

Internet Studies: Perspectives on a rapidly developing field

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The genealogy of this special issue begins in the fall of 2009, with a panel organized by Mia Consalvo and Charles Ess for the annual conference of the Association of Internet Researchers (AoIR) held in Milwaukee, Wisconsin on 8 October. The panel was constituted by a selected set of contributors to *The Handbook of Internet Studies* (Consalvo and Ess, 2011). The presentations and ensuing discussion, joined by contributors to another synthesis effort (Hunsinger et al., 2010), focused on the contours of Internet Studies as an emerging field. The panel inspired Bill Dutton – then working on *The Oxford Handbook of Internet Studies* (Dutton, 2013) – to propose a workshop for the following spring. Its purpose was to build on the work launched by the handbooks to capture key patterns in the development of this rapidly developing field.

The immediate upshot was a productive and enjoyable workshop co-sponsored by the Oxford Internet Institute and the Information and Media Studies Department of Aarhus University, held at Aarhus University on 19 March 2010. Following the workshop, the editors of *New Media and Society*, Steve Jones and Nick Jankowski, agreed with our proposal to build on the momentum of this workshop with an open call for papers that would be published in a special issue of the journal as one more step in support of an array of efforts to catalyze discussion of the state of the art of this developing field. The primary goals of our special issue were, first, to articulate significant bodies of findings and begin to identify an evolving set of constitutive domains within the field. Secondly, with these as primary starting points, both our contributors and we, as editors, sought to identify developing trajectories of future research. We intended to demarcate areas of likely importance, while not prematurely defining and thus closing off what is manifestly an expanding and changing field of Internet Studies.

What do the articles reviewed and selected for this special issue say about the development of Internet Studies? We begin to answer this question with an overview of the contributions to the special issue, noting along the way a few selected cross-references to both the articles collected here as well as the larger relevant literatures. We close with a more general account of what we have learned about this evolving field from this special issue in light of work on our respective handbooks.

We have organized the contributions to this issue such that they flow across four general areas. The first focuses on the field as a whole, and is filled by our lead article, by Tai-Quan Peng, Lun Zhang, Zhijin Zhong and Jonathan JH Zhu, 'Mapping the landscape of Internet Studies: Text mining of social science journal articles 2000–2009'. We then shift focus to specific Perspectives from Different Arenas, beginning with Elaine J Yuan's 'A culturalist critique of "online community" in new media studies', followed by Heidi Campbell's 'Religion and the Internet as a microcosm for studying trends and implications within Internet Studies', then an article by Jessie Daniels, 'Race and racism in Internet Studies', and Michel van Eeten and Milton Mueller's 'Where is the governance in Internet governance?'. The next set of articles focus more on Methodological Perspectives, beginning with Juliette De Maeyer's 'Towards a hyperlinked society: A critical review of link studies', followed by Niels Brügger's 'Web historiography and Internet Studies: Challenges and perspectives'. The two final articles are both tied to Critical Perspectives on User Empowerment, a cross-cutting theme of Internet research across various research arenas. Anja Bechmann and Stine Lomborg's article is entitled 'Mapping actor roles in social media: Different perspectives on value creation in theories of user participation', and this is followed by Christian Fuchs and Nick Dyer-Witheford's challenge to Internet Studies, entitled 'Karl Marx @ Internet Studies'.

A perspective on the field

We start with Tai-Quan Peng, Lun Zhang, Zhijin Zhong and Jonathan JH Zhu's 'Mapping the landscape of Internet Studies: Text mining of social science journal articles 2000–2009'. Their overview of the field within the social sciences provides one of the most comprehensive empirical accounts and maps of Internet Studies as approached through the social sciences to date, serving well as a broad introduction to the larger field as further incorporating humanistic perspectives.

The authors begin with a review of earlier but comparatively more limited efforts to map the field within pre-defined areas. To address the limitations they identify, they turn to a more 'bottom-up' approach designed to draw 'a comprehensive knowledge map for Internet Studies'. Their study of over 27,000 refereed journal articles firmly establishes the growing presence of Internet Studies. First they find that the 27,340 articles comprising the field stand as the third largest domain of articles surveyed, and further enjoy the second fastest growth rate (following 'environment') in the first decade of the 21st century. Moreover, clusters move around key issues – e.g., interaction, communication, and regulation – suggesting a map that could serve as a preliminary taxonomy for this growing field.

Some of us might be surprised to learn here, for example, that e-Health emerges as a very prominent theme and cluster, as it is largely outside the purview of much social research on the Internet. In addition, their study provides evidence of a 'paradigm shift' from sender—receiver to network models of communication. This is but one example of the larger ferment in the field, one catalyzed by the interdisciplinary character of research: 'Internet studies are a melting pot that attracts researchers from different disciplines to transcend their disciplinary boundaries to develop new theoretical, methodological, and practical concerns'. The authors' concluding suggestions for future research directions are an especially valuable contribution.

Perspectives from different arenas

Elaine J Yuan's 'A culturalist critique of "online community" in new media studies' begins the next section that focuses on research on particular topics, most often anchored in specific contexts or arenas of research. Elaine J Yuan addresses one of the most important components of both social scientific and humanistic approaches to Internet Studies in what she calls a culturalist perspective. In tracing the study of community in research on the Internet and related new media, Yuan is addressing one of the formative objects of Internet Studies, launched by Howard Rheingold (1993) and others around 'virtual communities', and later work on community informatics (Keeble and Loader, 2001; cf. Kendall, 2011). The author observes the degree to which a focus on 'structuralist' perspectives on networking has tended to erase the cultural context from the study of community, leading her to argue for a more global approach that requires greater attention to the cultural meaning of networking structures. She illustrates the significance of this 'culturalist' approach by contrasting a traditional East Asian conception of society with Western conceptions. This critique of community studies provides as a more general call for more global and cross-cultural comparative perspectives for the field – a point to which we return in our conclusion.

Heidi Campbell's 'Religion and the Internet as a microcosm for studying trends and implications within Internet Studies' shifts to a different arena – religious communities, and complements Peng et al.'s map by way of her thematic focus on online religion as a subfield that mirrors aspects of Internet Studies more generally. Her synthesis of major work on the Internet and religion yields a number of themes that are critical to studies of religion in other areas of Internet Studies. For instance, studies of religion online have dealt with issues of identity, empowerment or the increasing autonomy of users, the tension between face-to-face versus online communication, and the general theme of community, a topic joined in this issue by Elaine J Yuan. Campbell finds that insights gained from the study of online religious practices provide useful inputs to issues that concern Internet Studies across other contexts of use, such as the often complementary role of the Internet as opposed to its substitution for face-to-face communication. We would only add that studies anchored in particular contexts, such as religion, also have the advantage of empirically grounding observations, rather than moving to overly general perspectives on the Internet in all contexts, which is the risk of studies that are not embedded in a particular context.

Jessie Daniels' article, entitled 'Race and racism in Internet Studies', provides a synthesis that counters early views that race and racism might be undermined by the inherent anonymity of Internet communications. Users would deal with arguments rather than react to racial stereotypes. Daniels shows how the research has demonstrated the opposite tendency. Race and racism persist online in various ways. Designed by a relatively White middle-class culture of Silicon Valley entrepreneurs and techies, the very structure of the Internet has aspects that appear naïve with respect to race, beginning with the use of racist metaphors, for instance the playful use of terminology such as master and slave. Race is far from invisible online, as increasingly new social media make race even more evident, such as through the increasing prominence of photographs. And while racism persists online, social and legal efforts to mitigate harms seem rather limited, with

relatively little focus on racial profiling, and the control of hate speech, for example. Despite the importance of such issues, race is not a major focus of Internet research. A lack of attention to race and racism mirrors other issues raised about the universality underpinning much research, which ignores racial and other cultural variations. We expect that the themes raised by Daniels' article will help to draw more attention to this area by researchers.

The final article in this area, 'Where is the governance in Internet governance?' by Michel van Eeten and Milton Mueller, points out ways to build on one of the relatively new fields within Internet Studies. Most work on Internet governance has focused on emerging institutions, such as the Internet Governance Forum, and the struggles between different actors in shaping their agenda and debate. While such international fora are important, they often lack authority and do not make policy decisions. At the same time, there are technical decisions being made in other fora, such as standards bodies, that have indirect social and political consequences, and which should be given more priority in studies of Internet governance. Likewise, national regulators and politicians are increasingly moving from initiatives designed to stimulate Internet development and use into regulation of the Internet, such as in content control and the surveillance of Internet users, that are not being adequately considered by the community of scholars forming around Internet governance The perspective offered by this article should help broaden studies of Internet governance so that they are grappling with the full range of issues that are shaping the design, implementation and use of the Internet in local and global arenas. In the early study of Internet governance, much debate focused on the diffuse nature of this term, making it overly broad. An unintended consequence might have been the developing focus on a few institutions. As van Eeten and Mueller effectively argue, it is time to take a wider perspective on the institutions and decisions to be studied by this community.

Methodological perspectives

The first article in this section is by Juliette De Maeyer, entitled 'Towards a hyperlinked society: A critical review of link studies'. She provides an extensive overview of link studies as a significant component of the field, beginning with those in network sciences that focus on more technical dimensions, followed by work based in the social sciences. Here, linking patterns are studied as indicators and sometimes proxies of phenomena such as authority, academic significance, political affiliation and political homophily. In this last domain, in particular, the studies reviewed by De Maeyer support Cass Sunstein's controversial prediction of the Web underpinning 'cyberbalkanization' – fragmenting communities on the Web (2009). She further highlights work examining public debates, blog interconnectivity, and the (limits) of international information flows, including the sourcing of news.

De Maeyer then shifts to a brief list of some tools available for link analysis, followed by important cautions regarding their limitations. Broadly, 'all links are not created equal' – meaning that their intended significance is not always or easily revealed especially in automated, large-scale studies. This further means, for example, that statistical analyses of data produced automatically should be viewed with particular caution and

from multiple methodological perspectives. This leads to her conclusion that is a call for mixed method studies – ones that balance automated dataset generation and analysis with 'manual' analyses such as content analysis. De Maeyer argues that these and the other studies she has reviewed for us here articulate a shared methodology that can be taken as a foundational starting point for future link studies. Her article illustrates the range of issues that can be usefully explored through link studies, often in conjunction with other methods.

A methodological theme also shapes Niels Brügger's 'Web historiography and Internet Studies: Challenges and perspectives'. Brügger starts with the observation that historiography did not play a significant role in the first 10 years of the field – in part, for the obvious reason that there simply wasn't that much in the way of a historical record. By 2012, however – and we take this to be a marker of the maturity of Internet Studies as an emerging field - the Internet, and with it, the Web has developed a lengthy and certainly extensive history, one that is essential to archive and curate for the sake of contemporary and future study. At the same time, because Internet- and Web-based materials are in some important ways distinctive and different from other media, such as paperbased materials, there is the correlative need to develop the theoretical and methodological dimensions of these new forms of historiography. In particular, Brügger argues that, among other things, web historiography may be in need of a website philology - the disciplines and methods needed for best determining which one of our archived versions of a website is closest to what was originally online, and what should count as the original version. Finally, a key issue of growing importance here – i.e., as national web archives continue to be developed and grow in scope – is to recognize and, if possible, be responsive to the differences emerging in national approaches to Web archiving.

Critical perspectives on user empowerment

The final two articles both take a critical perspective on the common claim in Internet Studies that Internet- and Web-based communications 'empower' the user. First, in their 'Mapping actor roles in social media: Different perspectives on value creation in theories of user participation', Anja Bechmann and Stine Lomborg aim to contribute to a 'fuller establishment of social media theory' – a goal especially pertinent in light of Peng et al.'s observation that such theoretical development receives comparatively less attention in Internet Studies than other components, although it is among the most rapidly growing. In philosophical terms, Bechmann and Lomborg work to disambiguate a core concept of the field - namely 'user value creation'. As they carefully document, both notions of 'the user' and thereby of 'value creation' vary importantly between two primary foci. The first is that of industry perspectives that emphasize value creation in economic and sociopolitical terms. Here – and in ways that supplement the overtly Marxian analyses summarized here in Fuchs and Dyer-Witheford (below) - Bechmann and Lomborg show how the companies providing various services to users, such as in the forms of Social Networking Sites, blogging and microblogs, and posting sites such as YouTube, retain the power to structure the possibilities and patterns of user communication in specific ways. This means that while the users of these services may be 'empowered' and 'productive' agents – they are at the same time an 'exploitable target'.

The second is the perspective of users themselves, emphasizing value creation as sense-making, self-exploration, and relationship management. In both cases, the media user is a participatory agent – but in different ways and with different emphases: in particular, the 'asymmetrical power relations' that define the first perspective mean that any putative collapse between 'producer' and 'consumer' – as most notably and influentially captured in Axel Bruns' adaptation of Alvin Toffler's (1980) conception of the 'prosumer' – is factually mistaken. But this further means that confusing the two perspectives and correlative meanings threatens our research, findings, and reflections with equivocations potentially fatal for otherwise careful research and useful analyses.

Bechmann and Lomborg helpfully avoid another risk here – namely, that of taking an 'either-or' approach in the face of these differences, so as to highlight or privilege one perspective at the cost of the other. Instead, they sensibly argue for a '360 degree' approach in social media research – i.e., one that takes up both perspectives in ways that continue to recognize, articulate, and make effective use of their differences. One of the most significant contributions in this collection, in fact, is their first step towards exemplifying such a research approach – specifically in a map that demarcates both overlaps and differences between the two perspectives, and thereby highlights specific areas of research in the domain of social media most in need of attention.

This section and the symposium concludes with Christian Fuchs and Nick Dyer-Witheford's 'Karl Marx @ Internet Studies'. Fuchs and Dyer-Witheford's literature review demonstrates the degree to which Internet Studies already includes a variety of analyses and contributions that either implicitly or explicitly incorporate Marxian theories and categories. This is especially so when such studies take up normative foci on the themes of emancipation, participatory democracy, and the public sphere, but also in the domains of art and aesthetics, for example. They organize this review along the lines of no less than 11 major Marxian concepts that they show to be used in the field. From our perspective, one of the most important contributions here is their articulation of a rising concern in Internet Studies with the commodification of personal data - for example, as users voluntarily give up a great deal of information in return for access to, and use of 'free' sites, such as Facebook, YouTube, and so forth, and the services they offer. Moreover, they help sharpen this growing focus of research and debate by showing how it raises the still more fundamental problem of the commodification of our very selfhood and identity, a theme raised by Sonia Livingstone (2011) and Nancy Baym (2011), among others. By contextualizing this and other crucial themes in their larger framework of critical concepts and approaches, Fuchs and Dyer-Witheford push forward their larger goal of reorienting and reshaping Internet Studies to more explicitly incorporate both a Marxian critique of political economy and a broader critical theory of the Internet.

Reflections on Internet Studies

We had no illusion that a single call for papers would provide a representative, much less comprehensive, snapshot of the state of Internet Studies and the directions for future research. Nonetheless, in light of our work within the field and on handbooks for the field, we have been encouraged by the degree to which the selected papers reflect some

key themes that are emerging across this diverse field of research. We will briefly elaborate on what we see to be the major themes and connect them with a few examples from particular contributions to this special issue. While the collective results obviously remain partial, we nonetheless believe that the resulting overview represents an improvement on earlier efforts to survey and map Internet Studies as a still young but emerging field.

An expanding field

Peng and his colleagues begin the issue with a meta-analysis that supports the relatively recent but rapid expansion of this field of research. With this expansion has come growing diversity and specialization – as represented here with the examples of link studies (De Maeyer) and web historiography (Brügger). Moreover, there are growing communities of academics focused on Internet governance, Webmetrics, and other specialized fields within Internet Studies – including Internet Research Ethics (e.g., Buchanan, 2011). More broadly, nearly every discipline across the humanities and social sciences has fostered an emerging set of researchers with a focus on Internet-related issues. This growth and diffusion of Internet Studies will necessitate more efforts to connect and synthesize research across the field. We hope this special issue contributes towards that aim.

Enduring and emerging topics of inquiry

The articles of this issue illustrate the continuing resonance of themes and topics that have been central to Internet Studies from before the Internet defined our research. Early studies of computer-mediated communication often focused on the implications of technological change for community (Keeble and Loader, 2001; Kendall, 2011), the empowerment of the individual and democratization (De Sola Pool, 1983; Stromer-Galley and Wichowski, 2011), such as around the emergence of a public sphere. For example, Campbell's study of the Internet and religion provides a focus on challenges to and renegotiation of authority, such as with the role of new media in undermining former gatekeepers of religious communities. This theme, for example, has been prominent since early research on the rise of the printing press, but it remains a central theme and issue of Internet Studies as it builds on a tradition of literature on the societal implications of technological chance in media, information and communication technologies. Given the rapid pace of technological change, it is important to recognize that scholars are able to retain a focus on key issues that foster a continuity and cumulativeness to the field that is not shaken by the latest technical innovation (what Bernie Hogan and Barry Wellman (2012: 53) helpfully identify as the problem of 'presentism'), but actually deepened as topics such as community continue to be pursued across platforms and applications.

Theoretical diversity and contestation

The diversity of the field is certainly reflected in the range of theoretical perspectives that are shaping research. As noted above, this is a function of the multidisciplinary nature of the field, bringing philosophical approaches, empirical social sciences, and formal

theory of economics and political economy together around many similar topics. Yet cross-cutting disciplinary diversity brings with it theoretical contestations that are enduring, such as a continuing debate between a more or less technological versus social determinism, with the latter represented by critics of technologically focused work, including Internet Studies, as inherently technologically deterministic. There are clear theoretical underpinnings of authors in this symposium that the Internet shapes social behavior and structures, such as Campbell, even if skeptical of taken-for-granted assumptions, but also examples of authors who are closer to a social-cum-economic determinism, such as Fuchs and Dyer-Witheford.

The centrality of context and technology

The outline of this symposium issue underscores the degree to which work in this field is increasingly anchored in specific technologies, such as social media, or search engines, and/or in specific contexts, such as in the practices of religions, or in community studies. It is not uncommon for journalistic or public debate to be about the 'Internet' in general, but academics in this field are aware of the pitfalls of speaking so generally about the societal implications of a technology that is so malleable and ever-changing in many important ways. This does not negate the potential for addressing issues of the Internet per se, such as whether it can be empowering or not, but it does push research to tying such claims to concrete research on particular implementation of specific technological innovations in particular social and institutional settings. The centrality of such contextualized research is apparent in this special issue and related handbooks (Consalvo and Ess, 2011; Dutton, 2013).

Transforming methods of research as well as objects of inquiry

This issue also exemplifies the degree to which Internet Studies contribute to approaches to research, creating new ways to study traditional phenomena as well as study the Internet as an object of inquiry. For example, link studies (De Maeyer, this issue) can be used to study such traditional topics as social movements, but also open up new approaches to the study of Internet-centric questions, such as whether technical change is democratizing the production of information. The Internet and Web also provide a greater capability for, and value to, longitudinal studies, as argued by Brügger (this issue). Lori Kendall (2011) has developed related aspects of this theme.

A recognition of the need for multi-method approaches, in light of the weaknesses of particular methods, has also reinforced traditional approaches to research, including, for example, strongly philosophical explorations of online identity. Recent work, for example, takes up philosophy of mind, Lockean and Kantian theories of identity, as well as phenomenology and narrative theories of identity, and points to an emerging consensus on how we are to understand online identity – that is, one that counters earlier postmodernist celebrations of the fragmented, multiple self that was part of the 1990s ferment (but also largely unhelpful dualisms) of Internet Studies (Ess, 2012).

As a further example: within what is arguably the single most important new domain of Internet Studies, namely, research on mobile and locative Internet use, as focusing on

our rapidly expanding uses of Internet- and GPS-enabled digital devices such as smartphones and tablets, Rich Ling (2012) has pointed out the importance of taking up specific threads of this research in light of earlier work on both digital and analogue photography as their own fields of well-established study. Both of these examples reinforce our first point here regarding the sorts of longitudinal studies that are increasingly possible and important in Internet Studies. That is, they highlight the continuing value of traditional research approaches, as well as further reinforce how ongoing developments in Internet technologies and uses entail transforming the objects of inquiry for Internet Studies. Indeed, there is an important, specific intersection here: longitudinal studies tend to highlight continuities between our online and offline expressions of identity – continuities further brought forward in both this recent philosophical work and in Ling's observations.

These developments thus complement our comments above regarding enduring topics of inquiry, as well as further contribute to the identity of Internet Studies more broadly, as we discuss below.

Definitional ferment

Debate over the terminology of the field is not unique to Internet Studies, but it is an important feature. Internet researchers even disagree over the definition of the Internet, and the contours of the field of Internet Studies (Dutton, 2013). Bechmann and Lomborg's (this issue) close analysis of users as active agents and correlative forms of 'value creation' in industry-centric and then user-centric studies, helps disambiguate core terms and concepts – and further brings into focus domains of needed research in social media as one of the most prominent areas of Internet Studies. However, any multidisciplinary field is likely to face issues over the definition of core concepts, and Internet Studies is not an exception. Ideally, this ferment can keep the field from becoming entrenched in disciplinary echo chambers that cut off new lines of inquiry, such as those suggested by Bechmann and Lomborg.

A developing identity

The study of the Internet has long been undertaken by researchers who identify themselves as students of 'new media', 'social informatics', 'Web Science' and many other labels but not 'Internet Studies'. A degree of fragmentation remains prominent with the ease of establishing new journals and networks, but there is some promise that a more converged identity is developing over time, particularly with the rapid growth of the field. One of the editors of this special issue is actually a professor of 'Internet Studies'. The volume of research is mushrooming, as mapped broadly by Peng et al. (this issue) and by Bechmann and Lomborg (this issue), and in particular areas of research, as Campbell (this issue) and Brügger (this issue) demonstrate for religion and web historiography as domains within the field. The same is evident for Daniels (this issue) on racism and Fuchs and Dyer-Witheford (this issue) on Marxian approaches. Van Eeten and Milton Mueller (this issue) on governance also count as a topic constitutive of the field and thus our identity, which is deepening and broadening. This growth is tracking the

increasing significance of the Internet across the world and sharpening the identity of Internet Studies as a field in the making, albeit still contested from many mainstream disciplinary and alternative interdisciplinary standpoints.

Conclusion: We're not in Kansas any more

Yuan and Daniels (this issue) provide a strong call for more global and comparative research that challenges universal assumptions frequently made from Western cultural perspectives. Internet Studies have taken shape over decades, but the first meeting of what would become the Association of Internet Researchers (AoIR) was certainly one defining moment for the field. It took place in 2000 in Lawrence, Kansas, and surprised all those who organized and attended the event by attracting over 200 participants to this small Midwestern college town.

As fully intended and fostered by AoIR since this inception, it is clear from the growth of the field and the globalization of Internet Studies that – as Dorothy in 'The Wizard of Oz' so aptly put it – 'we are not in Kansas any more'. Internet Studies has moved on to include thousands, rather than hundreds. Also the early work in the field, which was often based in North America or the Western world, has been balanced over time by a rising level of research and publication from other regions. Nevertheless, Internet research is lagging behind the diffusion of the Internet, where Asia has already overtaken North America and Europe. The global nature of the Internet world is a step toward the realization of its potential, but it is creating a major challenge for the field to become more international in its research and cultural perspectives.

At the same time, these increasingly global perspectives go hand-in-hand with further developing ever-more sophisticated and fine-grained approaches – both in our research and in our reflections – to more local phenomena. To recall TS Eliot, in the last of *Four Quartets* of *Little Gidding*: 'We shall not cease from exploration. And the end of all our exploring will be to arrive where we started and know the place for the first time'. As Dorothy further learned, these outward and more encompassing journeys enable us to return to our origins and better know the value of home. We very much hope that the work collected here will contribute to our ongoing explorations, both local and global, in part by providing us with what we think of as, however imperfect and necessarily open to revision, a better and more reliable map and guide than we've had before.

Acknowledgements

We would like to express our gratitude to an extensive number of colleagues who submitted their work to this special issue and undertook the difficult challenge of serving as reviewers. Our ambitions for this issue – namely, to collect some of the most current and authoritative work across what is an exploding field of Internet Studies – made our reviewers' work unusually challenging.

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