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AUSTRALIAN INTERNET HISTORIES: IT'S TIME

Abstract

Since its beginnings in the 1960s, the Internet has grown steadily, metamorphosised in many surprising ways, and now is central to Australian society and media. As a relatively new medium, we still know little about its histories. This article discusses the emerging field of Internet histories, which as yet has surprisingly few connections with the relatively well-established enterprise of media histories. We look at key features of the development of the Internet in Australia, discuss international scholarly work on Internet histories, and, in the context of this special issue, consider the research agenda ahead.

Remembering the Internet

In 2009, the Internet marked its 40th birthday, and the Australian Internet turned 20 years old. As well as provoking celebrations and publicly shared memories, Internet history finally achieved some visibility. As befits a young medium, for its first few years, there were very few histories of the Internet. Internet pioneers and participants had been responsible for stories, chronologies, interviews, and some fledgling histories. In the Internet's fourth decade, in the spirit of the medium, a serious request for comment (RFC) was put out. Some of the key organisations responsible for the formation and consolidation of the public Internet commissioned their own official histories. The foremost body in the first years of the Australian Internet, Australia's National Research and Education Network (AARNET), commissioned business journalist Glenda Korporaal to write *AARNET: 20 Years of the Internet in Australia* (Korporaal, 2009).

As a project of public memory, the turn to history in the Internet comes also from a desire to make sense of and shape the present configurations and relations of this network technology, and in doing so summon up its futures. Because the Internet so underpins economic activity, is thoroughly enmeshed in social culture, provides the architecture and infrastructure for such a wide range of

domains of activity not least the formation of one's self, the fashioning and maintenance of personal relationships, the forging and rupture of social connection, and the actions of power, and as it is so consequential for public life, it is now at the centre of many debates and sites of decision making. A key debate at present, for instance, is over the free and open character of the public Internet. This has irrupted in the protests over the US anti-Internet piracy copyright legislation SOPA discussed by Kimberlee Weatherall in her paper. These protests were not confined to North America; many Australians vigorously raised their concerns as well. The uses of history are also at stake in the totemic National Broadband Network (NBN) project, raised by Melissa Gregg in her contribution. The immediate histories of Internet in the 1980s and 1990s matter greatly in the arguments over whether the NBN is necessary to envision and secure Australian connectivity, and so prosperity, for the future. The importance of research on Internet histories is underscored, as we have noted, by the high stakes in debates about what directions Internet media and technology should now take. A number of books invoke the need for revisionist work on the Internet (most recently, Curran, Fenton, and Friedman, 2012).

Our respective and joint interest in Internet histories is certainly piqued by these kinds of historical engagements and entailments, but also stems from a clear sense that this crucial media form lacked historical examination. So our call for papers solicited studies of any aspect of Australian *and* New Zealand Internet histories, with a sense that *Media International Australia* was a journal especially well-suited to the kind of culturally-attuned, media critical, historical evaluation we had in mind. *MIA* has featured a number of important special issues devoted to media history, or drawing heavily on historical study, criticism, and reasoning including: Australian media reception histories (no. 131, May 2009), 'Making Media Policy: Looking Forward, Looking Back' (no. 129, November 2008), '50 Years of Australian Television' (no. 121, November 2006), Australian media history (no. 99, 2001), and 'Cinema: Past and Present' (no. 80, May 1996).

Unfortunately we received no papers focussed on New Zealand Internet, despite some attempt to solicit contributions. This is a shame, as there are no doubt very interesting comparisons to be drawn between New Zealand and Australian Internet histories. So in the end while the Internet, more than perhaps any other, is a medium difficult to contain to the boundaries of one territory or nation, the issue is focussed on Australian Internet histories. The point of this introduction is to explain why this is useful, offering an overview and contextualization of the nascent area of Internet histories, and outlining the new opportunities as well as challenges they raise. Our introduction should be read in conjunction with the afterword provided by one of the leading international figures in Internet histories, Associate Professor Niels Brügger, director of the Centre for Internet Research, Aarhus University, Denmark.

Australian Internet and its International Paradoxes

The most obvious difficulty in studying and understanding the Internet at this time remains its dynamic, open-ended, and unfinished nature. The Internet is not alone in this; presumably the book, as another epochal technology, would look

dramatically different if viewed at different points when particular forms reigned — whether clay tablets, papyrus, parchment, manuscript, books from the printing press, or e-books. Compressed into the Internet's relatively short five or so decades are bewildering changes. The Internet of the 1970s and 1980s involved the forging of connections among different places, especially the connecting of the US-based Internet to countries in other regions, including Europe, Asia, Australia, and elsewhere (Clarke, 2004). In this period key technical features of the Internet developed, underpinning the TCP/IP (transmission control protocol/Internet protocol) standard. The important applications of the Internet were devised, implemented, and experimented with, from email and file-sharing, to proto-applications for finding files and documents, to games, chat and immersive, alternative reality spaces (such as MUDs and MOOs) that were precursors to Second Life. Also initiated were the distinctive decentralised characteristics of the technical innovation, social innovation, policy and regulation, and decision-making, represented in organisations such as the Internet Society. At the heart of this kind of distinctive Internet culture were notions of collaboration, sharing, and do-it-yourself ethics, seen in phenomena such as requests for comment, newsgroups, email lists, and other early Internet forms.

The formal start of the Australian Internet can be pinpointed as 1989, when the University of Melbourne became the first official connection to the US Internet. Yet already there were many developments in the overlapping areas of computing, telecommunications, data networks, personal and hobbyist computer, and various forms of media use from at least the Second World War that created the ground for this. In addition, we can point to the kind of prefiguring of the Internet that Matthew Allen notes in his paper for this issue on the discourses of Web 2.0, or that has been brought to notice in relation to cyberculture, in the collection *Prefiguring Cyberculture: An Intellectual History* (Tofts, Jonson and Cavallaro, 2004). The official inauguration of the Australian Internet occurred at approximately the moment the medium metastasised into the commercial, radical mass, customised medium it is more than two decades later. The role of government instigation, university and research institution funding, engineering, scientific, and technical led-innovation, was seriously displaced, if not eclipsed by the commercial forces that took hold of the Internet in league with an astonishing breadth of user groups. Relatively quickly, it encompassed the majority of the world's population, and now seriously allows the contemplation of universal, global connection of all individuals.

By the end of the 1990s, a great many regarded the Internet as synonymous with the World Wide Web. Shortly after the turn of century came a wave of new forms of Internet that caused us to reconsider its nature: blogs and wikis; broadband Internet; social networking systems; social media; the rise of mobile media, such as smartphones and tablet computers; locative media; the internalisation of Internet in everyday bodies, identities, and lives; ubiquitious computing. Of course, there are common elements to these new forms of Internet, and they remediate many earlier forms of online and other media. Yet their challenges to our understanding of media, culture, and society are considerable, causing older forms, accreted practices, and received understandings to fracture — with the

recast ideas and materialities still to eventuate. Conceptualising and undertaking histories of these shape-shifting Internets seem almost insurmountable.

In this light, the idea of the cultural specificity of Internet is promising, but also entirely necessary. Discerning what is distinctively 'Australian' about any particular medium is often difficult. Yet on even the most cursory inspection, it is clear that the Internet unfolds in distinctive ways in different social, cultural, and political settings. There is an intense renewal of interest in the concept of infrastructures that emphasises their contingent nature as assemblages. We learn about this from the consideration of earlier media forms, and how they unfold in Australia: the telegraph (Livingston, 2006); the telephone and telecommunications, as in Ann Moyal's evocative title *Clear Across Australia* (Moyal, 1984); the radio, in Bridget Griffen-Foley's definitive history of commercial radio (Foley, 2009), and wireless (Given, 2012).

More so than other media perhaps there is a paradox in the international nature of Internet. On the one hand, the institutions, reach, and nature of the technology of the Internet are global, indeed have extended the logics of globalisation, more than any other. On the other hand, to genuinely understand this mingling of nations, and the reworking of the grounds upon which associations among groups and individuals around the work now become possible, attention needs to be paid to the very different 'Internets' that evolve in particular settings, and their specific histories (Goggin and McLelland, 2009) — the conglomeration of which constitute the Internet as a totality.

Happily in recent years, the field of Internet histories internationally has started to grow. One obvious feature of the research literature is the many books on the development of the Internet in various countries and regions. Many of these have been published through Steve Jones' excellent Digital Formation series with Peter Lang. Not many of these books are Internet histories per se, but they do offer a much more complete picture of how the Internet has developed in different social and cultural settings — and as such provide a stronger base for historical work to come.

There is now also a small body of work that does explicitly undertake media and cultural historical studies of the Internet. The first of these books was Janet Abbate's excellent *Inventing the Internet* (Abbate, 1999), and the US has now spawned two other outstanding studies — Fred Turner's *From Counterculture to Cyberculture* (Turner, 2006) and Thomas Streeter's *The Net Effect: Romanticism, Capitalism, and the Internet* (Streeter, 2011). Historians of computing have also produced important studies, such as Ceruzzi's *Internet Alley* (Ceruzzi, 2005). Work on the histories of the web has been notably advanced by Niels Brügger, as represented by his 2010 volume *Web History* (Brügger, 2010). Brügger is noted for his rigorous theorization of the grounds of Internet history, especially in relation to the web, its archives, and methods — such preoccupation being a hallmark of his earlier work on media histories (Brügger and Kolstrup, 2002).

Some areas of the Internet have been of strong interest to researchers. Maureen Burns followed up her history of ABC Online (Burns, 2008), with a fine co-edited collection on public service broadcasting on the web that is a model for future work in other areas of Internet history (Burns and Brügger, 2012). The

development of the Internet as it pertains to American business is the subject of a thoughtful collection (Aspray and Ceruzzi, 2008). The area of gaming is another place where important work is being undertaken — for instance, with Melanie Swalwell and Jason Wilson's collection *The Pleasures of Computer Gaming* (Swalwell and Wilson, 2008).

This is not the place for an exhaustive reckoning of work on Internet histories, but this at least provides a context for the papers presented in this special issue. The first four papers can be seen as explicit attempts to tackle important aspects of Australian Internet histories.

In her 'Microcomputers' Usefulness in 1980s Australia', the product of a NSW State Library Fellowship, Melanie Swalwell documents a neglected yet crucial period. The shift of computers from their heritage as business machines and monumental installations in factories and buildings, into households and everyday life is pivotal what follows with the Internet. Swalwell's attentiveness to the way microcomputers were shaped and taken up by their users, is reminiscent of Leslie Haddon's important early work on computing and Elaine Lally's important study *At Home With Computers* (Lally, 2002). Vivienne Waller revisits a study of Internet diffusion in the following decade with her 'This Big Hi-Tech Thing": Gender and the Internet at Home in the 1990s'. She reminds us how gender mattered, but rather than just comparing the different experiences of males and females, she looks at how gender was constituted in meanings invested in particular uses or non-uses of the Internet. A relationship between gender and technology is identified that is more complex than the stories circulating at the time suggested, especially around the concept of 'technical mastery'.

Axel Bruns and Tim Highfield take us into the 2000s with their 'Confrontation and Cooptation: A Brief History of Australian Political Blogs'. Blogs involved an important reconfiguration of private and public spheres and media. Political blogs were a central, much noticed feature of the Australian blogosphere. Axel's and Tim's reflections will doubtless be expanded and challenged by other research such as Frances Shaw's work on Australian feminist blogs (Shaw, 2012). Matthew Allen provides a twofold service in his 'Gaining a past, losing a future: Web 2.0 and Internet historicity'. He is interested in how the Internet 'got a history', 'a narrative locating the current Internet in relationship with a past Internet'. Web 2.0, a notoriously vague term that provides 'a way of thinking about and understanding the Internet's origins, present and future possibilities', plays a central role, creating a periodization of Internet history. He also discusses the historicity of the Internet itself, an important contribution to an all too slim historiographic literature on this topic.

Our next four papers, tackle histories and their uses that press directly on contemporary developments, and enlarge our visions of the kinds of Internet histories that should be undertaken. Kimberlee Weatherall's timely 'The New (Old) War on Copyright Infringement, and how Context is Opening New Regulatory Possibilities' chronicles the extraordinary legislative moves on intellectual property and copyright in the US earlier this year, that galvanized

public activism in a way not often seen. Kimberlee is especially interested in the factors that have made it possible to conceive certain kinds of policy interventions that would have been unthinkable in the mid-1990s when the first wave of statutory compromise about intermediary liability was settled in many jurisdictions. Amanda Lawrence takes up a topic that pre-dates the Internet — grey literature. Previously a concern of librarians, scientists, government agencies and publishers, grey literature seemed well suited to the easier and cheaper production and distribution made possible by computers and the Internet. Yet this ease has also created new challenges and magnified the scale of old ones, especially those of storing and cataloguing a greatly expanded universe of information resources. Mark Balnaves' 'The Australian Finance Sector and Social Media: Towards a History of the New Banking' explores the importance of the web, then social media, to banking — and he theorizes the uncanny ways in which the forms of finance and relationships, on the other hand, and technology, on the other, are almost indivisibly fused. Melissa Gregg's 'A typical country town? How histories of media use matter in the NBN debate', turns to the current stage of Internet development in Australia. Melissa's subtle and carefully observed account sheds light on the media histories that informed the decision to grant the residents of the South Australian country town of Willunga high-speed broadband before the rest of the country. Sharing findings from ethnographic research conducted in Willunga during the 2011 NBN roll-out, she records 'an important moment in the history of internet use in Australia, indeed, when residents were quite conscious of their place in history'.

The final, afterword, in the special issue goes to Niels Brügger, and we are very grateful for his reflections upon this set of Australian papers on Internet history. Niels not only situates our work in international currents of thinking and research, but he makes an important and timely intervention into questions of e-research, digital humanities, and archives. These areas are broader and more fundamental than our topic here, but they are ones to which Internet histories, as Niels demonstrates, can make especially acute and prescient contributions.

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