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# Aristea Fotopoulou and Nick Couldry Telling the story of the stories: online content curation and digital engagement

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#### AND DIGITAL ENGAGEMENT

#### **Abstract**

This article explores tensions between the imaginaries and material hindrances that accompany

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the development of digital infrastructures for narrative exchange and public engagement. Digital infrastructures allow civil society organisations to become narrators of their community lives, and to express solidarity and recognition. Often full development and implementation of such infrastructures result in drastic changes to an organization's mode of operation. Drawing from empirical material collected during an action research project with an organization of community reporters in the North of England, here we examine the visions of 'telling the story of the stories' that motivated such changes, the experiments in web analytics and content curation that in practice realised these visions, and the socioeconomic contexts that constrained them. We attend to the wider social imaginaries about the digital as they help us understand better how social actors construct the worlds they want to inhabit within information society through mundane everyday practices. By examining how perceptions of digital engagement translate into such concrete practices is necessary in order to gain insight into the ways in which material infrastructures, such as resources and technologies, intertwine with social and cultural expectations about how life should be with digital technologies.

KEYWORDS: content curation, digital infrastructure, web analytics, social imaginary, data literacy

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#### Introduction

Digital technologies present civil society organizations with new opportunities and challenges for public engagement and participatory politics. A wide range of digital media and strategic plans aimed to connect organizations with their audiences (website development, advanced social networking, off-the-shelf plugins and tools for web analytics, tailor-made platforms and various open access systems) compose the bigger picture of digital engagement. Undoubtedly, the implementation of such solutions benefits civil society organizations immensely as it helps them realize their critical objectives. There are however important variations that derive from media practices already established within an organization, and the social purposes these serve. Here we are interested in such qualitative variations and what constitutes successful incorporation of digital technologies. Instead of providing an instrumental analysis, we focus on the productive tension between imagining and materializing infrastructural change.

The expectations linked to the potential of digital technologies for social change are a mobilizing force for various social organisations. Taking into account how practical and material constrains often obstruct the realisation of this potential, and the seamless embedding of digital technologies into existing arrangements, in this article we present a detailed case study of Citizens Media (hereafter, 'C-Media'), a civil society organization of community reporters (hereafter, CRs) based in the North of England. We focus on the efforts of community media journalists to implement certain digital technologies in their everyday practices, and we analyze

the ways in which imaginaries and material limitations co-exist in the shaping of a digital infrastructure. Our analysis is situated within a wider project, *Storycircle<sup>i</sup>*, in which we focused on the social processes and digital resources that support narrative exchange (XXXXb, forthcoming). As Star and Ruhleder (1996) note in their work on systems development, although infrastructural technologies are often considered to be transparent tools, in fact they have a dual character. Following this work, we understand 'digital infrastructure' not simply as a set of technical tools; it is constituted within social arrangements and has the potential to contribute to broader civic culture (XXXXa, forthcoming). Our interest in the visions, imaginaries and stories, rather than just the technical capacity, allow us to approach the development of a digital infrastructure as a sociotechnical process, and to identify how existing social relations are being reconfigured in this process.

In what follows, first, we outline how we supported *C-Media* to meet its primary social aim of connecting communities of reporters and their stories by developing a redesign of the website and experiments on content curation and 'community tagging'. The development of a digital infrastructure was envisioned by the organization to enable a long term process: to give voice to shared concerns in the local area, and to sustain existing social bonds between particular communities. In the words of one manager at *C-Media*, this was a process of 'telling the story of the stories'. We describe how these visions facilitated our interventions of setting up the digital infrastructure. Third, we refer to how such visions were constrained by the socioeconomic contexts in which these actors operated, and by the timeframe available for development, at least within the ambit of our funded research process. In these three ways, we explore the interplay between material contexts of digital resource and broader imaginaries, and suggests that both

need to be considered as conditions for sustaining voice (XXXXc, 2010).

#### Key Concepts: Digital engagement and social imaginary

Today a common term for capturing organizations' use of digital resources, both governmental and non-governmental, is 'digital engagement'. For actors in the civic sector, this has been defined as 'any use of social media by a corporate organization, right through to more specific definitions around how public sector organizations promote participation in policymaking' (The Digital Engagement Guide, 2013). Governmental actors describe digital engagement as any form of civic engagement and political participation that involves digital technologies, such as online consultations (Government Digital Service, 2013). As noted elsewhere (XXXXd, forthcoming), digital engagement can be approached as a democratic aspiration, from within framings of participatory culture (Bruns, 2008; Schafer, 2011) but it also forms a significant aspect of projects for digital inclusion and digital literacy (see Helsper, 2008; Rheingold, 2008). The latter focus more on advancing the employability of citizens, rather than their capacity to participate in democratic processes at national and European level. Government and European Commission interventions which aim to enable web access and participation for minors and socially disadvantaged groups (age group 65-74, low income, unemployed, less educated, people with disabilities) largely see the development of digital infrastructure as a means to an end (see 2010 European wide directive Digital Agenda for Europe). Digital engagement is hence is seen to involve digital competences, such as 'learning, creating, participating and being confident and discerning in the use of digital media' (European Commission, 2010, p.25). However, quite independently of such legislative ambitions, civil society actors set up digital infrastructures and

to use digital media to meet their own community needs - which are in many cases different from employability or basic web access or other needs prescribed by directives. In the process, these actors make their *own working definitions* of 'digital engagement'. It is important to attend to these alternative definitions, and to how engagement and participation in the digital world are understood by particular social actors on the ground, and across a range of organizational and digital literacy levels because they give valuable insights to the ways in which the implementation of informational infrastructureactually works.

By examining how these perceptions of digital engagement further translate into material digital practices, we can understand how material infrastructures (resources, technologies) intertwine with social and cultural expectations about how life should be with digital technologies. We must attend to the 'social imaginaries' (Taylor, 2003) about the digital, since imaginaries are a key process in understanding how social actors construct the worlds they want to inhabit. In her recent analysis of how the communication systems that mediate our lives have evolved in the Internet Age, Robin Mansell (2012) employs Charles Taylor's concept to examine the notions, images and visions of those engaged with development on information society (p.6). 'Technoscientific imaginaries' (Marcus et al., 1995) is another term used to describe the collective visions of engineers and scientists. Alternatively 'sociotechnical imaginaries' account for 'imagined forms of social life and social order that centre on the development and fulfilment of innovative scientific and/or technological projects' (Jasanoff and Kim, 2006, p.1), and how these are mediated in policy and culture (see Haran et. al., 2011). In this article our primary interest is the collective practices, ideas and language of lay people, rather than those of engineers and scientists. Therefore the concepts of 'sociotechnical' and 'technoscientific'

imaginary are less useful to our analysis than that of the 'social imaginary'. We are also informed by Mansell's (2012) understanding of how social imaginaries of information are shared by large groups of people and emerge out of everyday interactions: it is through particular 'configurations' (Suchman, 2012) of digital resource that those broader imaginaries get materialized. As we explain next, *C-Media* re-imagined their role as a social enterprise through the redesign of a web platform and, in the process, began to develop a new shared sense of their own legitimacy as an organization.

In order to meet their social goals and foster a sense of belonging in a community of citizen journalists, C-Media sought inventive uses of information and communication technologies. Our interventions were targeted specifically at meeting these aims, taking into account however the organization's expressed preferences for experiments in online content curation, 'community tagging' and content rating. Wenger's (1998) conceptualization of 'communities of practice' helps us understand such experimentation. Communities of practice are 'practices of social communities and constructing identities in relation to these communities' (Wenger, 1998, p. 4). One could assume that when organizations adopt new technology this adoption will, with minimum disturbance, sustain the dynamics of an existing 'community of practice'. Experiments with digital infrastructures can be central for re-inforcing social bonds between members of a community, especially if we think of "communities of practice" as shared practices oriented towards common practical and imaginative goals, rather than just the pursuit of shared interests. Through active membership in *C-Media*'s community, CRs developed a common language which was used to describe the imaginary of a movement of community journalists operating across digital platforms. We understand this language, and the experiments and visions

that accommodated it, as a "shared repertoire of communal resources" (Wenger, 2000, p. 229).

By exploring the three distinct axes of this process - website redesign, metadata management, online content curation - alongside the broader hopes or resistances underpinning these processes, we unveil a rich reflexive process and not just an instrumental and technical one. We pay special attention to the agency of social actors and we account for the constraints and opportunities for voice and digital storytelling for social organizations with limited funding. A consideration of our active role as researchers in the *re-imagining* of internet technologies, allows an understanding of how an approach informed by critical humanities and cultural studies can enhance social science approaches to computer-mediated communication. While our fieldwork was with a small media organization, it offers, we hope, a model also useful for research with other, larger organizations.

#### Methodological background

During our fieldwork between April 2011 and March 2013, and for all four principal case studies in the *Storycircle* project, we were interested to explore the wider social processes and digital platforms that connect the narrative activity of institutional settings with broader networks of exchange. This approach was informed, both ethically and politically, by the principle of valuing narrative (Ricoeur, 1984) and narrative exchange (XXXXc, 2010), and their potential to generate mutual recognition (Honneth, 1996). Situated within scholarly work on digital storytelling (Hartley & McWilliam, 2009; Lambert, 2013; Lundby, 2008; Thumim' 2009), the notion of storycircle can take the form of physical spaces, such as workshops, but also digital spaces, where people produce narratives and 'give an account of themselves' (Butler, 2005; Cavarero,

2000). The complexity of digital resources demanded a collaborative approach with particular partners, and we therefore worked in a variety of institutional settings.

C-Media, a network of CRs well established in the British community media landscape, provided a good research context for our study. They described themselves as a not-for-profit community development organisation, whose aims were to: 'support people to have a voice, challenge perceptions and describe their own reality'; and 'encourage people to connect, share their experiences and successes with each other and so contribute to raising community and individual aspiration.' During our fieldwork, we worked with C-Media in order to identify the key challenges that CRs were faced up with for meeting their aims. The development of an efficient technical infrastructure (software, hardware, training, storage space) and continuously updates were perceived by C-Media to be essential preconditions for visibility to wider audiences, and more substantial, interactive engagement with the content produced by CRs. For us, embedding a digital infrastructure consistently within the social norms of an organisation was a precondition for cultivating spaces of mutual support, recognition and discussion.

Our methodological approach to collaborative action research (Fals-Borda and Rahman, 1991; Somekh, 2006) adopted a feedback loop that links the processes of planning, acting, observing and reflecting. Although in principle these happen in successive iterations, they are organic and intertwined (Foulger, 2010). This engaged approach allowed us to attend to both organizational and technical developments, and to move beyond the digital storytelling produced within face-to-face workshops. We were able to identify emergent practices and obstacles, as well as hopes and visions underpinning the development of a digital infrastructure.

A key part of our collaboration with C-Media was to follow the collection of metadata (or web

analytics), as well as the administrative work of logging formal training and individual skills development. Although we do not account for the organizational aspects of our study here<sup>ii</sup>, we also provided support with logging local group interactions in the context of informal 'meet-ups', and networking, as a means for sustaining these interactions. Additionally, *C-Media* provided training and networking to local groups of CR. We were interested in sustaining interactions, skills and networks beyond the initial training experience, as a means to supporting processes of narrative exchange with the use of digital technologies. What is more, *C-Media* hoped to serve as a model for many other organizations faced with similar challenges. Hence, given that our interventions were applied on multiple layers and took a diversity of formats, our collaborative action research sought to understand how digital infrastructure could contribute to an entire repurposing of *C-Media*'s organizational processes.

During the initial stages of the project, we approached these aims with the use of web analytic tools, but later 'action' phases of the research initiated a series of creative experiments in collective modes of content production and circulation. In a novel framework which we call 'social analytics' (see XXXXe, forthcoming), we sought to explore how the management of metadata can potentially function as a reflexive, rather than *automated* or *strictly technical*, way for social actors to claim control of their own online presence. As explained in detail below, measurements (for example of dominant themes, visitor traffic and location) helped *C-Media* get a sense of the different constituencies and publics emerging around the website. Subsequently, we invited *C-Media* to reflect on the analytics and on the forms of engagement enabled by their website, within the context of *C-Media*'s community-oriented goals. Web analytics played an essential role in the reflective process, since they offered a different sense of the actors' own

narrative and progress, and formed a key element of the action research circle.

#### 2. **Re-imagining the website**

Since the development and launch of the first instantiation of the website early in 2011, visitors to *C-Media*'s website were mainly CRs who were located near its headoffices in the North of England. *C-Media* wished to review their digital presence, and use analytics more productively in meeting their social and civic goals. Thus the digital infrastructure and the website redesign were conceived to complement a wider plan of maintaining sustained interaction between CRs, and to potentially provide further training for various new media skills necessary for digital engagement. Sustained interaction could enable *C-Media* to do more than maintain "dispersed face-to-face networks" and "socio-spatial enclaves" (Calhoun, 1998, pp.383-384) between citizen journalists: it could enable them to *connect* communities, beyond instrumental uses of network connectivity, which predominately pertain the individual user.

For us, finding ways so that *C-Media* could use digital resources effectively in order to meet their broader goals of amplifying community voice guided the website development. Modules of 'community tagging', a visual map of the network and the concept of 'content curation' as integral elements of the new website were introduced to serve such purposes. To accommodate interaction between readers, local community groups and national news media, the website needed to become a platform for discussion and interaction, in ways that allowed readers to further cultivate dialogue and narrative exchange. Thus the practical and technical demands here intersected with a project of wider trans-local democratic engagement (XXXXa, forthcoming).

While re-imagining the website as an emergent space for democratic dialogue might seems in itself an ambitious enough vision, during our fieldwork *C-Media* progressively re-assessed their leadership potential. As the manager noted:

we've been needing to transition from being a delivery organization to a network management organization and we're not quite there yet, and we still keep getting bogged down in having to do these very time consuming jobs that aren't necessarily fulfilling the greater vision, which is creating and sustaining a movement of community reporters, so that's where we know we want to be (Vicky).

The restructuring of the website was perceived by *C-Media* to be fundamental in enabling the organization to manage others with similar aims, and to even mobilize a social movement. Shared between members of the organisation, the social imaginary (Taylor) of connecting communities and "telling the story of the stories" was enabled by the implementation of digital technologies, making certain practices necessary and giving *C-Media* a sense of legitimacy as a social media enterprise. It was certainly necessary however for the organisation to focus primarily in the implications that the adoption of data management and new tools for analytics had for its internal restructuring, before modelling this process for other civil society organisations.

*C-Media* hoped that internet technology would enable them to be more efficient internally as an organisation (building capacity and skills), and concurrently to face outwards (provide high quality services to the wider community of civil media organisations). This combination of internally and outward-facing practical aims was supported by commonplace actions (for example the necessary upgrading of the open source operating system Drupal) and our role was

to continuously track this process. Beyond the obvious expectation that practical and strategic solutions would help the web redesign, these actions were underpinned by the hope that *C-Media* could reconfigure its existing relationships with other media organisations and situate itself as a mediator between citizens. Thus a distinct vision, consistent with *C-Media*'s wider social vision, shaped the breadth and depth of undertaking the website redesign, and indeed the process of reimagining its potential benefits. *C-Media* themselves recognized that, under the constrained conditions they operated, such a vision (or imaginary) was necessary for implementation:

You only get bogged down in the doing the day-to-day work, you do want to keep focussed on there is a point and purpose to what we do, and that social movement, the vision of that is very alive (Vicky).

Beyond the wider vision of the social movement however, *C-Media*'s idea of their role as an organisation for the wider community of social media providers and CRs shifted many times during our study. The business model that they eventually adopted emerged from various transformations, which mainly entailed comparisons with traditional and mainstream modes of journalism, such as the "hyper-local" model (Howley, 2009; Picard, 2003, 2008). Although hyperlocal media have been theorised as hybrids of civic, community news which, in addition to alternative broadcasting, incorporate web 2.0 in their practices (Metzgar et al., 2011), *C-Media* ultimately appropriated this model to a service model that was oriented towards empowering community voices. As the chief executive noted:

I think the beauty of hyperlocal is being able to tell the stories that bigger media players will ignore or overlook. [...] So it's being able to tell those real grassroots stories in a professional way (Harry).

Devising an online interactive geographical map of CRs thus not only legitimised *C-Media* as the connecting node between CRs; it additionally materialized its vision to become a provider of hyperlocal media.

In practical term, this online interactive map displayed a pin for each reporter, provided information about their interests, and aimed to practically depict (and imaginatively represent) a *network* of citizen journalists not only in the UK, but around Europe as well:

[...] what we'll get instead is meaningful data, so you'll be able to click through to somebody's profile, you'll be able to see what they're interested in, [...] and you'll be able to contact them via the [website]. (Vicky).

Though nowadays ordinary in the online world, the interactive map and online discussion forum were both crucial elements that materialised *C-Media's* vision to become the enabler of a network of CRs, and even to ignite a transnational social movement. These activities (and the underpinning vision) should be considered in the context of work that focuses mainly on identity formation and social capital in relation to online visibility (Ellison et al., 2011; Barnard-Willis and Ashenden, 2010). Such writing pays little attention to the wider social imaginaries that motivate social actors in the first place. The process of planning for a digital infrastructure, the imagined benefits and challenges, prepares a vital ground from which a new community of *practice* can emerge.

#### 3. Using Web Analytics

Data analytics are conceived to be indispensable for businesses; however, increasingly they are adopted by organisations and educational institutions (Jisc, 2012). The starting point for *C*-

*Media*'s use of web analytics was the systematic, iterative collection, visualization and analysis of datasets. These datasets logged interactions with the content which was generated by CRs and published on the website. A period of reflecting on how the use of web analytics could serve their social goals was necessary before *C-Media* could start experimenting with content curation and "community tagging".

Pursuing our wider approach of 'social analytics' (XXXXe, forthcoming) involved following in detail *C-Media*'s particular employment of web analytics, and their reflections upon them. It is from mundane, everyday interactions such as the collection of statistical data that *imaginaries* of digital engagement in practice emerge and are enacted. This section follows this emergence in detail.

We focus here on how reflexive use of web analytics by social actors fuelled further experimentation with digital media and tangible alterations in the organization's platform. Reflection enabled *C- Me*dia to meet its most significant aim: to maintain the website as the primary locus for stories produced by CRs. As *C-Media* suggested early on in this project, doing this within the competitive context of social media providers involved innovating *how* this content was presented to its audiences. In practical terms, a website development primarily demanded research on how the main website had been used in the period following its launch in 2011, and a consideration of potential design improvements and platform upgrades. Having identified the systematic measurement of website posts as a priority, we further hoped to cross-reference these data with other detailed records about the authors. Data about accreditation level, location and group affiliation, which were previously held offline to preserve privacy, were able to provide qualitative insights into the production and exchange of community reporter stories.

At a basic level, such cross-referencing allowed a useful way to identify who actively contributed content to the website. At a second level, it allowed *C-Media* to compare how the resulting patterns (in quality and quantity of content) correlated with the regular training it delivered to CRs. Such a dual layer process could enable an understanding of the life-cycle of the training, and the impact of stories posted on the website.

Measurements enabled the emergence of a meta-narrative about the website and its content. We agreed with *C-Media* that analytics would provide a clearer sense of the dominant themes as these formed not only through the organisation-defined categories, but also through the tags used by CRs themselves. This type of monitoring would help the organisation to get a sense of the interests of the wider community of citizen journalists, and would therefore allow them to strengthen its identity. In order for *C-Media* to enhance levels of active audience engagement, we proposed assessment of the different constituencies gathering around the website. To achieve this, C-Media needed to concretely track how visitors found their way to the C-Media site; where web visitors were located upon visiting the site; what sorts of content they were interested in; and how they interacted with content and with each other. The key data collection tools used here were the modules 'Views' in the Drupal platform (used to build the Community Reporter site) and Google Analytics (GA), which allowed for the flexible measurement of website usage and generation of reports, tables, charts, visualisations of such data, as well as offers customisable reporting<sup>iii</sup>. Although *C-Media* identified a need to maintain their presence in the online world, they were ambivalent about their social network presence activity, especially since they largely opposed to commercial platforms (e.g. Facebook). Thus identifying the role of social networks in new forms of news production was important. One key finding from this monthly-captured data,

which *C-Media* needed to take into account in its assessments, was that the numbers of unique visitors who were not reporters themselves varied substantially from one month to the next<sup>1</sup>. Metrics also showed that most visits were direct, in other words did not involve referrals from links on social media, other sites or messages. This indicated that most visitors were in fact already acquainted with the website, and were probably CRs. The collection of statistics about the different search terms that visitors used upon landing on the website was the first step to observing how their efforts in opening up to new audiences were successful or not, and in the light of that (see next Section), to revise the ways in which their content was categorized and tagged.

Crucial for building social relations and maintaining interactions between CRs was also the extension of their network in spatial terms. Concretely, the collection of analytics allowed *C-Media* to locate its web visitors geographically and hence to evaluate the timeliness and spatial range of their stories. For example in July 2012, most visitors accessed the website from the North of England, and from areas where *C-Media*'s programme was delivered (see Table 1). In order to meet its social aim of increased public engagement, we agreed that it was also important for *C-Media* to collect and analyze information not only about the origin and location of web visitors, but also about how these visitors engaged with the site. Again here the tool used was the Google Analytics custom report on "Content Circulation" and "Flow Visualization", which was complemented with a log of page views, downloads and responses to *C-Media*'s blog content, discussion papers and other material. These analytics, by providing *C-Media* with a

For example, in April 2012 there were 1150 visits, in May 2012 these rose to 1475, and fell to 1193 visits in June 2012.

sense of both passive and active engagement with the website<sup>2</sup>, enabled the important process of reflection to commence – a process which we had identified as the basis for further adjustments to the online presence of a social media organization to be made (XXXXe, forthcoming).

#### **Implementation**

We refer to our work with measurements and analytics with such detail here because it is important to stress how such measurements would enable the organization to adjust their online activity and would help them to translate their social aims into digital media practices. Together, the four categories of collected data (origin, location, type and quality of interaction) could provide C-Media with a clear sense of audiences engagement with the website. If the measurements were established as regular practice, they could further constitute indicators for the success of the different experiments in content curation and other alternative formats, which C-Media wanted to try out. However, such analysis of measurements proved sometimes challenging. Generally the task of data analysis and visualisation was taken up by a C-Media administrator, who tried to make sense of what the implications were for the more general strategy of publishing for the organization. There were two main obstacles to translating measurements into concrete changes: the lack of a certain form of data literacy, i.e. the numerical, statistical and analytical skills that would help the interpretation of such data; and the lack of time to prioritize data collection over tasks which largely C-Media perceived to be more directly linked to achieving their social aims. As we note below, the time needed for the new practice of data collection and the digital infrastructure to 'sink into' the existing social practices extended beyond the timeframe of our study. However, it is the banality of such constraints on

Passive engagement with site content refers here to time spent on different parts of the site, the average numbers of pages viewed and the bounce rate (the percentage of visits that leave the site again after the first page).

which the material reality of making organizations 'more digital' is in practice based.

#### **4 Content Curation: Telling the story of the stories**

Despite limitations of time and resources, the reflection process that started with the collection and interpretation of metadata helped *C-Media* to identify a need to enhance how it managed the production and circulation of web content. As a result, CRs initiated a series of creative experiments in online content curation, which, as explained next, helped develop an alternative imaginary of online interaction and engagement, indeed an overtly ambitious horizon of aspiration, given *C-Media*'s current digital infrastructure and the levels of digital literacy of its reporters.

Content curation finds many applications in online culture world today, including projects about heritage (Boon, 2011; Nilsen et al., 2012) and online identity (Boyd and Ellison, 2007, 2008; Cox et al., 2008; Durrant et al., 2011). As a practice pertaining creative production, content curation has been understood to disrupt hierarchical modes of production (Parry, 2007; Hooper-Greenhill, 2000), but there are also more cynical applications of the concept in the online marketing world. Critical positions have argued that such practices of collective knowledge production (for instance, crowdsourcing in cultural and museum projects) potentially feed into "communicative capitalism" (Dean 2009) and "inclusive neoliberalism" (Wickstom, 2012). We are alert to such critical positions; here however, we are interested in how processes of collective content production, such as those led by *C-Media*, could enable a *reflexive process* about both the role of an organisation and its modes of engagement in a digital world. This reflexive process involved the emergence of a *metanarrative*, in the words of *C-Media's* manager (Vicky) the

"telling the *story* of the stories", and this was not a reductive or instrumental process. This is a space of agency neglected, indeed often made hard to see, by accounts of "communicative capitalism" (Dean, 2010; Andrejevic, 2013).

The ambitious vision of "telling the story of the stories" had to start with simpler and more tangible tasks. We identified with *C-Media* how, as a media practice, content curation involved finding, categorising and organising relevant online content on specific issues. As expected, the experiments with content curation did not entail the creation of more content, but presented a way to feature selected content that pre-existed online. For *C-Media*, the point of curation was to tell stories not being told, or to tell existing stories in a different way. An example, discussed in one website development meeting during our fieldwork, was to re-tell a news story about homeless people being driven out of London, which was covered in *The Guardian* but received little attention due to the US elections happening at the same time. *C-Media* appreciated that curated content could take many forms; a wiki; a Storify; or a blog post; it could contain videos or photos; and it could connect directly the *C-Media* platform with social media. In this way, content curation presented an opportunity for *C-Media* to establish links with new audiences and to strengthen existing social bonds with the local community. As the manager noted, the organisation aimed at:

raising the profile of the content, give people reasons to keep coming back, and then hopefully within twelve months it will be a really different place where people are using the forum, they are communicating with each other, they are finding that it meets their needs and that it's stimulating them to be involved and they're getting feedback on the content, so they've got reason to come (Vicky).

*C-Media* negotiated, appropriated and often resisted the marketing aspects of content curation.

As the Chief executive noted:

There's us curating the content, there's us responding to a story and the third is other people are curating the content for us as a mass collaboration. But there's lots of issues around that like who do we give authority to [create] content (Hugh).

So for *C-Media* the introduction of content curation was a key mechanism in their overall civic project of generating authoritative voice for a particular community.

#### **Community Tagging as knowledge production**

In technical and practical terms, apart from, obviously, the selective foregrounding of timely, relevant content the practice of content curation involved the incorporation of a several modules. "Community tags" is a *user-generated* tagging system that uses a module available in Drupal (the open-source platform employed by *C-Media*), which allowed CRs to tag content. Its implementation was envisioned to bring together the practice of curating content (and the intended outcome of reaching wider audiences) with that of enhancing public and user engagement with community reporter content. This was an important intervention: in information-saturated spaces, where organisations like *C-Media* run the danger of sinking beneath the weight of more content, tags and other data, the visual display of a community tagcloud on the front webpage begins potentially a process of recognition (Honneth 2007); that is, recognition of CRs as producers of knowledge, indeed *knowledge about knowledge*.

Community reporters, by tagging content which was not their own, valued and foregrounded stories that were written by other members of the community, and in this process also recognised *others* as knowledge producers. Thus, although tag clouds are today becoming a banal

phenomenon that appears in most webpages, this specific experiment of community tagging, unlike crowdsourcing exercises, and because it was contained within a small connected group of people, created a temporary space for practising mutual recognition. Extending the relationship between CRs *beyond plainly reading*, the experiment, if repeated and sustained, could establish new habits of knowledge-making amongst news media producers. Community tags in this case reflect a wider process of *collective re-imagining* and began to embody a bigger vision:

A lot of what we've been talking about is about building community. It isn't just cold, hard content. It is about that sense of community and that's really one of the things that we're trying to develop and achieve with this (Vicky).

#### And as the Chief Executive noted:

I think the community tagging is great 'cause that supports an idea that we've got around mass collaboration that people themselves will self-select the content and create the stories that [are] evolving (Hugh).

This democratic aspect of content curation and community tagging is of key importance, potentially, to organizations such as *C-Media*. It presents an area of agency that avoids the reductive "choice" between an emergent self-organizing system where "learning" algorithmic machines take precedence over human values, and an information commons in which a new elite makes our choices for us' (Mansell, 2012, p.193).

This vision is also directly attached to new digital skills, literacies and capabilities. As was the case with metadata, new competencies and literacies were a direct implication of content curation practices. According to one Board member:

I'm just saying we should share the knowledge, the experience that you gain from this, what's successful, what works well, what's the contents, and that should be part of the job of the reporters to be thinking about that. It's not just about making a bit of content; it's actually about thinking about where it's going to sit (Mike).

One of the competencies and new roles that reporters were invited to take up by *C-Media* was that of an editor:

I think it's telling the stories of the stories. [...] It's possibly the kind of connecting bit. So there's an internal assessment of the stories that's made, in order to then promote the content out to the different audiences. So that thinking bit, the telling the stories of the stories, is one of kind of exercising our internal judgement maybe about the impact that we want to have (Vicky).

Organizations can re-imagine their social role and the democratic limits of their practices as they embark in experiments with transforming their digital presence, in an evidence-based process of reflection. The ways in which *C-Media* negotiated the form of their editorial policy, which resulted from the implementation of a new digital platform, clearly show that digital infrastructure and data litearcies are constituted *within social practices* and are more than a matter of technical deployment. What our current analysis adds to existing discussions (XXXXe, forthcoming) is that civil society organizations must have a clear vision of their role, their policies, the importance of collaboration and networked technologies, and not just a series of technical instructions. Narratives that enact these visions – through, as C-Media put it *telling the story of the stories* – demonstrate the continuing dialectic between the social and the technical.

#### 5 Constraints and limitations

We have so far presented the adoption of content curation, data analytics and community tagging as an important process whereby social imaginaries of information are concretely shared by members of a community, contributing to a "community of practice", and emerge out of their everyday interactions. For *C-Media*, the planning and eventual implementation led to internal organisational and technical changes but also opened up possibilities for refinement.

We would not however wish to understate the constraints and limitations affecting such transformations of digital infrastructure. As with many other similar organizations, *C-Media* faced major funding limitations, which impacted directly on the number of personnel employed by the organization. Seeking inventive ways to meet the basic need for technical updates, including both software and hardware, was an everyday concern. An important factor for the implementation of creative experiments with digital media is the technical capacity required for processing, analysing and visualising data. Although we recognise that innovative thinking is crucial for incorporation of web analytics for instance, employing one person only for the entire redesign of the website and upgrade of the Drupal system, evidently resulted in a slow rhythm of updates. One resulting practical impediment was how the web profiles for existing CRs were not operational at the time of the new website launch. *C-Media* had to develop a system of reciprocal support in response. As we have noted elsewhere (XXXXa, forthcoming), an operational online discussion forum was the precondition for such reciprocity, mutual recognition and support to emerge, and this only slowly began to emerge during the course of our fieldwork collaboration.

#### **Sustainability**

What were the conditions of this practice? Throughout our research we were concerned with the implications for sustainability after our fieldwork was complete. Sustainability can be addressed in different ways. During planning meetings, our collaborative aim was to create an initially feasible and on the long term sustainable model for the content curation process. As one of the board members noted:

To me there are three aspects of [content curation]. One is the technological how you do it, how you present it; the other is intellectual, how you get the materials together; and the other one is how do you develop cooperation over it, which is the social aspect of it (Craig).

Beyond the need for a working digital infrastructure, there was a clear need for someone to have a designated responsibility in this area which was so closely linked with repurposing of *C-Media*'s administrative processes. The sustainable adoption of web analytics and content curation modules required either a professionally trained data analyst who could additionally lead the reflexive process of content curation, beyond the experimentation phase; an alternative based on CRs themselves, so that they could compensate for the shortages of staff. As already noted, content curation already invoked some new competencies and digital literacies for CRs. An alternative approach to the designated professional role ("content curator", "metadata analyst") would involve spreading responsibility for editing and curating content, and for the use of metadata across CRs, just as responsibility for production of media content had been spread before. This model of editorial practice would shift responsibility and expertise from *the* editor, over to a wider network of CRs and would have reflected the social values of *C-Media*Of course during our web planning meetings, the organization negotiated whether the editorial role should

be taken up by one paid editor. However, given restrictions in funding, *collective* editing, moderation and curation seemed to be the only available option for *C-Media*. Implementing such a distributed solution required a consistent vision across a number of tasks: data management and ethical standards for their use; editorial practice and policies regarding the use of social networking.

Organizations like *C-Media* can only hope to adopt new technology practices and to re-invent their digital infrastructure with minimum disturbance if they are freed up from external disruptions. In order for our model to be sustainable and operational beyond the research phase, it needed to align with the social principles of the organisation, and to genuinely 'sink into' its socialtechnical conditions (Star and Ruhleder, 1996). Often the material realities of day to day work and a constantly-changing funding landscape make it difficult for these actors to achieve the necessary and inevitably complex new processes of reflexive thinking and self-assessment. However, notwithstanding the limitations in funding and the increased competition in civil society sector, *C-Media*, like other organizations, can still re-imagine the ways in which they can participate in a digital world and sustain an effective digital presence.

#### 7 Conclusions

For *C-Media*, the point of digital engagement was not specifically for users and participants to become competent and competitive *individuals*, but to serve the needs of a particular community. By setting up a digital infrastructure, the organization made their *own definitions* of how to engage in a digital world, according to the values and social aims underpinning the organization's overall activity. These values and aims did not always accord with those imagined

in governmental policies of digital inclusion and participation, but entailed a re-imagination of their role as an organization, their limits and the importance of networked connectivity. Our article has focused on how these understandings, values and visions translate into concrete, material digital practices.

We have shown how *C- Media* redesigned their online presence and rethought their relationship to digital technology, configuring (Suchman, 2012) an imagined version of digital engagement, and with it the practical reality of what could be achieved. The web redesign, the metadata management and the content curation experiments aimed to enhance interactivity, secure the visual identity of the organization and simplify the functionality of the website. At the same time, these elements sought to open up the readership of community reporter stories, and make the best of existing content. To meet these aims, CRs invented playful ways, such as community tagging and collective content rating, which particularly fostered a sense of belonging in a community of practice (Wenger) that worked towards common goals. What materialized as a digital infrastructure of narrative exchange, and as shared practices for giving voice, was inevitably caught up in the realities of limited resources.

The development of the website and the experiments in online content curation, with modules such as "community tagging" and content rating, although not completed during the period of our fieldwork, helped *C-Media* to develop a common language for describing what they hoped to achieve more generally, as a social and civic organization. The language and reflection involved in an organization's rethinking of its digital presence must draw upon its "repertoire of communal resources". In mundane, everyday interactions such as the collection and analysis of statistical data, certain *imaginaries* of digital engagement emerged. "Telling the story of stories"

(C-Media's own term for what was at stake in this process) is not just a practical process of editing content and re-telling stories by linking or sharing on social media platforms; it is, more broadly, a *narrative re-imagination* of an organization' capabilities, in which stories about how social actors come to participate in the digital world circulate between, and are produced and enacted by, actors themselves. The opportunities for such reimagining, and their attendant limitations, cannot for social organizations like *C-Media* be separated from the practical limitations of funding and resources. But it precisely within such realistic limitations that the implementation of imaginaries for a transformed digital infrastructure must be followed in practice.

#### References

XXXXa

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XXXXc, 2010

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Andrejevic, M. (2013). *Infoglut: How Too Much Information is Changing the Way We Think and Know*. Routledge.

Barnard-Wills, D., & Ashenden, D. (2010). "Public sector engagement with online identity management." *Identity in the Information Society* 3.3, pp. 657-674.

Boyd, D., & Ellison, N. (2007). Social network sites: The role of networked publics in teenage social life. Journal of Computer-Mediated Communication 13: 1.

Boon, T. (2011). Co-Curation and the Public History of Science and Technology. Curator: The Museum Journal, 54: 383–387.

Bruns, A. (2008). *Blogs, Wikipedia, Second Life, and beyond: From production to produsage* (Vol. 45). Peter Lang.

Cox, A. M., Clough, P. D., & Marlow, J. (2008). Flickr: A first look at user-behavior in the context of photography as serious behavior. *Information Research*, *13*(1).

Digital Engagement Guide, <a href="http://www.digitalengagement.info/">http://www.digitalengagement.info/</a>

Durrant, A., Frohlich, D., Sellen, A. & Uzzell, D., (2011). "The secret life of teens: online versus offline photographic displays at home", *Visual Studies*, 26:2, 113-124

Ellison, N. B., Steinfield, C., & Lampe, C. (2011). Connection strategies: Social capital implications of Facebook-enabled communication practices. *New Media & Society*, *13*(6), 873-892

Government Digital Service, <a href="http://digital.cabinetoffice.gov.uk/category/digital-engagement/">http://digital.cabinetoffice.gov.uk/category/digital-engagement/</a>
Helsper, E. (2008). Digital inclusion: An analysis of social disadvantage and the information society. Department for Communities and Local Government.

Hooper Greenhill, E. (2000). Museums and the Interpretation of Visual Culture, London: Routledge.

Rheingold, H. (2008). "Welcome to Participatory Media Literacy." Participatory Media Literacy. Jasanoff, S., & Kim, S. H. (2009). Containing the atom: Sociotechnical imaginaries and nuclear power in the United States and South Korea. *Minerva*, 47(2), 119-146.

Jasanoff, S., Kim, S. H., & Sperling, S. (2006). Sociotechnical Imaginaries and Science and Technology Policy: A Cross-National Comparison. *NSF project proposal, Kennedy School of Government, Harvard University*.

http://sts.hks.harvard.edu/research/platforms/imaginaries/iii.proj/nsf-summary-and-proposal/ George E. Marcus, (Ed.) (1995). *Technoscientific Imaginaries: Conversations, Profiles, and Memoirs*. University of Chicago Press.

Nilsen, T. T., Grey, N. C., & Friedman, B. (2012, February). Public curation of a historic collection: a means for speaking safely in public. In *Proceedings of the ACM 2012 conference on Computer Supported Cooperative Work Companion* (pp. 277-278). ACM.

Parry, R. (2007). Re-Coding the Museum: Digital Heritage and the Technologies of Change Oxon, Routledge

Mansell, R. (2012). *Imagining the internet: communication, innovation, and governance*. Oxford University Press.

Suchman, L. (2012). Configuration, in Lury, C., & Wakeford, N. (Eds.) (2012). *Inventive methods: The happening of the social*. London: Routledge.

Star, S. L., & Ruhleder, K. (1996). Steps toward an ecology of infrastructure: Design and access for large information spaces. *Information systems research*, 7(1), 111-134.

Table 1: Top ten locations where visitors came from, unique visitors, percentage of new visits and average visit duration.

Town/City	Unique	Visits	New	% New	Avg. Visit
	Visitors		Visits	Visits	Duration
Manchester	127	222	100	45.05%	00:05:01
London	89	124	72	58.06%	00:05:45
Salford	43	182	27	14.84%	00:08:30
Bethesda	17	17	17	100.00%	00:00:00
Liverpool	16	16	13	81.25%	00:03:57
Huddersfield	13	13	11	84.62%	00:00:36
Leeds	13	15	10	66.67%	00:02:36
Cambridge	11	13	7	53.85%	00:02:56
Sale	11	14	9	64.29%	00:00:55
Preston	10	13	7	53.85%	00:00:59
TOTAL	717	1,045	607	58.09%	00:04:10

i The research reported here was conducted as part of Storycircle, a core project within the FIRM research consortium funded by the UKRC Digital Economy Programme: <a href="http://www.firm-innovation.net/">http://www.firm-innovation.net/</a> and <a href="http://storycircle.co.uk/">http://storycircle.co.uk/</a>

ii We developed an Outcomes Framework which would benefit C-Media, its partners in the sector and other public, third sector and social enterprise organisations, to evaluate the programmes they offer to community reporters, and to establish robust evidence of impact, which it could subsequently use with funding bodies, and policy makers. C-Media, during the fieldwork, explicitly articulated five core organisational outcomes: to develop the personal and technical skills of Community Reporters; to sustain local networks of Community Reporters; to stimulate the production of positive, community reported content; to increase public engagement with community reported content; to expand organisational partnerships through the social licence. The

Outcomes Framework documents have been made available online.

iii Alternative options for web analytics were also considered, including the re-purposing of third party platforms alongside GA to enable more critical and flexible data evaluation. (as 'critical evaluation data' tools rather than 'marketing' tools), or for combining these platforms, sometimes described as 'auto content circulation', using tools such as 'IFTTT' (If this then that).