

# First Steps towards the Development of Convivial Tools in the Digital Age beyond the Facebook Model

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**Abstract.** In this paper we outline the main traits of our research in the domain of social neighbourhood networks. We report the main findings from the literature survey performed to orientate our research efforts and anticipate some results from a questionnaire based user study that involved 200 potential users of a social media aimed at supporting their life in condominium and in their neighbourhood. This class of social media is opposed to the currently dominant model, which we denote as the Facebook model, and is related to an important component of the sociality phenomenon, which we denote as conviviality, after the seminal works by Illich and others.

## Motivations and Background

Very simply put, nowadays eVoting regards the use of ICTs by government institutions to let citizens express their opinions on specific matters of concerns, or more commonly, to receive mandate to represent their will in policy and decision making for the collective interest. Our contribution in going beyond this current picture is to focus on the use of ICTs, and more specifically Social Media (SMs), to develop communities of citizens at local level who are better informed on what they are called to express their vote and, possibly grow these communities so that they become mature Communities of Practice, which are able to have an impact on local (and not so local) institutional bodies. The kind of practice we would like to focus on and around which we aim to study the facilitating role of SMs in supporting the growth of the related community of practice is strictly related to collective opinion making and deliberation: it is the practice encompassing the collection of multiple stances, proposals and opinions

from the grass-root level of the community; the negotiation processes by which conflicting stances are discussed, reformulated and eventually integrated; the drafting of the motions that could represent the majority of the members involved; and eventually the building up of the “single voice” that could most effectively interact with the institutions and corporates at stake<sup>1</sup>. Our point is that such a community of practice (where the characterizing practice is not related to any kind of work, but rather it grows up from a bottom-up need to gain momentum and credibility to have an impact on the decisions related to a local reality and circumscribed territory) can be supported by ICTs, but not ICTs whose structure (or underlying model) is that of the Social Network Sites that are having an amazing worldwide success in the digitized societies.

SMS, and especially the so called Social Network Sites (SNSs) are an impressive phenomenon of the Digital Age that, in virtue of its extent, can be addressed from several perspectives and with multiple research aims. The research aims that we will outline in the next sections emerge from a preliminary question regarding whether the worldwide use of SNSs has so far improved the social capital and well-being of the people involved. This question has been addressed several times since the first introduction of successful SNSs. Studies addressing the role between Internet and sociality have often spent words of more or less cautious optimism in their discussions and conclusions: the reader can refer to, e.g. Wellman et al. (2001); Lee and Lee (2010) to have a glimpse of that portion of specialist body of works.

An influential reference that has often been cited by the less optimistic, or overtly contrarian, scholars was that of Putnam Putnam (2001). Putnam in his well known studies claimed that: i) in the thirty years before the end of the millennium, social capital had been inexorably declining; and ii) technological progress was one of the most plausible causes for this erosion, mainly due to the progressive individualization of entertainment and service/ good consumption that it enabled, and sometimes fostered. This hypothesis, which at the beginning was little more than a mere conjecture, has recently received some further confirmation Antoci et al. (2013).

In fact, almost at the same time of Putnam, also Kraut et al. made a similar point, coining the expression “Internet Paradox” Kraut et al. (1998) to account for the apparent role of the Internet in making us less socially involved and less psychologically healthy. In this same strand, other researchers have pointed out as an increase in Internet usage is associated with decreases in the modes of communication Stern (2008), in the democratic autonomy of the people McChesney (2013), and even in their cognitive and learning capabilities Carr (2011); and, more notably to our aims, how the use of SNSs, like Facebook, is associated with an increase in social alienation Marturano (2011), socially destructive feelings like jealousy Muise et al. (2009), frustration Chou and Edge (2012) and envy Krasnova et al. (2013), and even a slight but clear decrease in the overall quality of life Kross et al. (2013).

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<sup>1</sup> This practice and the related community was suggested by Etienne Wenger in a private conversation.

## A research on conviviality

In the light of the controversial research undertaken so far on the impact of SNSs on macro-scale level, our research question adopts a more circumscribed and purposely limited scope: we focus on the potential impact of social media on sociality when these are adopted in smaller existing communities, that is on their influence at meso scale (cities, neighbourhoods, streets), and micro scale (single multi-family buildings, or aggregates of buildings on the same street, condominiums and supercondominiums, respectively). Thus we focus on the impact of Social Media on existing communities of place, that is on groups of people living in the same neighbourhood, or even in the same building (condominium), and more precisely on two constructs that are often associated with community life, that is the “social capital” and “sense of community” of its members. However, to state that our contribution lies in the research strand that aims to frame and understand the actual, and also potential to be, impact of SNSs on sociality would be only partially true, as we also aim to address sociality, with respect to the design of functionalities that could support it.

Sociality generally refers to the set of attitudes and actions that individuals rally to develop social links with other people, associate with them in communities, and interact within a common framework of mutually recognized membership to the same community. However, we propose to distinguish within the vast concept of sociality, which is often treated as a single undifferentiated dimension, at least two main components: “sociality as practice” (cf. the practice theory by Bourdieu); and “sociality as communication” (cf. the social systems theory by Luhmann).

We believe that the communication pole is by far the most hegemonic: we refer to it with the expression “Facebook model” (of sociality fostering). For this reason, we propose to denote the latter pole, which nevertheless would be reductive to equate to cooperation only, with a different term: conviviality. This term needs to be carefully characterized especially towards the design of innovative social media having a stronger impact on the civil society.

## Conviviality in (very) short

We are aware that the literal meaning of the term “conviviality” could hinder its wide adoption, especially in the design discourse: in fact dictionaries usually refer this term to what pertains to “social events where people can eat, drink, and talk in a friendly way with others” (cf. Merriam Webster 2014). Although this meaning is certainly true, and will not be repudiated at the end of our argumentation, we propose it for the same reasons it was first proposed as a value in the context of urban communities by Illich in the 1970s first, and then by Pettie in the late 1990s (all together with many others in the mould of these latter intellectuals).

More technically speaking, Illich first used this expression to denote specific tools (and hence not people nor situations), the so called “convivial tools”, and consequently the communities of people using these tools Illich (1973). From Latin *con-vivium* — to live together— (and only hence to have a nice time together), a convivial tool is a tool fostering conviviality and hence designed to be easily used, by anybody, as often or as seldom as desired, for the accomplishment of a purpose chosen by the user; it’s a tool that enables “autonomous and creative intercourse among persons, and the intercourse of persons with their environment”: its aims are then to unite people in both its use and production; not to alienate them; and give them opportunities to enjoy life together. Convivial tools are “new tools [people can] work with, rather than tools that work for [people].”(p. 10). Some years later, Peattie took up again this notion in the context of urban life and planning, defining conviviality as a set of “small-group rituals and social bonding in serious collective action, from barn raisings and neighbourhood cleanups to civil disobedience that blocks the streets or invades the missile site” Peattie (1998)(p. 246), thus stressing the potential for action of people within the same local community that is enabled by communication and that somehow goes beyond mere chattering and messaging.

Moreover, in Illich’s words, convivial tools are “responsibly limited [...] modern technologies [that] serve politically interrelated individuals rather than managers [and corporate profit-related aims]”. More precisely, Illich defined a convivial tool as “that which gives each person who uses it the greatest opportunity to enrich the environment with the fruits of his or her vision”: it is therefore a tool empowering the user and giving her both voice and the opportunity to have an impact on her world; and a tool whose “renewal would be as unpredictable, creative, and lively as the people who use them” Illich (1973), so envisioning “in nuce” even the most recent tenets of End-User Development Fischer (2009). It is also a tool promoting continuous learning, but not in that it backs up the teaching of someone through it, and the internalization of abstract instructions and notions (characteristics of non convivial tools), but in terms of self-learning and the promotion of “unhampered participation in meaningful settings”.

In light of this, we then use this term then to denote a class of artifacts that are aimed at “promoting sociality, self-expression and autonomous and creative intercourses among individuals”, and therefore both communication, and what adds to this latter the “will to act together”, that is collective deliberation, collective planning, and collaboration Nowicka and Vertovec (2013) to achieve collectively set purposes by means of agreed upon line of actions. If, also like Antoniadis and Apostol write “sharing information with neighbours is a critical requirement for creating convivial physical, and not virtual, communities and for a more informed and cohesive participation in public affairs.” Antoniadis and Apostol (2013), our point is to consider communication as a necessary, but far from being sufficient, condition for empowering “convivial physical, and not

virtual, communities”, whereas coordination for common actions and collective agreement are the elements tapping in communication that can support this dimension of sociality more clearly.

## Our research: context, preliminary results and agenda

The idea that investing on the smaller, grass-root communities could have beneficial impact on phenomena at a higher scale is not new, as rightly noticed in Cho and Rogel (2013): this idea dates back to the beginning of the 20th century when Judson Hanifan described neighbours as sources of social capital (expression coined in that occasion) for each others, that is resources to satisfy personal needs as well as improve the living conditions for all of the members of the whole community.

### The context

Condo communities are an interesting matter of concern for their diffusion, for their hierarchically flat (bossless) structure, which would call for some sort of support of a “distributed leadership”, and for the degree of infighting they exhibit, which has relevant consequences on one of the most congested, and hence slow, legal systems in the world.

With the exception of “nuclear families”, people living together in the same condo are the smallest community with somehow clear-cut boundaries: they are, indeed almost by definition, “communities of place” and, to some extent also, “communities of interest” (being the common concern the ordinary administration of the same building, often with respect to service and good suppliers, and maintenance interventions). As condos give shelter to people with no other common trait than living in the same place, those human ensembles very seldom exhibits the features of other types of communities where social ties are strong and somehow affecting the lives of their members, like communities of knowledge, of purpose, of practice Foth (2003).



Figure 1. A poster presenting the main process on which the Condoviviamo project focuses.

These aspects motivated us in beginning a research project, called condoviviamo (an Italian portmanteau from ‘condominio’ and ‘viviamo’, i.e., ‘condominium’ and ‘let’s live’, see Figure 1), which lays at the intersection of different, but yet related, disciplines, like community psychology, urban sociology and social and community informatics Carroll (2012). In this project we aim to study the relationship between the constructs known as “social capital”, “sense of community” and “social trust” at neighbourhood and condo level, and the potential impact of vertical SNSs on these constructs at either levels.

### Preliminary results

To carry on this research strand, in Fall 2013 we undertook a questionnaire-based user study to investigate the attitude of people living in a city towards social media, in general, and social media supporting condo and neighbourhood life, in particular; their preferences towards community-oriented functionalities (what are valued most if already present, what are longed more if still not available); and whether some correlations could be detected between the sense of belonging to the place where one lives and the attitudes mentioned above. We collected almost 200 complete questionnaires and weighted the responses for age bias. In this paper we can anticipate results that will be soon discussed in a full research paper. The respondents declared a relatively low sense of belonging to the place where they live, both in the case of their condo ( $P=.002$ ) and their neighbourhood ( $P_i.001$ ). These two perceptions were mutually correlated (Cronbach’s  $\alpha=.67$ ), and their aggregation was strongly correlated with several sociometric variables, like perceived acquaintanceship with neighbours [Spearman’s  $\rho=.56$ ,  $P_i.001$ ], perceived quality of relations with neighbours [ $\rho=.4$ ,  $P_i.001$ ], frequency of interaction with neighbours [ $\rho=.5$ ,  $P_i.001$ ]. This would corroborate the idea that

investing on the sense of belonging at micro-scale could impact also the meso-scale sense of community.

In the text of the questionnaire we briefly described the idea of a convivial tool that could support both social practices and communication in their condos and enumerated a number of functionalities, and tasks that could be supported by such a tool. In light of this description, the sample of respondents did not show a clear positive (nor negative) attitude towards such a tool. This can mean that the sample did not really have any strong feeling about the idea; however we cannot rule out that we failed to explain what this tool would be about in the questionnaire text effectively.

We detected a light to moderate positive correlation between the attitude towards this kind of convivial tool and some other sociometric variables: the higher this attitude is, also the higher the sense of belonging to either the condo or the neighbourhood ( $\rho=.3$ ,  $P<.001$ ), the wish to have a better relationship with neighbours ( $r=.44$ ,  $P<.001$ ), and to do something of concrete to improve the quality of life in the neighbourhood ( $r=.4$ ,  $P<.001$ ). The more important people deemed it to share information about how the condo was administered, the higher the attitude for a tool that would allow this [ $\rho=.21$ ,  $P=.001$ ].

In regard to the facilitating factors that emerged more clearly from the analysis, we detected that age was important [ $H(2) = 9.274$ ;  $P=.010$ ] (the younger the respondents, the higher their attitude), as well as having already an account on any SNS [ $U(227)= 3454$ ;  $P<.001$ ]: SNS users showed to appreciate the idea more than the other subgroups of respondents.

In regard to our task of prioritization of the functionalities that users would like to find in such systems, we can distinguish two segments: notably practice-oriented features were considered of higher priority than those communication oriented: the capability to organize collective events and be reminded of community deadlines (collective calendar), to be supported in the management of “ethical purchasing groups” (Gruppi di Acquisto Solidale, or GAS in Italian), to manage loans and used stuff exchanges, and to collect opinions and ideas from the grassroots. Conversely, having a personal page (account profile), being able to look for people with similar interests, and to discuss with other members on topics decoupled from practices (Forum) were all considered characteristics of lower importance (the difference between priority levels was statistically significant).

## The research agenda

The Italian context presents the opportunity to run interesting comparisons between alternative approaches to support communities of place in the urban context: there is a vertical social network, called Condomani<sup>2</sup> that counts

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<sup>2</sup> [www.condomani.it](http://www.condomani.it)

approximately 5000 registered users all over the National territory and aims to improve communication and the task of managing a condo with specific functionalities oriented to the administrator(s) and the involved suppliers and maintenance technicians, quite similarly to other platforms active in other countries, like iNeighbors<sup>3</sup> Hampton and Wellman (2003) and Nextdoor<sup>4</sup> in Canada and US Masden et al. (2014), and Peuplade<sup>5</sup> in France.

There is also an initiative called “social street”<sup>6</sup>, that has recently gained great attention from the mass media. This is a network of people that spread a set of guidelines to create a condo- or street-related private groups on Facebook<sup>7</sup> and use such a virtual place to organize community initiatives and socialize. There are also much smaller and condospecific initiatives from private citizens, who have created blogs or Web sites to create and maintain a very local community (e.g. PaoloSarpi<sup>8</sup>, Pesciolino<sup>9</sup>, Scarsellini<sup>10</sup>, this latter involved in a user study that has been recently reported in Cho and Rogel (2013).

Therefore, our future work will regard a qualitative research program that will encompass individual interviews, Focus Groups and questionnaires, in order to collect evidence of any significant difference between these different experiences: namely vertical corporatemanaged SNS, the vertical use of generalist SNSs (like Facebook), and self-managed adhoc social media (which is probably closer to our ideal of convivial tool). Another objective, which is more ambitious but also more original, will regard the study of a phenomenon that we conjecture about but never really observed in “vivo”: the longitudinal evolution (we adopt the more neutral term of “epimorphism”) of a group of people that, from being a mere “community of place”, progressively exhibits the characteristics of tighter kinds of communities, like the communities of interest and of practice.

## References

- Antoci, A., F. Sabatini, and M. Sodini (2013): ‘Economic Growth, Technological Progress and Social Capital: The Inverted U Hypothesis: Economic Growth, Technological Progress and Social Capital’. *Metroeconomica*, vol. 64, no. 3, pp. 401–431.
- Antoniadis, P. and I. Apostol (2013): ‘The Neighbourhood Game: from behavioural economics to urban planning’. In: 1st International Conference on Internet Science, Brussels, Belgium.

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<sup>3</sup> [www.i-neighbors.org](http://www.i-neighbors.org)

<sup>4</sup> [nextdoor.com](http://nextdoor.com)

<sup>5</sup> [www.peuplade.fr](http://www.peuplade.fr)

<sup>6</sup> [www.socialstreet.it](http://www.socialstreet.it)

<sup>7</sup> [www.facebook.com/about/groups](http://www.facebook.com/about/groups)

<sup>8</sup> [paolosarpi10.wordpress.com](http://paolosarpi10.wordpress.com)

<sup>9</sup> [pesciolino.wordpress.com](http://pesciolino.wordpress.com)

<sup>10</sup> <http://housinglab.wordpress.com/progetti/scarsellini-vicini-piu-vicini/>



- Carr, N. G. (2011): *The shallows: what the Internet is doing to our brains*. New York: W.W. Norton.
- Carroll, J. M. (2012): *The Neighborhood in the Internet: design research projects in community informatics*, No. 59 in *Routledge advances in sociology*. London ; New York: Routledge.
- Cho, E. J. and L. Rogel (2013): 'Urban social sustainability through the Web. Using ICTs to build a community for prospective neighbors.' In: *ICT4S 2013: Proceedings of the First International Conference on Information and Communication Technologies for Sustainability*, ETH Zurich, February 14-16, 2013.
- Chou, H.-T. G. and N. Edge (2012): 'They are happier and having better lives than I am: the impact of using Facebook on perceptions of others' lives'. *Cyberpsychology, Behavior, and Social Networking*, vol. 15, no. 2, pp. 117-121.
- Fischer, G. (2009): 'End-User Development and Meta-design: Foundations for Cultures of Participation'. In: *End-User Development*. p. 314.
- Foth, M. (2003): 'Connectivity does not ensure community: On social capital, Networks and Communities of Place.'. In: S. Marshall and W. Tayler (eds.): *Proceedings of the 5<sup>th</sup> International Information Technology in Regional Areas Conference*. pp. 31–39, Central Queensland University Press.
- Hampton, K. and B. Wellman (2003): 'Neighboring in Netville: How the Internet Supports Community and Social Capital in a Wired Suburb'. *City and Community*, vol. 2, no. 4, pp. 277-311.
- Illich, I. (1973): *Tools for conviviality*. New York, NY, USA: Harper n& Row.
- Krasnova, H., H. Wenninger, T. Widjaja, and P. Buxmann (2013): 'Envy on Facebook: A Hidden Threat to Users' Life Satisfaction?'. In: *Wirtschaftsinformatik*. p. 92.
- Kraut, R., M. Patterson, V. Lundmark, S. Kiesler, T. Mukopadhyay, and W. Scherlis (1998): 'Internet paradox. A social technology that reduces social involvement and psychological well-being?'. *The American psychologist*, vol. 53, no. 9, pp. 1017–1031. PMID: 9841579.
- Kross, E., P. Verduyn, E. Demiralp, J. Park, D. S. Lee, N. Lin, H. Shablack, J. Jonides, and O. Ybarra (2013): 'Facebook Use Predicts Declines in Subjective Well-Being in Young Adults'. *PLoS ONE*, vol. 8, no. 8, pp. e69841.
- Lee, J. and H. Lee (2010): 'The computer-mediated communication network: exploring the linkage between the online community and social capital'. *New Media & Society*, vol. 12, no. 5, pp. 711–727.
- Marturano, A. (2011): 'The Ethics of Online Social Networks An Introduction'. *International Review of Information Ethics*, vol. 16, pp. 35.
- Masden, C., C. Grevet, R. Grinter, E. Gilbert, and W. K. Edwards (2014): 'Tensions in Scaling-up Community Social Media: A Multi-Neighborhood Study of Nextdoor'. In: *Proceedings of CHI 2014, April 26 - May 01 2014, Toronto, ON, Canada*. ACM Press.
- McChesney, R. W. (2013): *Digital disconnect: how capitalism is turning the Internet against democracy*.
- Muise, A., E. Christofides, and S. Desmarais (2009): 'More Information than You Ever Wanted: Does Facebook Bring Out the Green-Eyed Monster of Jealousy?'. *CyberPsychology & Behavior*, vol. 12, no. 4, pp. 441–444.
- Nowicka, M. and S. Vertovec (2013): 'Introduction. Comparing convivialities: Dreams and realities of living-with-difference'. *European Journal of Cultural Studies*.
- Peattie, L. (1998): 'Convivial cities'. *Cities and Citizens: Planning and the Rise of Civil Society in a Global Age*, pp. 247–253.

- Putnam, D. R. (2001): *Bowling alone: the collapse and revival of American community*. London: Simon & Schuster.
- Stern, M. J. (2008): 'How locality, frequency of communication and internet usage affect modes of communication within core social networks'. *Information, Communication & Society*, vol. 11, no. 5, pp. 591–616.
- Wellman, B., A. Q. Haase, J. Witte, and K. Hampton (2001): 'Does the Internet increase, decrease, or supplement social capital? Social networks, participation, and community commitment'. *American behavioral scientist*, vol. 45, no. 3, pp. 436-455.