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'Porn shock for dons' (and other stories from Welsh pre-web history)

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Introduction

This chapter examines the debates and discussions surrounding the internet that were apparent in printed news media in Wales between the start of 1990 and the end of 1996. The aim is to investigate the early social imaginary of the medium: the ways in which the internet was imagined and conceived within society's structures during an early stage in its adoption. Taylor (2004:23) notes that the social imaginary is "...often not expressed in theoretical terms, but is carried in images, stories and legends." It is reasonable to assume, therefore, that news reports and feature articles would have played a significant role in forming early ideas and predictions about the nature of online media.

In searching for early predictions about the internet, the early 1990s appear to be a particularly fruitful era to examine. These years are seen by Anderson (2005:4) as the medium's "defining years of public acceptance," and the number of articles written about online computing increased significantly during this period, reflecting the growth of the medium itself.

In investigating the internet's social imaginary as presented in newspaper reports, the aim is to avoid undue focus on one particular aspect of the medium's development within the country. It is hoped that, instead, the result will be a wide-ranging overview of various overarching themes, common not only to Wales but to many other nations during the early stages of internet adoption. The time period was not arbitrarily chosen; as Anderson notes, the internet started to gain widespread publicity in the very early 1990s, but by 1996, in the public imagination, the "internet" gave way to its dominant application, namely the "web." Specifically, extrapolating the statistics collated by Gray (undated) implies that by late 1996, more than 50 percent of the traffic on the US internet backbone was flowing to and from web servers – the web, at a technical and, arguably, a conceptual level, dominated the American internet from that point onwards.

Significant work has already been carried out on early imaginings about the internet, notably by Anderson's team at Elon University, North Carolina, jointly with the Pew Internet and American Life Project, which collected more than 4,000 examples of early predictions about the internet, published between 1990 and 1995 (Anderson, 2005; Elon University, 2014). This chapter both reflects and extends that work through a specific focus on a small, bilingual country in Western Europe. However, many of the

uncovered discourses are internationally relevant, and reflect the findings of others who have researched similar outputs within different national and linguistic cultures.

In its focus on Wales and, to some extent, the Welsh language, the work presented here complements Cunliffe's historical overview of the Welsh-language web (Cunliffe, 2009:96) and it explores a similar time period to Mackay and Powell's survey of early Welsh-interest newsgroups and discussion forums (Mackay and Powell, 1998), and Parsons' exploration of online Welsh diaspora (Parsons, 2000).

This chapter examines the challenges inherent in writing histories of the early internet, before outlining the methodology used in the work carried out on the internet in Wales. The key themes within the newspaper articles are then explored in some detail. The chapter concludes with a discussion of the methodological limitations of the approach used, and possible means of overcoming these.

Methodology

The research outlined here has a specific geographical focus on Wales, one of the four constituent nations of the United Kingdom (UK). Until the mid-1800s, the Welsh language (Cymraeg) was the only language spoken by the majority of the Welsh population (Morgan, 2001). It is a bilingual country, and in the 1991 UK census, 508,098 people in Wales, comprising 18.7 percent of its population at the time, claimed to be able to "speak, read or write Welsh," (Jones, 2011:13), a percentage which has grown, slightly, since. The vast majority of Welsh speakers are natively fluent in English. This bilingualism is reflected in this study, which looks at the representations of new media in both English- and Welsh-language newspapers/magazines between 1990 and 1996.

Wales has no indigenous daily newspaper that may truly be described as national in its reach: as Barlow et al. (2005:49) note, "[t]he press in Wales is essentially local." In the early-to-mid 1990s, the main daily morning newspapers with a specifically Welsh focus were the *Western Mail*, mostly read in south and south-west Wales, and the north Wales version of the Liverpool *Daily Post*, which in its editorial structure could be regarded as a Welsh edition of an English regional newspaper. The most widely read of these newspapers, the *Western Mail*, was published as a broadsheet throughout this period, and had a circulation of 60,251 during July-December 1996 (Williams and Franklin, 2007:123).

The Welsh-language press, however, can be described as having national reach. Both *Y Cymro* (a weekly newspaper, first published 1932) and *Golwg* (a weekly magazine, established in 1988) are read by Welsh-speakers throughout Wales. *Y Cymro* claimed to

have a circulation of 4,500 copies per week in 1996 (*Y Cymro*, 10 April 1996: 16) and *Golwg* a circulation of 3,275 during 1994-5 (*ibid*.)

All 1990-96 editions of the *Western Mail (WM)*, *Y Cymro* and *Golwg* were examined in detail to uncover the key trends and discourses from the time in the reporting of new media. In general, no electronic databases containing the publications from this era were available, so copies were searched manually: microfilm reels (for the *WM*) and physical paper copies (for *Golwg* and *Y Cymro*) were examined to isolate stories considered relevant to the internet and computer technology. The exception was the *WM* from mid-1995 onwards, which was available on CD-ROM: in order to search this, Elon University's (2006) list of 36 synonyms commonly used in describing the early internet was used to determine search keywords, and relevant stories were thus extracted.

A search for articles mentioning online computing was also made in the National Library of Wales' digitized archive of Welsh journals (NLW, 2014) but no relevant content was found to have been published between 1990 and 1996.

Once searching was complete, very short items, which typically appeared in "news in brief" columns, were discarded, and the remaining material was analyzed thematically. A deductive rather than an inductive approach was primarily used, in order to reveal the utopian and dystopian discourses prevalent within the news stories, and to enable the internet to be contextualized within the wider context of other infant media of the time.

While care has been taken to avoid bias in the selection of articles highlighted in this chapter, there are two inescapable limitations to the research. Firstly, the primary research data used is, necessarily, subject to editorial decisions made by newspapers and magazines. In the context of this chapter, it is difficult to overstate the role of newspaper editors in gatekeeping how the internet was to be depicted. Secondly, it is highly likely that many of the articles were published as a direct or indirect result of public relations activity by marketing companies. Without access to a contemporary archive of press releases, it is impossible to state with certainty how many articles would have originated it this way. It should be noted, though, that the 1990s were a time of significant growth in the UK's PR industry, and as it matured, its effectiveness in publicizing its clients' activities grew with it.

The challenges of pre-web history

To attempt to construct a history of any medium is impossible without contextualizing that history more widely. Inevitably, media are inextricably linked with the wider contemporaneous stories of the societies in which they are situated: indeed, Seaton (2004:143) inverts this argument by stating that, "... you can no longer do proper history without [considering media], because they change everything." The nature of

new, decentralized media, does however pose additional challenges. The internet cannot be described as institutionalized to any great extent, so unlike broadcast history, applying a narrative of institutionally-based developments to the internet would at best result in an incomplete, narrowly circumscribed account, and at worst would be misleading.

Various possible approaches for the then largely undefined field of web history have been explored by Brügger (2010), who also defines "web history" as a sub-field of "internet history." He takes the former's starting point as August 1991, the month in which Tim Berners-Lee released the earliest HTTP package for free online (Connolly, 2000), which once installed on networked computers, enabled them to become web servers. Such a definition of "web history" allows the web to be delineated both temporally and technically from the internet which hosts it, but as Brügger goes on to note,

[...] although the 'internet' and the 'web' are not the same, the two are intertwined. In many cases, the history of the internet must be part of historical analyses of the web because the internet is a precondition for the web; conversely, the history of the web can also shed light on the history of the internet.

(2010:2)

I tentatively use the term "pre-web history" to describe the contents of this chapter. The starting point for what I describe is definitively within the pre-web era, as the oldest publications examined date from the beginning of 1990. This date was chosen deliberately, because the earliest, widespread, public online discussions about Wales and the Welsh language appeared only a few months prior to this, through the establishment in 1989 of the Usenet group *soc.culture.celtic* (Jones, 2010). However, it is misleading to imply, even for the more technologically developed nations of the time, that early 1990s internet history can be perfectly cleaved into "pre-web" and "web" eras. The emergence of the web as an online application helped popularize the internet both as a supporting medium for the web, and as a new media form in its own right. As will be seen, in many reports from 1995-6 in particular, the internet and the web are conflated, and some journalists appear to be greatly confused about the separation between one and the other.

As Brügger also notes, many of the "... functionalities of the web are anticipated in media types and technologies which were invented years before the advent of the web, thus laying down the foundations of the web" (2010:2). It is true that the web can be historicized in many ways, and its pre-history is certainly older than that of connected computing in isolation. However, the novel, peer-to-peer, decentralized and personalized nature of the early internet is shared by the early web, and there are

obvious conceptual and technological connections between them. This also means that a key complicating factor of web historiography – specifically, the need to form a narrative of a medium which has largely lacked unifying institutions or authorities – is equally relevant to histories of the online pre-web period.

An alternative approach to chronicling Welsh internet history has been taken by ap Dyfrig (2014) who has attempted to build a crowd-sourced timeline of Welsh-language internet and web developments, from 1989 to the present day. The *Hanes y We Gymraeg* ("History of the Welsh-Language Web") project solicited contributions to a wiki-fied chronology during a four-week period in early 2013, and gathered over 150 entries during that time. The timeline is still available online (ap Dyfrig and various contributors, 2013), and the methods used can be replicated for many other web spheres. This represents a significant, and intriguing, addition to a web historian's methodological arsenal.

The internet and new media, 1990-6

In their study of the conceptualization of the internet during the late twentieth century, Fisher and Wright (2001) resurrect William Ogburn's previously unfashionable theory of cultural lag (Ogburn, 1964), which outlines a delay between a technology's distribution across society and the resulting social adjustment. They argue that such a lag gives rise to competing, charged discourses during the early period of a technology's adoption, and correspondingly they outline the dominant "utopian and dystopian visions" surrounding the internet at the time.

Very little material about the internet, or connected computing in general, was found in the periodicals published up until Autumn 1994. However, other complementary technologies gained widespread attention in the newspapers of the time. Even the concept of owning a home computer, let alone putting it online, was relatively novel in the UK in the early 1990s, and if we accept Ogburn's cultural lag theory, then we should expect to see polarized discussions surrounding personal computing in general during this time. The reports in the *WM*, in particular, do indeed show these extreme discourses at work, and they prefigure the discussions that were to appear, only a few months later, about the internet.

Fears about digital pornography are apparent in the *WM* from late 1993 onwards. Under the headline "Porn hits the playground" (Swift, P., 1993) the paper reported that schoolchildren in the county of Blaenau Gwent "were gaining access to computerised pornography from playground friends," and that explicit material originating on bulletin board systems was being copied onto floppy disks and circulated by pupils. The deputy head of Gwent police was quoted as raising concerns about a possible consequent

increase in sex attacks, and bemoaning the lack of parental awareness of children "watching porn in their bedrooms via their computer screens."

Pessimistic visions such as the one implied by the previous story – that of a new development corrupting its users – are, of course, by no means unique to the past twenty five years or, indeed, to media in general. Fischer's social history of the telephone in the US opens with an account of the deliberations of the Knights of Columbus Adult Education Committee, who, in 1926, examined the problems of contemporary developments as diverse as the automobile and broadcasting. They "…considered whether modern comforts "softened" people, high rise living ruined character, electric lighting kept people at home, and radio's "low grade music" undermined morality." (Fischer, 1992:1)

It is unsurprising, therefore, that fears about the lack of regulation of electronic media were not restricted to online systems, and Swift's report on computerized pornography has as its coda the concern that computer games could lead to "unnaturally aggressive behaviour in teenagers," which is echoed in the paper's reporting of a preview of a survey (later to be published as Griffiths and Hunt, 1998), which claimed that one in five adolescents were "dependent" on computer games (Jackson, 1993). Regulation of violent videogames was also a well-exercised contemporary debate: in particular, the release of fighting game *Mortal Kombat* in September 1993, which featured graphic decapitation scenes, led to an examination of whether the video games industry was facing a "moral crisis" (Swift, G., 1993). Computer games were also blamed by the *WM* for encouraging inactivity amongst children (Walford, 1993), and for triggering seizures in players that had photosensitive epilepsy (January 14th 1993, p. 2). None of these fears, however, were apparent in the paper's weekly *Family Life* supplement, which would at the time carry regular reviews of games console cartridges.

The arrival of direct broadcasting by satellite to UK homes also caused concerns, notably surrounding lack of regulation over content. In 1993, the WM would report fears over a "continental-style hard core pornography channel" originating from Denmark (Basini, 1993), highlighting its foreign otherness by depicting the UK government "[l]ike Canute struggling to turn back the tide" due to European Union harmonization regulations. Satellite technology was not, however, seen as wholly negative; its role in assisting language learning through viewing foreign news programmes in the classroom (Clarke, 1991), and in giving schoolchildren access to geospatial images to assist with their geography lessons also gained significant attention in the WM. The tension between satellite television as an external vehicle for moral corruption, and its role in constructing an idealized, multilingual, technologically aware educated citizen can perhaps be understood by the perception of the medium as existing outside previous norms. This metaphor of foreign otherness is also present in early reporting about the internet. Within the technologically deterministic, charged discourses that are present

during a period of cultural lag, it seems that external influences cause extreme dystopian or utopian outcomes – they are almost never viewed as neutrally benign.

The pathologies of new media

In his encyclopaedic social history of railway developments, Schivelbusch discusses the pathologies associated with the new transport medium as it spread through industrialized countries in the 19th century. These ranged from passengers being deafened by the noises caused by friction between the rails and the carriage wheels, to *maladie des mécaniciens* (Schivelbusch, 1978: 114) – the "engineers' malady," a phrase used to describe the pseudo-rheumatic pains observed in railway works.

Every medium, whether mechanical or electronic, brings with it its pathologies. During the 1990s, video games were seen as promoting sedentary lifestyles (Walford, 1993) and, for the first time, carried warnings against their use by individuals prone to photosensitive epilepsy. The internet, too, had its pathologies, but the examined articles usually frame these in moral, rather than physiological, terms.

Much of the early reporting about the internet focusses on the content accessible through the medium: in particular, and as seen in earlier reports about satellite television, the ease of access to pornography was highlighted as problematic. A typical account can be seen in a story entitled "Porn shock for dons," which recounts the case of a student at the University College of Wales, Swansea (now Swansea University) who used the main undergraduate mainframe computer to access pornographic material, reportedly causing the system to crash:

The 19-year-old student dialled the hard-core computer sex line in America from the university's multi-million pound system. College staff and students got a shock when they switched on and found sex acts including a striptease game being played on the screen. But as the video filth poured onto the university's computer banks, it caused a massive overload.

(Western Mail, 1994)

Though presented in a jocular style, with an associated cartoon showing a computer smoking a (presumably post-coital) cigarette and asking its user "How was it for you?" there is an undercurrent of unease in the report, particularly in its confused coda which states that "the Computer Misuse Act of 1989 made it illegal to possess computer porn" (Western Mail, 1994). The Act was actually passed in 1990, and the more relevant Obscene Publications Acts outlawed only specific forms of pornography regardless of whether they were found online or offline. This, perhaps, demonstrates the challenges

faced by reporters in attempting to précis this new medium to a public who were unlikely to have used it.

Misleading reporting of the internet did not, however, always go unnoticed. In a front-page story from 1995, under the headline "Internet subverted by sick anarchists" (Western Mail, 1995a), it was reported that an "information security expert" had found that the medium, "used by thousands of children and adults," contained information on cannibalism and murder. The pages in question had been placed online by members of a proto-hacktivist collective, Cult of the Dead Cow, and they appear to be either a provocation or, possibly, a spoof. The *WM*, though, was quick to editorialize the news, writing about the need to "regulate this new medium" (Western Mail, 1995b), alongside satellite television, "...to prevent corruption of children's minds." This response was critiqued in a reader's letter published a few days later, which took to task the earlier claim that the expert had "stumbled within seconds" upon the content, and pointed out that:

...with a rather conservative 200,000 [Usenet] messages a day, I hardly think that you could stumble across any particular message. On the contrary, as with everything on the Internet, you must be actively looking for certain areas ... and more importantly you must nearly always know where to look ...

(Hopkins, 1995)

Those conducting research into internet use during this period were also subject to newspapers skewing their interventions towards the poles of the debates surrounding the medium. In late 1995, Professor Harold Thimbleby, then of Middlesex University, presented at the British Association for the Advancement of Science his analysis of one of the earliest known search engines, which had been developed by one of his students, Jonathon Fletcher (Miller, 2013). His discovery that 47 percent of the most frequentlyrepeated searches made through the engine were for pornographic content was the main focus of the subsequent reporting, not only by the UK press (e.g. Connor, 1995) but also in Welsh periodicals. As with Mark Griffiths' work on computer games, Thimbleby's call for reflection about this new medium was largely ignored in the reportage. Y Cymro's political commentator, Catrin Iwan, framed Thimbleby's findings in opposition to a party conference speech by the then-leader of the British Labour Party, Tony Blair. Blair, who at the time headed the UK opposition parties, had stated that were he to be elected Prime Minister at the forthcoming general election, he would put in place an agreement, funded by the telecommunications company BT, to offer a laptop to every schoolchild. Conflating the fears over online pornography with other, unsourced, claims about child illiteracy, Iwan wrote in response:

Had Mr Blair persuaded BT to [...] persuade schoolchildren to read more books [...] I'd have been far more impressed! [...] Mr Blair would have been more responsible had he also drawn attention to the dangers of a system which opens the doors to such a large amount of information. [...] It also appears that pedophiles peddle their perversions [online] under the guise of child welfare groups.

(Iwan, 1995; author's translation)

As can be seen, polarized, charged discourses are evident in the discussions that surrounded the internet in Wales during the period in question. Those attempting to walk a middle ground between utopian and dystopian visions, such as Thimbleby and the letter-writer Hopkins, found themselves almost magnetically pulled towards the poles of the debate when their interventions were reported by the newspapers of the time.

Broadcasting Wales

Historians of radio and television within Wales have seen broadcasting as a key driver of the nation's self-conception. Davies' account of the BBC in Wales even claims that the country is "an artefact produced by broadcasting" (Davies, 1994, cited by Johnes, 2010: 1261). As Johnes notes, Davies does give convincing evidence for broadcast media's role in uniting the diverse social geographies of Wales, which are sometimes simplistically seen as consisting of an English-identifying east, a patriotic, industrialized south and a rural Welsh-speaking west.

It is perhaps not surprising, therefore, that much early reporting appears to understand the internet as a way of "broadcasting" Wales to the world. Of the articles examined in writing this chapter, the first feature piece to mention online conversations appears in Y Cymro in January 1993. It focusses on WELSH-L, an e-mail list devoted to conversations in, or about, the Welsh language, which was launched a few months previously. The article opens with a sampling of the topics discussed by its subscribers in the previous weeks: "What was the result of the rugby match between West and East Wales [two minor-league teams] over the weekend? What information is available on modern-day druids? What books are available for learning Welsh?" (Glynn, 1993; author's translation). Glynn then moves from the implicit framing of WELSH-L as an information source, and does goes on to note the peer-to-peer nature of the group's communications. However, the article's sub-headline, "Cyfrifiaduron yn 'siarad' am Gymru ar draws y byd" ("Computers 'talk' about Wales throughout the world") appears again to veer towards the language of broadcasting in its implication that the concept of "Wales", defined by its geography and language, is now being spread worldwide through a new medium. It could be argued that there is a similar subtext to the article's

boast that the most popular discussion topic on WELSH-L has been the resources available to learners of the Welsh language.

In fairness to Y Cymro's reporter, she was very far from being alone in failing to grasp the fundamental shift that was to occur online towards massively decentralized peer-topeer communication. The discourse of the "information superhighway," a term first used in 1983 to describe new cables that linked major US cities, entered the public consciousness following a speech given by the then US Vice President, Al Gore, to the American Television Academy (Unknown authors, 1994). Gore's speech, in which he announced a major US infrastructure investment in fiber-optic links, explicitly cited the case of an unnamed businessman who wished to buy into "...new technology to avoid ending up as 'roadkill' on the information superhighway." This provided a potent metaphor that was seized upon by thousands of commentators worldwide. By 1995, many of the articles about connected computing were devoid of terms such as "internet," or even "online": the superhighway was considered to be a convenient, universally understandable shorthand for the perceived technological revolution. Nevertheless, it should be noted that the term "superhighway" once again implies a broadcast-era metaphor – it evokes a cultural industrial complex sending its outputs to largely passive consumers via expensively constructed infrastructures.

Academic futurologists, too, were drawn towards broadcast metaphors in their attempts to understand the internet. Negroponte's seminal *Being Digital* (1995) is still seen as a pioneering technophilic account of the move from the material towards the informational. However, even that work still sees news sources, albeit personalized, as being directed from central sources towards consumers in the form of a "Daily Me;" Negroponte says little about the inversion of power that was later to occur when individual internet users realized their ability to post their own updates online. As Kelly (2005) notes, when broadcasters launched their initial web presences in the mid-1990s, they too saw the internet merely as an extension of their existing linear channel offerings. Even the web's founder was moved to state, during these early years in the medium's development, that, "I had (and still have) a dream that the web could be less of a television channel and more of an interactive sea of shared knowledge" (Berners-Lee, 1995).

The internet was later to cause a paradigm shift in the newspaper and periodical industry by enabling such "shared knowledge" to be disseminated through instant responses to articles, but journalists showed little awareness of this in the Wales of the mid-1990s. Writing in *Golwg*, Robin Gwyn saw the internet merely as a way of reinforcing the magazine's existing global reach, by claiming that "[e]ventually, it should be possible for *Golwg*'s readers in Australia to "receive" their copy by connecting a credit card sized computer to a local terminal, and watch video versions of the stories" (Gwyn, 1994; author's translation). There is little or no speculation, in any report, that the

internet might eventually become a home to news-breaking, fact-checking citizen journalists. As in so many other countries at the time, writers within the "artefact produced by broadcasting" seemed keen to imagine the world of online communication as yet another broadcast medium.

We're on the interweb!

From 1995 onwards, the articles about online computing start to explicitly mention the world wide web. As chronicled by Elon University (2006), the synonyms used to describe connected electronic systems multiplied in the early 1990s, and the term "web" was often used interchangeably with other related concepts, such as the "information superhighway" (or "infobahn"), and various terms containing "cyber..." as their first element.

This terminological confusion is reflected in much of the contemporary reporting, and can even be found within the newspapers' editorial content, exacerbated by the misinterpretation of some terms when they were translated into Welsh. Articles from Y Cymro appeared online for the first time on March 1, 1996, through a website set up by its owners, North Wales Newspapers (NWN). For much of that year, though, the paper vacillated over the best way to describe its web presence. Y Cymro's initial announcement that it was "on the web" described the NWN website as "our e-mail address..." (March 6 1996, p. 3). The following month, the same web address appeared on Y Cymro's masthead (April 10 1996, p. 1) under an exhortation for readers to "Remember: we're on the web." By December, the masthead also contained an e-mail address for correspondence, correctly described as such. The NWN web address, however, was now headlined with the term *rhyngwe*, a portmanteau which can be translated, literally, as "interweb." Though this appears to be simply due to journalistic confusion between the web and its supporting medium, it does demonstrate some of the challenges faced in trying to coin a new terminology for a new medium in a new language. Whereas early articles (e.g. Gwyn, 1994) would often make no attempt at translation, and simply insert words such as "E-mail" or "cyberspace" in the middle of a Welsh-language feature, later pieces saw the development of Welsh phrases for key concepts. Most of these followed the conceptual bases of the corresponding English terms (the commonly used *rhyngrwyd*, for example, is a direct translation of "internet") but there was some evidence of adaptation, notably in the translation of "information superhighway" as archdraffordd wybodaeth, the highway being replaced in Welsh with its localized counterpart, the motorway.

"Backwards into the future"

The extent to which new technologies should be framed in terms of the developments that preceded them forms an open, and controversial, historiographical debate. In the

context of medium studies, Marshall McLuhan was adamant that "[w]hen faced with a totally new situation, we tend to attach ourselves to the objects, to the flavor of the most recent past. We look at the present through a rear-view mirror. We march backwards into the future" (McLuhan and Fiore, 1967: 74-5). In a later interview with *Playboy* magazine, he expounded further on what he saw as a human tendency to conceptualize new developments in terms of what was already well-understood. He said:

Most people [...] still cling to what I call the rearview-mirror view of their world. By this I mean to say that because of the invisibility of any environment during the period of its innovation, man is only consciously aware of the environment that has preceded it; in other words, an environment becomes fully visible only when it has been superseded by a new environment; thus we are always one step behind in our view of the world.

(McLuhan, 1969)

Though a characteristically gnomic utterance, it is difficult not to draw parallels between McLuhan's claims and Ogburn's near-contemporaneous idea of cultural lag. It is perhaps only now that we have begun to make the internet "fully visible." Even so, some of the tropes surrounding Welsh use of the internet, particularly those which see Wales as having or needing a defined online identity defined by geography and, sometimes, language, are as ubiquitous now as they were in the early 1990s. During the writing of this chapter, the Welsh Government formally launched two top-level domains for Wales. "I'm so pleased," the Welsh First Minister, Carwyn Jones, was quoted as saying, "that we will be able to register domain names in .wales and .cymru – we will... have a way of using our websites... to reflect the identity we feel in our hearts" (quoted by Williamson, 2014). There is, perhaps, little to distinguish Jones' words from the earlier utopian hopes that emerged around *WELSH-L*, when for the first time "computers talk[ed] about Wales throughout the world." (Glynn, 1993).

It could be argued that the societies that were first exposed to the internet in the early-to-mid 1990s have now passed through the period of cultural lag. However, if it is true that the internet, as a supporting *infrastructure*, is now often represented in a more nuanced manner than before, the same cannot often be said about newer manifestations of online *content*, particularly social network sites. As boyd and Ellison (2007) point out, Social Networking Systems (SNS) first came into being in 1997, shortly after the web began to dominate the internet, but they reached ubiquity only as recently as the early 2010s. Cultural lag has been evident in recent UK reporting of the perceived dangers of social media; in particular, Luce (2012) recounts the fears apparent in newspaper accounts of a cluster of suicides that occurred around Bridgend, South Wales, in 2008. During the first six months of that year, 20 people from the area, aged between 15 and 29, died by suicide; many of them followed each other on sites such as

Facebook, Bebo and MySpace. Despite the weakness of the ties between the individuals, newspapers were quick to claim that the use of SNS was a contributing factor in the deaths, with a widely reported agency report (cited by Cadwalladr, 2009) even linking some of them to a "cyber-suicide ring." This claim was later discredited, and much of the newspaper reporting surrounding the deaths was heavily criticized by South Wales Police and community leaders. In the context of the reports previously presented in this chapter it is, perhaps, telling that the reportage of the Bridgend suicide cluster grasped for decades-old metaphors. Bebo, in particular, would have been widely used during this time by schoolchildren throughout Wales and beyond, but the "cyber" concept used in reporting the Bridgend suicides carries with it an older connotation, as outlined by Barlow (1996) – that of an untamable, alien "home of the mind," which cannot be grasped by those who do not inhabit it. While driving through a new social media landscape, it would seem that newspapers saw only an unfamiliar cyberspace, dimly, through their rearview mirrors.

Conclusion

The work presented here has attempted to avoid a linear, institutional narrative of early internet developments by focusing instead on how a social imaginary was constructed around the new medium. As it relies on printed reports published during a relatively early stage of the internet's enculturation, the methodology can also be applied to the development of other nations' online spheres, provided that newspaper or periodical archives exist for the relevant periods.

Following Ogburn's cultural lag theory, it is perhaps unsurprising that euphoria and disquiet about the new medium are seen in many of the reports. The perceived advantages of near-instantaneous and cheap worldwide interpersonal communication, and the benefits of the "information superhighway" to businesses are tempered by fears over unrestricted access to inappropriate or morally questionable content.

Similar uncertainty is evident in the articles' exploration of the shape of Wales online. The ability to spread a somewhat nebulously defined Welsh culture online was welcomed in articles which, sometimes in the same paragraph, acknowledged that there would also be an opposite cultural flow. Often framed in terms of the Welsh language itself, many reports called on Welsh people to act and ensure an online presence and visibility for Wales. Cunliffe (2009) theorized such actions as "linguistic resistance" to the online spread of English. The genesis of such a movement can perhaps be seen in statements such as those by the then European Member of Parliament, Eluned Morgan, who wrote in *Golwg* that "Welsh should have a voice in setting the foundations for the use of the new technologies" (Morgan, 1995; author's translation)

While this chapter has investigated various historical narratives with an attempt to avoid centralism in a history of the internet, there are limiting factors which should be taken into consideration. Newspaper gatekeeping and the influence of public relations practitioners in some of the stories, especially when combined with the limited understanding of new media amongst many journalists at the time, may have the effect of reintroducing an institutional bias to the work. It is evident that a single approach to internet history can, evidently, only tell part of the story of the emergence of online spaces. However, it is believed that the methodology outlined in this chapter is a useful way to carry out geographically bound discourse analyses of the internet's social history, and can reveal much about the way the medium was imagined in its earliest days.

Further reading

An overview of the information "society" and "superhighway" metaphors in the European context can be found in Schulte, S. R. (2009)'s paper "Self-Colonizing eEurope: The Information Society Merges onto the Information Superhighway", in vol. 1, no. 1 of the *Journal of Transnational American Studies*. Barbrook's *Imaginary Futures* (Pluto Press, 2007), provides an excellent corrective to early utopian visions surrounding online culture. Johnes' *Wales since 1939* (Manchester University Press, 2012) gives a comprehensive yet pithy account of the modern history of Wales. Accounts of the development of the internet in Wales during the period in question can be found in Mackay and Powell (1998), Parsons (2000) and Jones (2010). Researchers wishing to carry out their own work into the time period in question here should be guided towards relevant newspaper archives, but Google's archive of the Usenet group *alt.internet.media-coverage* (searchable by date as well as topic) may also be of interest to researchers within specifically Anglophone contexts. It is accessible via https://groups.google.com/.

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