Misunderstanding the Internet

Second edition

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and Des Freedman

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"Fully updated, the second edition of *Misunderstanding the Internet* speaks more clearly and critically than ever to today's hyperbolic claims, utopian and dystopian, about the internet. By presenting a wealth of data that problematises easy claims of democratisation, the authors issue an urgent call to action to embed public values in the internet of the future."

Sonia Livingstone, *Professor of Media and Communications, London School of Economics and Political Science*

"By updating their authoritative work on the Internet, James Curran, Natalie Fenton and Des Freedman have done scholars, students and concerned citizens an enormous favor. *Misunderstanding the Internet* remains the single most important book for someone to read to grasp the history and political economy of the digital revolution."

Robert W. McChesney, *Professor of Communication, University of Illinois at Urbana-Champaign*

"This is a very important book, it offers critical insights to contemporary political and economic power, the role of social media and how mass publics are informed, correcting many false assumptions - an absolute must read for students and academics in social and political sciences, as well as media and communications."

Gregory Philo, *Professor of Communications and Social Change, University of Glasgow*

The growth of the internet has been spectacular. There are now more than 3 billion internet users across the globe, some 40% of the world's population. The internet's meteoric rise is a phenomenon of enormous significance for the economic, political and social life of contemporary societies.

However, much popular and academic writing about the internet continues to take a celebratory view, assuming that the internet's potential will be realised in essentially positive and transformative ways. This was especially true in the euphoric moment of the mid-1990s, when many commentators wrote about the internet with awe and wonderment. While this moment may be over, its underlying technocentrism – the belief that technology determines outcomes – lingers on and, with it, a failure to understand the internet in its social, economic and political contexts.

Misunderstanding the Internet is a short introduction, encompassing the history, sociology, politics and economics of the internet and its impact on society. This expanded and updated second edition is a polemical, sociologically and historically informed guide to the key claims that have been made about the online world. It aims to challenge both popular myths and existing academic orthodoxies that surround the internet.

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Communication and Society

Series Editor: James Curran

This series encompasses the broad field of media and cultural studies. Its main concerns are the media and the public sphere: on whether the media empower or fail to empower popular forces in society; media organisations and public policy; the political and social consequences of media campaigns; and the role of media entertainment, ranging from potboilers and the human-interest story to rock music and TV sport.

Preface

This book is a spin-off from a research programme at Goldsmiths, University of London generously funded by the Leverhulme Trust. The programme has resulted in numerous specialist books, journal articles and computer applications. This book is different: an overview rather than a monograph. While it was prompted and informed by our empirical research, it grew out of our background reading of the relevant literature on the internet, and of our increasingly sceptical response to it.

So what began as a briefing for ourselves grew into a book-length overview, indeed almost a maverick textbook. But technology (and its uses) evolves quickly. The first edition of *Misunderstanding the Internet* was well received, and has been translated into Chinese and Korean. This encouraged us to return to the book some three years later, and to revise it in a way that takes account of both developments in the internet and research about it. The internet continues to transform our communicative experiences from shopping, to chatting to friends, to searching out information, to political activism. Social media has expanded exponentially in reach, transforming personal relationships and business. From social movements such as Occupy Wall Street and the Indignados in Spain to protests against the closure of a public park in Istanbul, the internet facilitates the sharing of our experiences and the building of solidarities across the world. Advances in mobile technology ensure we are ever more tuned in and connected at all times. At the same time, all of our digital comings and goings are tracked and our data collected to sell on to those who have become more sophisticated at profiting from it. We now know that digital surveillance is far more common-place than we ever thought, and privacy is an ever more important concern. And all the while, multi-media conglomerates continue to replicate patterns of dominance of legacy media. The internet is so much a part of our daily lives that we rarely stop to think what it might mean for our own identities, our relationships, our working lives, our institutions, our citizenship, our democracies. This second edition of *Misunderstanding the Internet* hopes to persuade readers, once more, to do just that.

This second edition has not only been updated in detail with significant rewrites of chapters, but has also increased substantially in size to address new developments and debates.

Although each chapter has been written by one by-lined author, it has been commented upon and even edited by the two others. The book is a collective effort, and a shared pleasure.

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James Curran

In the 1990s, leading experts, politicians, public officials, business leaders and journalists predicted that the internet would transform the world.[1] The internet would revolutionise, we were told, the organisation of business, and lead to a surge of prosperity (Gates 1995).[2] It would inaugurate a new era of cultural democracy in which sovereign users would call the shots, and old media leviathans would decay and die (Negroponte 1996). It would rejuvenate democracy – in some versions by enabling direct e-government through popular referenda (Grossman 1995). All over the world, the weak and marginal would be empowered, leading to the fall of autocrats and the reordering of power relations (Gilder 1994). More generally, the global medium of the internet would shrink the universe, promote dialogue between nations and foster global understanding (Jipguep 1995; Bulashova and Cole 1995). In brief, the internet would change society permanently and irrevocably, like the invention of print and gunpowder.

These arguments were mostly inferences derived from the internet's technology. It was assumed that the distinctive technological attributes of the internet – its interactivity, global reach, cheapness, speed, networking facility, storage capacity and alleged uncontrollability – would change the world beyond all recognition. Underlying these predictions was a widely shared internet-centrism, a belief that the internet was a determining technology that would reconfigure all environments.

These predictions gained ever greater authority when, seemingly, they were fulfilled. The internet entered every domain of social life, changing the way people searched for information, communicated, met, shopped and spent their time. The notion that anyone could live their life entirely offline seemed so absurd that it became the subject of satire (Portlandia, n.d.). Indeed, 15-year-olds in economically advanced countries spent around three hours online on a typical weekday in 2013 (OECD 2014: 13).

Numerous experts continued to affirm in the 2000s that the internet was transforming society. The internet was supposedly engendering a shift from passive consumption to active participation (Shirky 2010); causing markets to fragment (Anderson 2006); and rendering society more open and egalitarian (Leadbetter 2009). The 2011 popular uprisings in the Middle East – immediately hailed as the 'Twitter Revolutions' – seemed to offer final confirmation that the internet was a

transformative force. As the world-famous sociologist, Manuel Castells, exulted in a book hymning the power of the internet: 'dictatorships could be overthrown with the bare hands of the people' (Castells 2012: 1).

Thus, it seemed as if only technophobes, stuck in a time warp of the past, remained blind to what was apparent to everyone else: namely that the internet was remaking the world. But as pronouncements about the internet's impact shifted from the future to the present tense, and became ever more assured, some analysts had second thoughts. In 1995, Sherry Turkle had celebrated anonymous online encounters between people on the grounds that they could extend imaginative insight into the 'other', and forge more emancipated sensibilities (Turkle 1995). Sixteen years later, she changed tack. Online communication, she lamented, could be shallow and addictive, and get in the way of developing richer, more fulfilling interpersonal relationships (Turkle 2011).[3] Another apostate was the Belarus activist Evgeny Morozov. His former hope that the internet would undermine dictators was, he declared, a 'delusion' (Morozov 2011). There were also others whose initial, more guarded belief in the emancipatory power of the internet turned into outright scepticism. Typical of this latter group was John Foster and Robert McChesney who wrote in 2011 that 'the enormous potential of the Internet . . . has vaporized in a couple of decades' (2011: 17).

We are thus faced with a disconcerting difference of expert opinion. Most informed commentators view the internet as a transforming technology. Seemingly, their predictions are being confirmed by events. Yet a confident minority decries the majority view as perverse. Who – and what – is right?

We will attempt to sketch an answer in this introductory chapter by identifying four key sets of predictions about the impact of the internet, and then check to see whether they have come true.[4] This will lead to a brief consideration of the conditions that result in the internet having a greater or lesser effect.

Economic transformation

In the 1990s, it was widely claimed that the internet would generate wealth and prosperity for all. This was the central conclusion of a long article in *Wired*, the bible of the American internet community, written by the magazine's editor, Kevin Kelly (1999). Its title and standfirst set the article's tone: 'The Roaring Zeros: The good news is, you'll be a millionaire soon. The bad news is, so will everybody else'.

This was merely one exuberant example of the speculative fever that took hold of mainstream media. 'The Internet gold rush is under way', declared the *Seattle Post-Intelligencer* (6 December 1995). 'Thousands of people and companies are staking claims. Without a doubt there is lots of gold because the Internet is the beginning of something immensely important.' Across the Atlantic Ocean, the same message was being proclaimed with undisguised relish. The 'fortunes' of 'Web whiz-kids', according to the *Independent on Sunday* (25 July 1999), 'reduce National Lottery jackpots to peanuts and make City bonuses seem like restaurant tips'. Punters could become rich too, it was promised, if they invested in whiz-kids' IPOs (initial public

offerings). This invitation to personal enrichment was backed up by authoritative reports in the business press that the internet would generate increased prosperity. 'We have entered the Age of the Internet', declared *BusinessWeek* (October 1999). 'The result: an *explosion* of economic and productivity growth first in the U.S., with the rest of the world soon to follow' (emphasis added).

Bullish comments about the dynamic economic impact of the internet subsided when the dotcom bubble burst in 2001, but were reprised from the mid-2000s onwards. While this second wave of prophecy was not as flamboyant as the first, its general tenor was still strongly upbeat. One standard argument was that past predictions had been wrong only because they had been premature. But the internet is now moving allegedly into its full deployment phase, and coming into its own (Atkinson et al. 2010). Indeed, as time passed and memory of the internet crash faded, forecasts tended to become ever more optimistic (e.g. OECD 2014).

Central to this resilient prophetic tradition is the idea that the internet and digital communication has given birth to the 'New Economy'. While this concept is mutable and sometimes opaque, it is associated with certain recurrent themes. The internet provides, we are told, a more efficient means of connecting suppliers, producers and consumers. It is a disruptive technology that is generating a Schumpeterian wave of innovation, and attendant surge of productivity. And it is contributing to the growth of an information and communication economy that will compensate for the decline of manufacturing in de-industrialising, Western societies.

At the heart of this theorising is a mystical core (which was especially prominent in the 1990s). The internet is supposedly changing the terms of competition by establishing *a level playing field* between corporate giants and small companies. As Steve Jobs asserted in 1996, the internet is an 'incredible democratiser', since 'a small company can look as large as a big company and be accessible' (cited in Ryan 2010: 179). This has supposedly renewed the dynamism of the market, and unleashed a whirlwind force of creativity and growth. The internet has also created new market opportunities by enabling small start-ups to bypass dominant retailers and service agencies. It has lowered costs and extended exports, enabling new producers to prosper by catering for niche markets. More generally, the internet favours, we are told, horizontal, flexible network enterprise, able to respond rapidly to changes in consumer demand, unlike heavy-footed, top-down, Fordist, giant corporations. 'Small' is not only nimble but empowered and gifted with opportunity in the internet-based New Economy.

The presentation of these themes is often cloaked in specialist language. To understand its insights, it is seemingly necessary to learn a new vocabulary: to distinguish between portal and vortal, to differentiate between internet, intranet and extranet, to grasp the meaning of phrases like 'click-and-mortar' and 'data-warehousing', and to be familiar with endless acronyms like CRM (customer relationship management), VAN (value-added network), ERP (enterprise resource planning), OLTP (online transaction processing) and ETL (extract, transform and load). To be part of the novitiate who understands the future, it is first necessary to master a new catechism.

It is not easy to assess whether this vision of the future has come true because the economic impact of the internet is ongoing and incomplete. An added complication arises from the fact that the internet was preceded by earlier electronic data interchange systems like the telex and fax, and widespread business use of computers for data analysis (Bar and Simard 2002). Change has been cumulative.

Even so, it is possible to make a preliminary assessment. The first conclusion is that the internet has indeed modified the nerve system of the economy by changing the interactions between suppliers, producers and consumers, the configuration of markets, the volume and velocity of global financial transactions, and the nature of data processing and communication within business organisations. The internet has also given rise to the creation of major corporations like Google, and assisted the growth of lucrative enterprises like online gaming.

Perhaps the aspect of this economic restructuring that has most affected everyday material life is the rise of online retailing. In 2013 almost 50% of the adult OECD population bought something online. However, this average conceals very large variations between countries. Within the OECD bloc of affluent nations, the British and Danes are the most disposed to shop online: over three quarters did so in 2013. Yet, in the same year, only 10% of people in Turkey and 2% of people in Mexico ordered goods and services online (OECD 2014: 42).

While many now shop online, the *volume* of online shopping is still small in relative terms. This is for two main reasons: online sales take place mainly within nations rather than between nations, and are uneven across different retail and service sectors. To put the rise of online selling in perspective, e-commerce sales made up just 6.5% of total retail sales in the United States in 2014 (Bucchioni et al. 2015). By comparison, e-commerce accounted for 4% of total sales in Europe in 2007 (European Commission 2009), though the proportion will have risen since then.

Online sale of goods and services will continue to expand in the future. The relatively recent inroads made by Uber, which connects drivers with passengers, and Airbnb, which connects hosts with paying guests, are examples of an ongoing transformation. Factors holding back the rise of online retailing will diminish in importance over time. Even so, the obstacles in the way of an international online revolution – low internet access in some countries, language difficulties, security fears, differences in broadband speed and in the reliability of postal services, national variations in custom procedures and taxes, local corruption, differences of legislation respecting the cross-border transfer of personal details, the high cost of insurance and much else besides – remain formidable (Swedish National Board of Trade 2012; cf Groot 2011). There will also continue to be people who enjoy offline shopping, want to try out a product before purchase, or wish to buy without delay.

The second conclusion is that the internet has not been a geyser of wealth cascading down to all. There was an enormous increase in the stock market value of internet companies between 1995 and 2000. But this was fuelled by ignorance and the credit boom produced by financial de-regulation in the mid-1990s (Blodget 2008; Cassidy 2002). The bubble was exacerbated by financial incentives that

encouraged investment analysts to recommend unsound investments in the internet sector (Wheale and Amin 2003), and by a group-think belief that conventional investment criteria did not apply to the New Economy (Valliere and Peterson 2004). In the event, most dotcom start-ups that attracted heavy investment folded without ever making a profit (Cellan-Jones 2001). These losses were so severe that they helped to cause a downturn of the US economy in 2001.

During the late 1990s and early 2000s, there was a rapid diffusion of internet use in the West. But this did not give rise to a sustained economic boom. Quite the contrary: the credit crunch of 2007 and the financial crash of 2008 marked the beginning of the longest recession of the Western economy since the 1930s (Blinder 2015; Bordo et al. 2013; Cattaneo et al. 2010). More generally, the internet era was a time of deepening economic inequality when the rich became much richer, and the incomes of many others flat-lined or even declined (Piketty 2014; Cingano 2014; OECD 2011; Stone et al. 2015). Manifestly, the internet was not a fountain of prosperity that reached all.

The third, related conclusion is that the internet's anticipated contribution to the economy was greatly overstated. Detailed, authoritative estimates of the internet's contribution range from 0.8% to 7% of GDP (OECD 2013: 19). Thus, a Harvard Business School study, using an employment income approach, concluded that the advertising-supported internet contributed approximately 2% to the US's GDP, or perhaps 3% if the internet's indirect contribution to domestic economic activity is taken into account (Deighton and Quelch 2009). An alternative calculation estimated that business-to-consumer e-commerce in Europe accounted for 1.35% of GDP (Eskelsen et al. 2009). A McKinsey Report (du Rausas et al. 2011) concluded that the internet's direct economic input averaged 3.4% of the GDP of the G8 countries and five other major economies. Different methods of measurement (that can assign speculative values to societal welfare and consumer gains) produce different results.[5] But whatever method of measurement is adopted, the internet's total economic contribution is small by comparison with what was hoped for in the 1990s.

The fourth conclusion is that the internet did not create a level playing field between small and large enterprise. The belief that it would was the principal evangelical component of the 'New Economy' thesis, and lay at the heart of its conviction that the internet would generate a surge of innovation and growth.[6] This article of faith proved to be wrong on several counts.

It underestimated the advantages of size.[7] Large corporations have bigger budgets, and greater access to capital, than small companies. This gives the former a competitive advantage, which they can exploit by lowering prices and increasing promotion. In general, large companies also have other built-in advantages: large economies of scale, enabling lower unit costs of production; economies of scope, based on the sharing of services and cross-promotion; and concentrations of expertise and resources that facilitate the launch of new products and services. While there can also be diseconomies of scale, large companies can renew themselves through acquiring dynamic young companies.

These advantages help to explain why large corporations continued to dominate leading market sectors, from car manufacture to grocery supermarkets. Indeed, in the leading economy (US), the number of *manufacturing* industries, in which the largest four companies accounted for at least 50% of shipment value, steadily increased between 1997 and 2007 (Foster et al. 2011: chart 1). There was also a truly remarkable increase between 1997 and 2007 in the market share of the four largest firms in leading sectors of the US *retail* industry. To take just two examples, the big four computer and software stores' share soared from 35% to 73%, while the share of the big four merchandising stores rose from 56% to 73%, during this period (Foster et al. 2011: table 1).

The trend towards corporate dominance was not confined to the offline world. In January 2011, 73.5% of the world's internet users visited either Google or its subsidiary, YouTube (Naughton 2012: 269). In the same month, the iTunes Store accounted for an estimated 71% of worldwide online digital music sales (Naughton 2012: 277–8). Amazon became the dominant online retailer (aided by economies of scale and scope), while Facebook became the leading social media site due partly to network effects (the bigger the service, the more useful it becomes). These corporations' rise to a position of ascendancy in a new industry, in so short a time, illustrates the underlying logic of the capitalist system: the natural processes of competition tend to diminish competition.

There is also compelling evidence that large companies proved to be better adapted to exploiting the opportunities offered by the internet than small companies. In 2012, 40% of large enterprises (with more than 250 employees) in OECD countries were engaged in e-commerce, compared with 20% of small businesses (with under 50 employees) (OECD 2014a: 42). E-commerce sales represent about 20% of all sales for large enterprises, but only 7% for small firms (OECD 2014a: 139). E-commerce proved particularly challenging for small and medium-sized enterprises in developing countries, for numerous reasons including inadequate infrastructure and high bandwidth costs (World Trade Organization 2013).

In brief, the economic impact of the internet was filtered through the unequal relations of competition in the marketplace. The prediction that small business would triumph in the internet era was never fulfilled. Corporate Goliaths continued to squash undersized Davids armed only with a virtual sling and pebble.

Global understanding

During the 1990s, there was a broad consensus that the internet would promote greater global understanding. 'The internet', declared the Republican politician Vern Ehlers (1995), 'will create a community of informed, interacting, and tolerant world citizens'. The internet, concurred Bulashova and Cole (1995), offers 'a tremendous "peace dividend" resulting from improved communications with and improved knowledge of other people, countries and cultures'. One key reason for this, argues the writer Harley Hahn (1993), is not just that the internet is a global medium but also that it offers greater opportunity for people to communicate with

each other than do traditional media. 'I see the Net', he concludes, 'as being our best hope . . . for the world finally starting to become a global community and everybody just getting along with everyone else'. Another reason for optimism, advanced by numerous commentators, is that the internet is less subject to state censorship than traditional media, and is thus better able to host a free, unconstrained global discourse between ordinary citizens. It is partly because 'people will communicate more freely and learn more about the aspirations of human beings in other parts of the globe', opines Frances Cairncross (1997: xvi), that 'the effect will be to increase understanding, foster tolerance, and ultimately promote worldwide peace'. These themes – the internet's international reach, user participation, and freedom – continued to be invoked in the 2000s as grounds for thinking that the internet would bond the world in growing amity.

These arguments have been given a distinctive academic imprint by critical cultural theorists. Jon Stratton (1997: 257) argues that the internet encourages the 'globalization of culture' and 'hyper-deterritorialization' – by which he means the loosening of ties to nation and place. This argument is part of a well-established cultural studies tradition which sees media globalisation as fostering cosmopolitanism, and an opening up to other people and places (e.g. Tomlinson 1999).

Critical political theorists advance a parallel argument (Fraser 2007; Bohman 2004; Ugarteche 2007, among others). Their contention is that what Nancy Fraser (2007: 18–19) calls the 'denationalization of communication infrastructure' and the rise of 'decentered internet networks' are creating webs of communication that interconnect with one another to create an international public sphere of dialogue and debate. From this is beginning to emerge allegedly a 'transnational ethic', 'global public norms' and 'international public opinion'. This offers, it is suggested, a new basis of popular power capable of holding to account transnational economic and political power. While these theorists vary in terms of how far they push this argument (Fraser 2007, for example, is notably circumspect), they are advancing a thesis that goes beyond the standard humanist understanding of the internet as the midwife of global understanding. The internet is presented as a stepping-stone in the building of a new, progressive social order.

The central weakness of these optimistic perspectives is that they are based on inference from internet technology rather than evidence. Yet the readily available information tells a different story. The impact of the internet does not follow a trajectory dictated solely by its technology, but is filtered through the structures and processes of society. This constrains in at least seven different ways the role of the internet in promoting global understanding and a new social order.

Seven constraints

First, the world is unequal, and this limits participation in an internet-based global dialogue. In 2014, the richest 1% owned 48% of global wealth. The remaining 52% of the world's wealth was owned unequally, much of it by the richest 20% (Oxfam 2015). The distribution of income is also sharply unequal, and this disparity has