples of alternative digital social networks are ones that integrate a collective functionality for grassroots political projects. Indeed, the first Web 2.0 site ran by user-contributed content was arguably Indymedia, the global network of independent media centers set up in the wake of the alterglobalization movement at the turn of the millennium.[21] Almost all websites for mass media channels now feature the once-innovative open commenting of Indymedia. Furthermore, the original activists and programmers that imagined an 'augmented social network' that would 'enhance the ability of citizens to form relationships and self-organize around shared interests in communities of practice in order to better engage in the process of democratic governance'[22] seems to have for the most part surrendered, and are now either working for traditional digital social networks, or perhaps playing the 'long game' to realize their original vision. Finally, ranging from FOAF to Diaspora,[23] the success of these alternatives to Facebook and Twitter can be objectively measured in terms of their users and their consistent long-term growth. While alternative social networks such as Diaspora had a temporary large influx of users due to their coverage by mainstream media like *The New York Times*, they never offered the collaborative tools needed for collective individuation. Thus unable to differentiate themselves from Facebook in a way that users could understand, except in terms of abstract values and

---

21. See, https://www.indymedia.org/.
22. Ken Jordan, Jan Hauser and Steven Foster, 'The Augmented Social Network: Building Identity and Trust into the Next-generation Internet', *First Monday* 8.8 (4 August 2003), http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1068/988.
23. See, https://joindiaspora.com/.

an engineering design, their users eventually lost interest and even today its remaining founders are moving to different projects. Furthermore, any protocol that only creates a decentralization of social networking is, at best, subsumed into current social networking platforms like Facebook or Google+. More likely, any supposed alternative that does not go beyond the conception of a primitive social physics, social atoms linked by reified social relationships, simply withers and dies. Despite critique after critique of centralized digital social networking platforms, the conceptual apparatus of such a primitive social physics seems to have little impact on activists, who from the Egyptian Revolution to #occupy all regularly use traditional atomistic networks like Twitter and Facebook, primarily for publicity due to the massive numbers of people on them. It is simply the most efficient way to get news out. It still seems rather paltry that the end result of the global interconnection of humanity via digital social networking is the sharing of photos and 140 character cries for attention.

Closer inspection reveals that activists organize amongst themselves not on Facebook and Twitter but on little-known alternative social networks such as the decentralized digital social network Lorea[24], and the Crabgrass[25] social network run by the activist server riseup.net. Objectively speaking, both of these networks are successful within their communities for each have around 50,000 users, consistent growth, and constant updating of their software, likely because they are well-known and integrated within existing social movements directly related to both the collective individuation present in the streets and on the web. Lorea is the preferred collective social networking platform of the Indignados in Spain and Crabgrass has a long-standing relationship with various anarchist movements in the United States, Germany, and Brazil. This is not to say any social networking platform created by grassroots political activists is pre-destined for success; far from it, for the much-hyped platform planned to be built by the #occupy movement, the Federated General Assembly, still remains a draft plan rather than a working codebase with actual users. The reason for the success of platforms like Lorea and Crabgrass is straightforward: what atomistic digital social networks like Facebook and Twitter lack are precisely the tools necessary for the coordination and production of data, such as the collaborative editing of files and task organization that is provided by the 'groupware' of these platforms. While the term 'groupware' is usually associated with business software such as the IBM Lotusphere, for the most part these kinds of tools have been restricted to corporate users willing to pay a hefty price tag, and their functionality has been restricted to only corporate use-cases. What we see happening now is the movement of groupware into the hands of the self-organization of citizens. Furthermore, neither of these networks is particularly decentralized in practice: Lorea is decentralized, but almost all activity is on a single node, and due to security concerns Crabgrass has yet to implement any features including federation. In this regard, what is clearly important for users is not decentralization, but the presence of features that enable collective individuation.

Currently these activist social networking platforms have barely scratched the surface of the tools required for collective individuation. On Crabgrass and Lorea, the most popular tool is the collaborative editing of wikis, but tightly restricted to small activist groups

---

24. See, https://lorea.org/.
25. See, https://we.riseup.net/.

whose privacy is protected from possible surveillance by the alternative social networking platform. Yet what is necessary are even more sorts of tools for coordination across a wider range of latency and media, ranging from the real-time chat of Eetherpad to collaborative editing and annotation of video. Indeed, what a genuine alternative to atomized social networking would produce would be the cultivation not just of the collective production of information, but a space for reflection and knowledge of all kinds across all possible types of data. Thus we find that these collective platforms could indeed be the heart of the Semantic Web of Berners-Lee: they should feature the ability to store, refine, and share data, using open and flexible formats such as RDF that can then be easily interpreted by projecting such data onto maps and other kinds of visualizations. Moving beyond the simplistic vision of the web as a universal space where all data can be easily accessed by any user, a platform for collective individuation allows only those involved in the creation of data and knowledge to have command over the data via access control, so that they can release it to the wider world when ready. Just as current social networking platforms have, as their primary *raison d'etre*, the harvesting of data about their users for marketing, a genuine alternative would allow users to create manifold types of data about their world to increase their own collective presence in it, a vast multiplicity of open-ended relations that ultimately are not connections between atoms, but different ways of being and dwelling in data, the re-establishment of a new *Da* in the *Dasein* of the internet era.

In this vein, those involved in the collective individuation process must be able to reveal themselves in a manner they see fit, with the capability of exposing themselves using different personae or even remaining anonymous rather than always being tied to a single identity. One can imagine that some would rather reveal themselves via pseudonyms or be anonymous, or even only operate in collectives that are entirely anonymous. Current digital social networks exist primarily as marketing machines for which (dis)individuation is a mere side effect, where what appears to be private is always accessible to those that run the server. Thus in order to open the space for collective individuation, even the system administrators that run the server should not be able to access the data of the collective groups on it. This should be possible using public-key technology and encryption on the server-side, which would prevent those that run the server from spying on its users. Indeed, for security reasons, decentralization does make sense, if done properly, along with storing data in a decentralized and redundant fashion across multiple servers in order to minimize the consequences of attacks and the destruction of the collectively produced data.

Conclusion: A Social Web to Come

We are not against the mathematics of graphs, but against the *Weltbild* of the network, a particular image of the totality of our world that constrains and shapes our potentialities.[26] Like the image of the world as a clock or a computer before it, this particular image is far from innocent, but reflects the ontological assumptions of our social and economic order: it is no accident that Adam Smith and classical economists viewed exchanges – a kind of link! – as always happening between individuals. We have pointed out again and again that the theory of the network has little to do with

26. Yuk Hui, 'Computational Turn or a New Weltbild?', *Junctures: The Journal for Thematic Dialogu*e 13 Unseen (2010): 41-51. Available at, http://www.junctures.org/index.php/junctures/article/view/6/4.

digitality per se, as Saint-Simon's failed imaginary socialism desired to build a world of networks far before the advent of the internet. Digital social networks, combining the mathematical theory of the social graph with the real-world artifact of globe-spanning digital communication networks, represent an industrialization of social relationships that transforms the rich possibilities pointed to by the elusive adjective of 'the social' to a totally atomic individualism, with connections to a world reduced to mere links. Far from being a neutral scientific methodology, the presuppositions of social networking today mediate our real communication.

Collective individuation proposes that another social network is not only possible but necessary for an economy that is far more than marketing, click rate, number of users, and the like. A collective social networking is possible, and is one based on the revealing of ourselves and our being-in-the-world-with-others, the 'group' based around a common project or calling. A project is also a projection, that is, the anticipation of a common future of the collective individuation of groups. By tying groups to projects, we hold to the fact that individuation is also always a temporal and existential process, rather than merely social and psychological. By projecting a common will to a project, it is the project itself that produces a co-individuation of groups and individuals. Furthermore, by creating a new technical substrate influenced by open standards that are based on this conception of groups, different alternatives can exchange and make elements of their social networks communicable in terms of protocols, data portability, and especially conceptualizations. So while we criticize the limits of social networks and researchers who embrace sociometry as some royal road to understanding social computing, we also want to outline that a new method for understanding – and even programming! – the social and digital is possible, and urgent.

Let us end with a few surprising words in defense of social networking.

Across the globe, we are increasingly both fascinated and enmeshed in a new *Weltbild*, the global social network. Perhaps social networking performs a similar function to that of the novel in the now bygone era of early capitalism as analyzed by Lukács in the *Theory of the Novel*: as the individual was uprooted out of their previously stable pastoral world and pushed into the city, the narrative of the bourgeoisie novel provided a crucial representation that served as a testament to the damage caused by the advent of capitalism and gave means to symbolically obtain a new holistic understanding in the overwhelming new world of the metropolis.[27] Now, in the era of late capitalism, our social life is uprooted beyond a particular city and nation, and due to rising unemployment the importance of a 'job' (the factory, the workplace, the office) declines; so is it any surprise that in the image of Facebook we can glimpse a way of understanding our now global-spanning networks of relationships and make sense of the 'timeline' of our lives? Does not the general obsession with 'friends' reveal the loneliness of this global world, yet also reveal our human desire for genuine friendship? Is it not self-evident that the libidinal investment in profiles serves a merely all-too-accurate reflection of the difficulty of maintaining our sense of identity in a world adrift from any tradition and sense of place? Despite its faulty ontology of nodes and links, within the image of the global social network there is a picture of the possibility of a unified world, much more

27. Georg Lukács, *Theory of the Novel,* trans. A. Bostock, Cambridge, MA: MIT Press, 1974 (1916).

so than the image of the globe as distinct nation states, each with their own peculiar color and rigid boundaries that are to never mix. There is an unredeemed promise in Moreno today, visualized by the image of the world-spanning social network, namely the possibility of constructing a truly global conception of friendship and connection. It is still unknown what image comes after the *Weltbild* of the global social network, but we can only hope it is the abolition of all such images. An image is always a testament to our alienation and failure to grasp that which is really already there. There will be no image of the world when we have cultivated our cognitive powers to let us take responsibility for our common world. There will only be the world itself.

References

Adorno, Theodor. *Negative Dialectics*, trans. E. B. Ashton, New York: Seabury Press, 1973 (1966).

Fitzpatrick, Brad and David Recordon. 'Thoughts on the Social Graph', bradfitz.com, 17 August 2007, http://bradfitz.com/social-graph-problem/.

Galloway, Alexander. *Protocol: How Control Exists after Decentralization*, Boston: MIT Press, 2006.

Hui, Yuk. 'Computational Turn or a New Weltbild?', *Junctures: The Journal for Thematic Dialogu*e 13 Unseen (2010): 41-51.

Jordan, Ken, Jan Hauser and Steven Foster. 'The Augmented Social Network: Building Identity and Trust into the Next-generation Internet', *First Monday* 8.8 (4 August 2003), http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1068/988.

Lukács, Georg. *Theory of the Novel,* trans. A. Bostock, Cambridge, MA: MIT Press, 1974 (1916).

Marx, Karl. *Capital: Volume 1: A Critique of Political Economy,* trans. Ben Fowkes, New York: Penguin Classics, 1992 (1867).

Moreno, J.L. 'Foundations of Sociometry: An Introduction in Sociometry', *American Sociological Association* 4.1 (February, 1941): 15-35.

_____. *Who Shall Survive? Foundations of Sociometry, Group Psychotherapy and Sociodrama*, New York: Beacon House, 1978.

Musso, Pierre. 'Aux origines du concept moderne: corps et réseau dans la philosophie de Saint Simon', *Quaderni* 3 (Hiver 87/88): 11-29.

Perroux, François. *Industrie et création collective, tome I: Saint-simonisme du XXe siècle et création collective*, Paris: Press Universitaire de France, 1964.

Schumpeter, Joseph. *Capitalism, Socialism and Democracy*, London: Routledge, 2003 (1943).

Simondon, Gilbert. *L'individuation Psychique et Collective*, Paris: Editions Aubier, 1989.

_____. *Imagination et Invention*, Chatou: Editions de la Transparence, 2008.

Stiegler, Bernard. 'Who? What? The Invention of the Human', in Bernard Stiegler, *Technics and Time, 1: The Fault of Epimetheus*, trans. Richard Beardsworth and George Collins, Palo Alto, CA: Stanford University Press, 1998, pp. 134-180.

_____. *Ce qui fait que la vie vaut la peine d'être vécue: De la pharmacologie*, Paris: Flammarion, 2010.

_____. *États de choc: Bêtise et savoir au XXIe Siècle*, Paris: Fayard/Mille et une Nuit, 2012.