# 5. COMMUNITIES BEYOND ‘COMMUNITY’

While the previous chapter has investigated the semantic profiling of ‘online community’, this chapter aims to analyse how communities are implicitly enacted through the data sets of submissions to Ars Electronica’s Digital Communities competition. Drawing on an anti-essentialist, performative approach[[1]](#footnote-1), it focuses on the way communities are said to exist by spokespersons to a major international competition.[[2]](#footnote-2) Such an approach allows bypassing 1990s’ discussions about what should be considered a ‘proper’ online community, and focusing instead on techno-social assemblages that are acknowledged as occurrences of digital communities by virtue of being presented to and admitted by one such competition.

To do so, the chapter retains a relational definition of digital communities, and identifies the relevant topics in the data set. As seen in chapter 4, the chosen software defines as ‘relevant’ those concepts which are not only more frequent, but also more often co-occurring in a cluster of other frequent words. In Leximancer a word is said to be ‘part of’ a concept if it often co-occurs with it and occurs not so often with other concepts (i.e., the relevancy standard deviation value is above a set threshold). This inclusion is achieved through ‘learning’, an iterative process in which the collection of terms defining a concept is updated, so that initially central terms can reach a peripheral position or even be lost when relevancy is normalised after a certain number of iterations. The aim of concept learning is to discover clusters of words which, when taken together as a concept, maximise the relevancy values of all the other words in the document.

Despite machine learning, the method followed in this research left the researcher much more room than using software automation would suggest. On one hand, the specific software techniques used were selected by attentively setting the software.[[3]](#footnote-3) Very different results were obtained by changing only a few settings. For example, the analysis discussed in the previous chapter established ‘online community’ as seeding word, and results were considerably different from those discussed in this chapter, which were obtained by not setting any seeding word.

On the other hand, software-extracted concepts constituted only the starting point of the analysis. It was only by qualitatively comparing the relative strengths of concepts co-occurring with the most relevant ones that I came to identify full-blown topics and narratives. Actually, the effort to move from mined concepts to full-blown topics informs this whole chapter.

Figure 4 shows the conceptual map extracted from the data set without any word seeding function.[[4]](#footnote-4) The map’s most remarkable characteristic is its stability: at every resetting, concepts aggregated in stable clusters. Differently from the conceptual map in the previous chapter, in which loose concepts were reshuffled at every resetting, here it was possible to identify recurrent and stabilized concept clusters.

Figure04

Figure 4 – Conceptual map without word seeding. Bird’s eye

Concepts are clustered in thematic circles that form around the most connected ones: *information, (web)site, social, art, work, software, radio, research, technology, system* and *rural*. Here some technology-related concepts are crucial, that were absent when ‘online community’ was seeded as key concept (see previous chapter). For example, it is significant[[5]](#footnote-5) that – when ‘online community’ was taken as a key concept – technological objects were conceived only as ‘tools’[[6]](#footnote-6). Differently, in the unseeded analysis they are specified as ‘technology’, ‘software’, ‘website’. In other words, while in discourses on online communities (i.e., the seeded analysis) the role of technology is black-boxed as mere tool, outside that discourse there seems to be more room for artefacts to be unpacked. It is only when the rhetoric about online communities is dropped, that artefacts can appear in their role as mediators keeping human relations going.

Conversely, if we consider the concepts related to ‘online community’ in the seeded analysis, some of them are not present in the unseeded one. For example, in the concept list in Table 9 there is no reference to ‘individuals’ as agents of change, nor to the classical dichotomy between ‘physical’ and virtual realms. As we have seen in chapter 1, individualism and a sharp separation between the brick-and-mortar world and cyberspace were among the elements that digital communitarians inherited from early cyberculture. Indeed, these two concepts appear in the data set only when online community is taken as a seed, and not in the unseeded semantic profiling. It could thus be suggested that networked individualism and the physical/virtual separation are part of the discourse *on* digital communities, but they are not part of current practices *of* online assemblages.

## 5.1 From Concepts to Full-blown Topics

Figure 4 shows ‘relevant’ concepts, that is, frequent words that co-occur more often with some other words, and less often with other ones. In that map, broader themes form around a highly connected concept, from which they borrow the label, and aggregate less connected ones. For instance, the theme *Art* borrows the label from the highly connected concept ‘art’ and aggregates the concepts ‘media’ and ‘music’, as well. The relationship between the main concept/theme and the aggregated concepts is based on contextual similarity: they appear in similar contexts in the data set. However, to what extent do these themes develop into full-blown topics? How can narratives be identified from a list of co-occurring concepts? How can we account for the theories of actions involving artefacts that underpin techno-social online collaboration, that is, this book’s main empirical question?

In order to address these requests, different methods than map visualization are needed. Co-occurrence patterns were thus systematically browsed, and corresponding textual excerpts thoroughly analysed in order to identify full-blown concepts and narratives. In so doing, I did not only consider the co-occurrences recurring inside thematic clusters, but opened up the analysis to the whole co-occurrence lists of highly relevant concepts. In this way, I tried to give reasons for those concepts being included in the more fragmented clusters, as well.

As an example of this method, the theme *Rural* aggregated the concepts‘rural’, ‘health’, and ‘learned’. These concepts were strongly related: ‘rural’ occurred very often with ‘learned’ and quite often with ‘health’, while ‘health’ and ‘rural’ were the concepts with which ‘learned’ most frequently co-occurred. The co-occurrence pattern between ‘rural’ and ‘learned’ singled out textual excerpts that could be browsed. Through browsing, a recurring narrative could be identified: that of information technologies conceived of as benefiting the quality of life of rural populations by allowing access to informal education. The rise of social networks was thus deemed the unmediated consequence of the possibility to access ICT. Conversely, lack of IT-mediated knowledge caused severe impairments:

The farmers of the riverside remotest areas [of Bangladesh] do not have any access to the information society; consequently the conditions of 7,000 rivers and streams of the country are degrading day by day with negative impact on the overall health of the aquatic system, human health, biodiversity, rural economy, rural life etc. […] Due to the knowledge gap of the farmers on proper use of fertilizer and pesticide the usages went up a hundred times over the last thirty years, but with the education of the Mobile Units, thousands of farmers were trained on proper use of fertilizer and pesticides, agricultural productivity is increased and thousands of landless farmers did not have to leave their villages in search of work. […] Technology contributes to the democratization of information and offers assistance to the underprivileged people of the remotest areas. This project has helped the people who had no right to be accessed to the information society. The rural people now can discuss their points of views and express their opinions. With the mobile unit activity their voices are disseminated in the distant areas and to other farming groups, and in this way they are able to think and decide the alternative ways for their local problems. Now they can look at the whole world, establish their relationships with it and, in this way they are building up a vision of development. [[7]](#footnote-7)

This narrative corresponds to one of the topics identified in chapter 4: ‘rural development through education’. Although this kind of narratives was quite recurrent, in our data set it followed a decreasing temporal trend. While several applications dealt with it in 2004, from that year onwards it became less and less popular, as figure 5 shows.

Figure05

Figure 5 – Temporal trend for ‘rural’

In summary, the qualitative analysis conducted for all themes (figure 4) shows that not all of them correspond to full-blown topics. Some of them (i.e., *Site, Social, Research, System*) turned out to be aggregates of concepts whose closeness in the map did not reveal any recognizable narrative. Conversely, some others showed meaningful associations and deserved further investigation. Notably, *Art, Information, Work, Software'* aggregated elements that co-occured with a certain regularity and suggested the following topics:

* free and open software
* local development and information
* cultural work
* media art

## 5.2 Social Software as Mediator or Intermediary

As with ‘work’ (see below), ‘software’ was a key concept over the four years of competition being analyzed, with only a light decrease in frequency in 2006 (figure 6). The theme *Software* aggregated the concepts ‘software’, ‘video’, ‘open’, ‘free’, ‘collaboration’. Also ‘collaboration’ – not a frequent concept in itself – was part of this theme. Notably, a very strong co-occurrence pattern between ‘software’, ‘free’ and ‘open’ was recognizable.

Figure06

Figure 6 – Temporal trend for ‘software’

‘Software’ was strongly related with ‘free’ (they co-occurred 11% of times in which ‘software’ appears) and ‘open’ (10,8%), while the strength of co-occurrence with ‘social’ was considerably lower (3,7%). Similarly, while ‘open’, ‘free’, and ‘software’ appeared in similar conceptual contexts in the map, ‘social’ and ‘software’ did not (see figure 7).

Figure07

Figure 7 – Co-occurrence between ‘software’ and ‘free’/’open’/’social’

This evidence leads to register a predominance in the data set of the FLOSS and hacker discourse over the Web 2.0 one, one of whose key expressions is precisely ‘social software’. Further evidence is provided by Leximancer’s entity vocabulary list: among the top thirty most frequent words appearing in sentences containing ‘software’, ‘social’ appeared 222 times, while ‘open’ 422 times and ‘free’ 420 times.

Textual excerpts browsing confirmed this insight and added further elements. On one hand, in all cases where ‘software’ occurred with ‘free’ and/or ‘open’, these terms were used to describe FLOSS initiatives participating in the competition: from *FSF-GNU* and *Linux* to *dyne.org* and epigones. On the other hand, less homogeneous narratives were identified by the co-occurrence of ‘software’ and ‘social’. This lack of homogeneity is thus worth further analysis.

In the data set, three different meanings of ‘social software’ were distinguishable. First, software design was seen as constituting a moment for ‘social inquiry’. As software design usually relies on knowledge of prior software, by definition software development is a collaborative process, and software is the artefact that crystallizes such social process.[[8]](#footnote-8) See for an example the *Spring-alpha* project:

Thematically, "spring-alpha" is an exploration of the relationship between software and social systems, focusing, in particular, on how issues in their design and implementation mirror one another. This is being realised practically, by taking the development of a game simulation world and exploring how the different issues involved in its design can form a process of social enquiry. […] [The game] depicts a story in which the occupants of an industrial housing project attempt to establish their own autonomous society. The narrative acts as a kind of parable paralleling the themes and practice of the project. It will serve as a "conceptual kernel" which will be extended through collaborative public workshops. The content of the game is therefore also developed through a form of "Open Source" method. Many of the issues involved in designing such a game mirror those involved in constructing real-world social systems. In this way the development process will act as a form of critical social enquiry exposing the relationships of software and social systems. Objectives: To demonstrate the potential of software design as a process of social enquiry. To extend the collaborative, social principles of FOSS beyond programming into broader forms of participation and creative practice. To foreground the development of software as a fundamentally social process.[[9]](#footnote-9)

A second, different understanding of social software was laid down by the *[meme.garden]* project. In this case, social software was conceived of as a peculiar kind of software that emphasizes the human dimension of networking. Here, ‘social’ was synonymous of ‘human’, as opposed to ‘cold’ computer systems:

[meme.garden] functions as social software which explores an individual's interests (whether these interests be news topics, political phenomena, health, hobbies, etc) among a social group. The software emphasizes the human element inherent in networked tools. Artwork created with computerized systems often feels cold and impersonal to audiences. The [meme.garden] software blends social software, search tool, and aesthetic system to visualize participant's interests in prevalent streams of information, encouraging browsing and interaction between users in real time, through time. Our goal is to make a social software search engine tools that embody human themes.[[10]](#footnote-10)

A similar narrative was present in the *Barnraiser* submission. For this project, social software focuses more on the ‘social conventions’ than on ‘software features’. It ‘directly’ benefits society by allowing people to interact and share knowledge. While providing hardware is not sufficient to assure development, having access to *social* software and knowing how to use it facilitates the development of society:

We are a growing movement of people that want to contribute directly to a better society by pushing forward the boundaries of social software development and education. Social software is developed from social convention rather than software features. Social software facilitates interaction and collaboration and is changing how people communicate. Installing computers and supplying Internet connection is not enough when building capacity within society. We need software, software that allows that society to develop, allows the people within that society to share knowledge and contribute towards their information society. We facilitate this by creating free social software and ensuring that people can have access to it and the knowledge to use it.[[11]](#footnote-11)

A third narrative associated with social software was provided for example by *World-Information.org*. Here, the Web 2.0 rhetoric was explicit. Indeed, social software’s peculiarity was seen in allowing the convergence between sender and receiver, passive user, and content contributor:

the [social software] content management system had to be specifically adaptable to support the different workflow models simultaneously because not only internal editors but also external parties such as institutions or single individuals must be enabled to join the editorial team. Also the very heterogeneous skill levels of the prospect users had to be kept in mind. Editors all over the world had to be given access to the system over the internet. The user interface had to give support during the research process as well during content entry.[[12]](#footnote-12)

In summary, by following co-occurrence patterns for ‘software’, diverse narratives emerged, which can be compared to the communitarian rhetorics discussed in chapters 1 and 2. The most frequent narrative recalls hacker culture’s focus on free and/or open software, as described in chapter 1. This discourse is dominant over less represented understandings of ‘social software’. Social software can either refer to a type of ‘human’ substance opposed to machinic reasoning, or to a collaborative process of social inquiry. Additionally, the social networking narrative proper to the Web 2.0 rhetoric addressed in section 2.3 is a minor one.

The differences between these narratives allow introducing a key category of analysis, that will be crucial to the rest of the book. I suggest that we can read the difference among those narratives by recovering the distinction between *mediators* and *intermediaries*. While Human-Computer-Interaction (HCI) has usually focused on the ‘immediacy’ between input and output as a key concept for the evaluation of digital artefacts,[[13]](#footnote-13) sociology of technology has suggested the notion of ‘mediation’ to overcome that dichotomy.[[14]](#footnote-14) The two traditions entailed very different approaches towards agency. While for HCI agency pertains to a full-blown subject endowed with intentionality, sociology of technology questions the cognitive nature of intentionality, and sees agency emerging in interaction, distributed throughout an assemblage, a network of hybrid ‘actants’[[15]](#footnote-15). For this scholarship, agency is not embodied in a single actor, nor in a single ‘social cause’, rather, it is dislocated.

On closer inspection, one could notice that this extended definition of ‘action’ as ‘making someone do something’ resembles HCI’s notion of ‘affordance’ as an invitation to action that is embedded in the artefact.[[16]](#footnote-16) Nonetheless, a crucial difference between the two approaches should not be overlooked: while for the theories based on situated action affordances emerge *during* action, for cognitive ergonomics the subject and the object are constituted *before* the interaction.

One of the ways to account for this difference is the distinction between ‘mediation’ – a relationship that constitutes actors while taking place, from ‘intermediation’ – a relationship in which a tool just transports agency from one pre-existing point to another pre-existing point. While in intermediation the inputs are enough to define the outputs, mediation exceeds its inputs and cannot be reduced to a relationship of cause-and-effect.[[17]](#footnote-17) Putting it slightly differently, a mediator is an actant that translates, transforms, modifies the elements it is supposed to carry; a mediator is never a cause: it does not determine, but makes someone do something, it triggers further actions and activates new participants. Every time a mediator appears, it introduces a bifurcation in the course of action. Therefore, the chain of action becomes longer and the output is never predictable starting from the input. On the contrary, an intermediary only transports agency from an input to an output without transforming it; the output can therefore be easily predicted. With intermediaries, elements are usually linked through relationships of cause-and-effect and the chain transporting action is thus short, often made of only a couple of elements (i.e., the cause and the effect).

As to the social software cases above discussed, in the *[meme.garden]* and *Barnraiser* accounts, computer systems are supposed to be cold digital machines and social software acts as an intermediary that dilutes this coldness into the warmth of human interaction. Yet social software does not introduce elements that could interfere with the output, which is simply given by the encounter of the ‘digital’ with the ‘social’. It is thus conceived as an intermediary. On the other hand, in the *Spring-alpha* project the software and the social system get constituted *through* their interplay. The gaming software is a mediator because it transforms the subjects involved: the output (the ‘autonomous society’) cannot be predicted by the input (the ‘conceptual kernel’).

This distinction is going to play a major role in examining the theories of action which underpin online collaboration, and the role of artefacts as mediators keeping human relations going, once the online communities rhetoric is definitely dropped.

## 5.3 Different Technologies for Different Territories

As far as the theme *Information* is concerned, it aggregated the concepts ‘information’, ‘local’, ‘government’, ‘services’, ‘city’, ‘human’, ‘development’, ‘youth’, ‘including’, ‘map’, ‘life’, ‘members’, ‘created’. Among these concepts, ‘information’ co-occurred frequently with ‘local’, ‘government’, ‘development’; ‘government’ co-occurred frequently with ‘services’ and ‘development’; ‘local’ showed a strong co-occurrence with ‘information’ and ‘development’; ‘development’ and ‘members’ co-occured frequently with ‘local’ and ‘information’. As figure 8 shows, the concept ‘information’ was most relevant in the applications submitted in 2004, while it progressively decreased in importance in the following years.

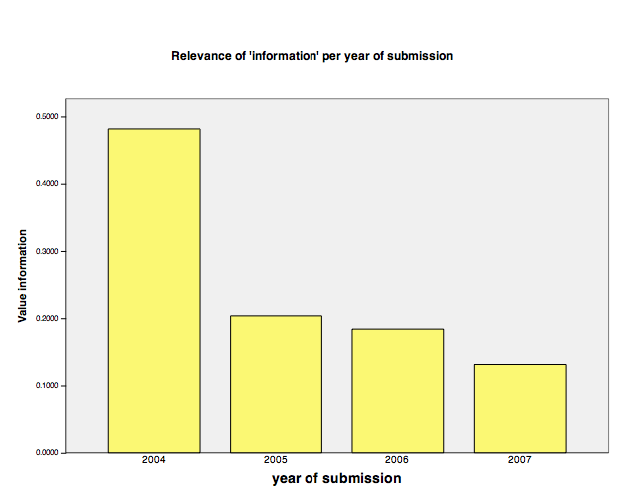


Figure 8 – Temporal trend for ‘information’

In counter-tendency with the dominant internet discourse on de-territorialization (see sections 1.1, 3.1), and confirming more recent studies on the territorialization of the Net (see section 2.2), ‘information’ registers the emergence of a territorial topic. In the co-occurrence list for ‘information’, among the five concepts most frequently co-occurring three displayed a semantic reference to a territorial dimension (‘local’, ‘government’, ‘rural’), while another one (‘site’) connoted both a physical and a virtual (website) portion of space (figure 9).

Figure09

Figure 9 – Co-occurrence map for ‘information’

The territorial topic was present also in the co-occurrence scheme for ‘development’, the fifth item in the list. The strongest item co-occurring with ‘development’ was ‘local’, followed by ‘information’, ‘site’, ‘software’, and ‘technology’.

In most of these cases, a recurring narrative emerged, according to which information technologies are seen as empowering means for local, rural, disadvantaged communities:

Namma Dhwani (Our VOICES in the Kannada language) is an initiative which has created a space for different rural social groups to utilize a combination of cable audio & digital technologies to put in place a local information and communication network owned and operated by members of the local community. […] Namma Dhwani uses a unique model developed to suit local needs and circumstances. It not only combines cable audio with new digital media, but also combines these media tools with a network of local community groups, specifically poor women’s self-help groups (SHGs), watershed groups made up of local farmers, and a local development resource centre. Namma Dhwani has enabled poor semi-literate, women, farmers, labourers, school drop-outs and other community members to use information & communication media & technologies to create: 1) Their own channels of information access, storage and dissemination 2) Their own platforms for communication and discussion […] The network successfully addresses local information needs and has had a visible impact on local development and governance.[[18]](#footnote-18)

Rural space was however not the only model of territoriality dealt with in the data set. A distinct relationship between territory and ICT involved urban spaces. Indeed, ‘city’ showed an absolutely peculiar semantic context aggregating around the urban territory, and a specific ‘metropolitan’ use of information technologies. While ‘city’ did never occur with any of the other territorial concepts (i.e., ‘rural’, ‘site’ or ‘government’, except ‘local’), it showed a strong co-occurrence with ‘mobile’ and ‘map’.

Figure10

Figure 10 – Co-occurrence map for ‘city’

Analysing the textual instances, they all dealt with geo-referenced mobile systems allowing the creation of unconventional maps of the urban space, and the bottom-up regeneration of a sense of place. Similar projects were usually subsumed under the umbrella term ‘locative media’. Here is an example:

Citypoems turns mobile phones in Leeds into widely distributed creative writing and publishing tools (70% of teenagers and adults in the UK own a mobile phone). Everyone in Leeds can read and write a Citypoem, experiencing and contributing to an enriched sense of their own place from wherever, and whenever, they are in the city. The Citypoems biography is made new by every reader, turning the pages in the order of their own daily lives as they move through the city, and transforming mobile phones into books with an infinite number of blank pages waiting to be filled.[[19]](#footnote-19)

Summing up, different roles for information technologies were associated to different types of local territory. The qualitative analysis uncovered a first discourse in which ICT were depicted as empowering tools (i.e., intermediaries) fostering the development of disadvantaged, rural areas, in partnership with local governments, by sharing information accessible through websites. The second narrative conceives of information technologies as mobile and urban. They are seen as representational means that allow the creation of subjective maps of the urban space, of collectively generated psycho-geographies. With these different narratives, in our data set the mythological local community we discussed in chapter 1 hits the ground in two rather different forms, each of which attributes a different role to digital information technologies.

## 5.4 Knowledge Labour Between Sustainability and Gift Economy

‘Work’ is the third most frequent concept in the whole data set. It is also the second most central concept after ‘art’, meaning that – besides being frequent – it also often appears in contexts where other relevant concepts are present. Furthermore, despite a decrease in 2005, the concept ‘work’ remained frequent over the four years of the Digital Communities competition (Figure 11).

Figure 11 – Temporal trend for ‘work’

The thematic circle *Work* includes the concepts ‘work’, ‘cultural’, ‘international’, ‘network’, ‘text’ (Figure 12). ‘Work’ more often occurs with ‘art’, ‘media’, ‘software’, ‘open’, ‘online’, ‘video’. Notably, there is a strong co-occurrence between ‘work’ and ‘cultural’. ‘Cultural’ and ‘work’ are also very close in the map, meaning that they appear in similar conceptual contexts. All in all, these co-occurrence paths show a dominant narrative about knowledge labour, testifying the reproduction of the creative class narrative well after the dotcom burst (see section 2.1).

Figure12

Figure 12 – Co-occurrence map for ‘work’

However, that narrative survives in more articulated ways. When it comes to the models of remuneration of cognitive labour, two different meanings of ‘work’ emerge. The first deals with work as an economic activity, while the second one conceives of work as a voluntary act oriented to the production of common goods.

On one hand, ‘work’ appears quite frequently in the section dedicated to the planned use of the possible prize money (indicated by the recurring word ‘money’). This testifies the intention to allocate some resources towards the sustainability of cognitive work and to go beyond the equation ‘immaterial work’ = ‘amateur, unpaid labour’ fostered by the Web 2.0 hype (see section 2.3). A proposal that addresses sustainability without abdicating to free knowledge is, for example, advanced by the *SerendiPd* project:

There are many people who dedicate substantial time and resources to making Pd better. We would like to enable such people to earn a living while working on Pd, while keeping it free. There are a number of methods of raising money for free software projects, including: project donations, selling support like RedHat does, and bounty systems like those used by GNOME. […] the GNOME bounty system (http://www.gnome.org/bounties/) makes the most sense for the Pd community. One project that we would like to take on with the prize money would be to build a bounty board for Pd, where both user- and developed-initiated tasks could be posted. For user-initiated tasks, money collection via donations would continue until someone proved that the task had been completed; this individual would then receive the total collected sum for the work completed. For developer-initiated tasks, developers would include their minimum fee for execution. Pd users would give money to whichever tasks they deemed worthy; when a bounty is reached the developer would then work to complete the task, receiving payment upon completion.[[20]](#footnote-20)

On the other hand, ‘work’ co-occurs very frequently with ‘open’ (see Figure 13). When browsing through the textual instances, it appears clear that ‘open’ is used in all the contexts wherein it co-occurs with ‘work’ as synonymous with ‘free’. All these instances deal with the exaltation of volunteer cognitive work whose efforts allow the creation and distribution of immaterial commons. Volunteer workers are conceived of as community-engaged individuals contributing to the free/open knowledge:

Ubuntu is a community developed, commercially supported Linux distribution with an emphasis on software freedom and making computers as easy and accessible for everyone. […] Ubuntu has access to thousands of additional tools and applications, and a huge community who provide support and assistance to Ubuntu users. Ubuntu is commercially supported by Canonical Ltd, but a worldwide network of enthusiastic volunteers work together on all aspects of the system, providing a solid community orientated distribution.[[21]](#footnote-21)

Figure13

Figure 13 – Co-occurrence list for ‘work’

All in all, in the data set the topic of labour is still wavering between the need for economic models that can assure an adequate remuneration to cognitive work and the push towards the creation and distribution of open and free commons. However, even when acknowledging these contrasting narratives about ‘work’, a significant trend must be noticed. The entries where ‘work’ and ‘open’ co-occur were submitted mainly in 2004 (76% of cases), while the entries where ‘work’ and ‘money’ co-occur were submitted largely between 2006 and 2007 (60% of cases). This is sufficient evidence of a change in the runderstanding of work, from volunteer to paid activity, and a detachment from the rhetoric of user-based unpaid work that we have discussed in chapter 2.

## 5.5 ‘Public Media Art’ as Politics

The last relevant topic emerging from the data set could be defined as ‘public media art’. The theme *Art* aggregated the concepts ‘art’, ‘media’, ‘music’, that is, they co-occured in similar contexts. ‘Media’ and ‘art’ co-occured often together, especially in the expression ‘media art’. ‘Art’ and ‘music’ showed a lower co-occurrence index. ‘Media’ and ‘music’ never occured together. Looking at the temporal trend for the concept ‘art’, we can see that in 2005 and 2006 the applications dealt less with ‘art’ than in 2004 and 2007, relatively to the total amount of submissions from each year (Figure 14).[[22]](#footnote-22)

Figure14

Figure 14 – Temporal trend for ‘art’

A similar trend was shown by the concept ‘media’: after a strong frequency in 2004, it decreased until 2007, when it re-gained importance (Figure 15).

Figure15

Figure 15 – Temporal trend for ‘media’

Among the ten concepts most-frequently occurring with ‘art’, three were related to the type of medium (‘media’ in general, ‘online’, ‘digital’), three were attributes of art itself (‘international’, ‘open’, ‘public’), other three were part of frequent expressions (‘cultural’, art-‘work’, art-‘world’) (Figure 16). The last one, ‘space’, was alternatively included into expressions like ‘public space’, ‘open space’, and ‘space of art’.

Figure16

Figure 16 – Co-occurrence map and concept list for ‘art’

Browsing through textual excerpts in more depth, three coherent narratives emerged when ‘art’ co-occured with ‘public’ and ‘open’. The first conceived of art as public because it uses public space as a creative medium, as the space of exhibition. This was the case of projects like *Glowlab* – whose work on psycho-geography dealt specifically with urban spaces, and *52weeks52works* – whose artworks were deployed in public spaces worldwide.

The second narrative stressed the relationship between art and political engagement in social movements. In the *REPUBLICart* project, for instance, ‘public art’ was seen as retaining an organizational, theoretical and political role:

the art of res publica is about experimental forms of organizing, which develop in precarious micro-situations for a limited period of time, testing new modes of selforganization and interplays with other experiments. The "organizing function" of art (Walter Benjamin) creates new spaces in the overlapping zones of art practices, political activism and theory production. […] Joining the heterogeneous activities against economic globalization, the old forms of intervention art are being transformed and new ones are emerging. In the context of current political movements, art is becoming public again.[[23]](#footnote-23)

The third narrative related to open/public art focused on a process-oriented aesthetic. Here, ‘open art’ is about collaborative creation eluding copyright regimes:

The whole basis for the experience is ‘intellectual generosity’, the creation and supporting of an open environment for people to work on a project without being tied to any kind of restrictions of production created by the copyright. […] Our goal is develop open art, produced in a collaborative way, within workgroups spread all over the world. [[24]](#footnote-24)

Open art requires distributed learning and authorship. It is the response to the privatization of the Web and to the closure of the source code adopted by digital artists which followed the commodification of net-art:

a number of prominent artists have been experimenting with models for selling digital art, and dealers who smell money are scrambling to help artists package work into closed, exclusive forms. While there's nothing wrong in principle with making money off art, in practice this pressure has led some artists to move toward formats where code is hidden from view and where access is controlled by private collectors or gated communities.[[25]](#footnote-25)

According to this narrative, while the blackboxing of code was to lead to the ‘elitarization’ of digital media and the exclusion of the many from such practices, the establishment of ethical procedures and the promotion of open standards initiated by the community of online artists was to empower individual artists:

the opportunity to create open yet enduring standards--and most important, a community ethic--offers creative individuals a chance to take control of their destiny and help shape the culture that nourishes them. The Open Art Network aims to empower artists working in digital formats by devising and promoting standards that encourage an open architecture for the Internet and digital media.[[26]](#footnote-26)

In such accounts, empowerment proceeds from the opportunity for single artists not only to consume each other's works, but especially to mutually learn from each other's creative process. This possibility is designed in specific type of artefacts: access to mutual learning is assured by open standards and procedures. If we assume a definition of ‘the political’ as both the procedures that allow the assembly to gather as well as the matter of concern that has to be discussed in the assembly, in this third meaning ‘open art’ is eminently political, since it aims at setting the standards whereby an assembly may constitute.[[27]](#footnote-27)

In summary, in the Digital Communities data set, art retains major relevance, albeit declining. Evidence confirms that the aesthetic interest that constituted one of the major thrusts for digital communitarianisms in the 1990s (see section 1.3) maintained its relevance for online sociability until 2007. Art has also kept an explicit political function as an opportunity for the empowerment of individuals through mutual learning. As such, it continues the tradition of individualistic empowerment á la Rheingold, while combining the decentralizing, self-organized efforts which characterized the 1990s’ net art and mediactivism cultures.

At this point of the book, we have successfully attempted the tricky task of identifying relevant topics and narratives in the data set without postulating actors and theories of action. This shows the validity of our initial intuition about not rushing to conclusions about the disappearance of online communities but to conduct empirical investigation about the conditions under which they can nowadays be re-conceptualized. Notably, when the early rhetoric about ‘online communities’ is dropped – i.e., when the concept is not ‘sown’ for analysis, narratives enlighten theories of action that account for peculiar roles of artefacts as mediators of human relations. In the next chapter we shall focus on some of these theories in more depth.

1. Given the steps ahead – and in parallel – in the performativity debate, during the revision for the 2018 edition the author has deemed appropriate to update the original manuscript with more recent, key references. [↑](#footnote-ref-1)
2. Note to the 2018 Edition. J. Butler, ‘Performative Agency’, *Journal of Cultural Economy* 3.2 (2010): 147-161; M. Callon, ‘Performativity, Misfires and Politics’, *Journal of Cultural Economy* 3.2 (2010): 163-169. [↑](#footnote-ref-2)
3. See Table 8 in Annex C. Key settings are emphasized in italics. [↑](#footnote-ref-3)
4. Resulting concepts are also listed in Table 9 – Annex C. [↑](#footnote-ref-4)
5. My aim is not to give an *explanation* of these results, but to *describe* the variations in the elements that constitute one or more aggregates. Indeed, this book’s approach is not about providing a further theory about why social actors act in a certain way, but about tracing the minute shifts in meaning left behind by activities of group formation. As a consequence, the definition of ‘significant’ as ‘having a particular meaning’ (Oxford Dictionary) is the most precise: meaning is given exactly by the shifts in the elements that move from one association into another one. [↑](#footnote-ref-5)
6. Actually, in the previous analysis in chapter 4 ‘tool’ was the only concept referring to technological artefacts. [↑](#footnote-ref-6)
7. Mobile Internet-Educational Unit on Boats submission, 2004. [↑](#footnote-ref-7)
8. This is the crucial insight of net.art, software art and hacker practices (see section 1.3). I wish to thank Tatiana Bazzichelli for the stimulating discussions about this issue. ANT provides a further access to this approach by going back to the semantic root of the word ‘thing’ as ‘assembly’: ‘long before designating an object thrown out of the political sphere and standing there objectively and independently, the *Ding* or Thing has for many centuries meant the issue that brings people together *because* it divides them. […] The *Ding* designates both those who assemble because they are concerned as well as what causes their concerns and divisions.’ Latour, ‘From Realpolitik to Dingpolitik’, p. 13, *italics in the text*). According to ANT, ‘social’ means ‘collective’ and things (also digital artefacts) are ‘social’ because they are ‘assemblies’, ‘gatherings’. [↑](#footnote-ref-8)
9. *Spring-alpha* submission, 2004. [↑](#footnote-ref-9)
10. *[meme.garden]* submission, 2007. [↑](#footnote-ref-10)
11. *Barnraiser* submission, 2005. [↑](#footnote-ref-11)
12. World-Information.org submission, 2006 [↑](#footnote-ref-12)
13. J. Nielsen, *Designing Web Usability*, Indianapolis: New Riders, 1999;

    D. A. Norman, *The Psychology of Everyday Things* New York: Basic Books, 1988; M. Visciola, *Usabilità dei siti web*, Milano: Apogeo, 2000. [↑](#footnote-ref-13)
14. M. Akrich, Des réseaux vidéocom aux réseaux électriques: machines, gestion, marchés, Paris: L’Harmattan, 1992; D. Haraway, Primate Visions: Gender, Race, and Nature in the World of Modern Science, New York: Routledge, 1989; L. A. Suchman, Plans and Situated Actions: The Problem of Human-Machine Communication, New York: Cambridge University Press, 1987. [↑](#footnote-ref-14)
15. Latour, *Reassembling the Social*. Latour uses the term ‘actant’ instead of ‘actor’ in order to gain higher pliability with respect to figuration. It might be said that an actant is an abstract agent endowed with a narrative function that on a discursive level gets embodied into an actor endowed with a figuration. Latour borrowed this distinction from semiotics, where it corresponds to the deployment of agency respectively on the narrative level (where we talk of ‘actants’) and on the discursive level (where ‘actors’ lie). Greimas and Courtés define an actant as ‘the one that performs or undergoes the act, regardless of any other determination. Thus, quoting L. Tesnière whose work this term is borrowed from, “actants are the beings or the things that – under whichever qualification and in whatsoever manner, even as simple bit players and in the most passive manner – take part in the process”. Under this perspective, the actant designates a type of syntactic unit, a peculiarly formal one, before any semantic and/or ideological investment’. See Greimas and Courtés, *Sémiotique,*, p. 40, *Author’s translation into English*. It is interesting to notice that, under this distinction, ‘loose networks’, ‘communities of practice’ and ‘groupware’ differ on a discursive, figurative level, while they might fulfil the same logical function in a course of action. [↑](#footnote-ref-15)
16. J. J. Gibson, The Ecological Approach to Visual Perception, London: Hillsdale, 1986; Norman, The Psychology of Everyday Things. [↑](#footnote-ref-16)
17. Latour, Reassembling the Social. [↑](#footnote-ref-17)
18. *Namma Dhwani* submission, 2004. [↑](#footnote-ref-18)
19. *Citypoems* submission, 2004. [↑](#footnote-ref-19)
20. *SerendiPd* submission, 2004. [↑](#footnote-ref-20)
21. *Ubuntu* submission, 2007. [↑](#footnote-ref-21)
22. The result for 2007 might be explained by the new interest the *Prix Ars Electronica* put on artistic projects in that year’s call. [↑](#footnote-ref-22)
23. *REPUBLICart* submission, 2004. [↑](#footnote-ref-23)
24. *Re:combo* submission, 2007. [↑](#footnote-ref-24)
25. *Open Art Network* submission, 2004. [↑](#footnote-ref-25)
26. *Open Art Network* submission, 2004. [↑](#footnote-ref-26)
27. Latour, ‘From Realpolitik to Dingpolitik’. [↑](#footnote-ref-27)