

# Introduction: audiences and stakeholders in the history of medicine

*Solveig Jülich and Sven Widmalm*

According to the ivory-tower stereotype, the academic community promotes withdrawal and disengagement instead of acting in the real world.<sup>1</sup> Another interpretation of the sometimes low visibility of academic and not least humanistic research is that its non-academic use is not acknowledged. This was recently demonstrated in Sweden when a documentary around the widely acclaimed drama television series 'Miss Friman's War' (*Fröken Frimans krig*), produced for the national public TV broadcaster (SVT), became the topic of a heated debate. The series is based on actual events around the struggle for women's suffrage and equal rights in early twentieth-century Sweden. Themes from medical history are also manifest, as seen in an episode when a character inspired by the female gynaecologist pioneer Karolina Widerström argues against the legislation that forced women suspected of prostitution to be subjected to medical examination for signs of venereal diseases. Several female experts on women's history had contributed as consultants to the documentary and SVT was criticized for making it seem as if the research underlying the series had been carried out by the production company, not even acknowledging the names of the professional historians in the film's end credits. The irony that this exclusion of female expertise clashed with the theme of the drama was not lost on commentators.<sup>2</sup> Interestingly, the outcome of this controversy was to make visible 'the invisible historian' (to paraphrase Steven Shapin's classic paper).<sup>3</sup>

Historians interact with a variety of audiences; television and film is one example where their research may be said to have a societal 'impact', though often blunted for dramaturgical reasons, and sometimes made invisible because historical knowledge is seen as a commons (a resource generally available free of charge) where the crediting of authorship does not always seem necessary. In the history of medicine – our focus in this book – other audiences include government committees and commissions dealing with ethical issues in biomedicine; journalists asking for historical perspectives on discoveries or abuses and controversies in medicine; curators and visitors at museums; sometimes even medical researchers utilizing historical material. A particularly prominent audience for historians of medicine is practising physicians. The subject is often taught at medical schools in the context of medical (or health) humanities, a field that has undergone a rapid development in the UK and the United States, and more recently in countries like the Netherlands and Sweden. At the same time research assessments put pressure on all disciplines to account for the concrete and direct effects – 'impact' – of research outside of an academic context.

An important aim of this book is to challenge the idea, often implicit in current discussions about impact, that communication between researchers and their audiences is unidirectional and that it takes place between pre-defined groups of actors. The book should provide fodder for a discussion about how engagements by academic historians with potential interest groups may be viewed as exercises in 'audiencing' – i.e. the creation of new audiences for academic knowledge production – and also how researchers develop new agendas, sometimes expanding their professional domain, to cater to the perceived needs of existing or potential audiences. The measurement of impact is rapidly becoming a policy tool, whereas the idea of audiencing is an analytical framework that can be used for understanding processes encouraged by policy. Our view is that such an analytical approach is much needed considering the current transformation of the humanities, where utility is emphasized more and more, not only because scholars are encouraged to demonstrate impact but because many are truly interested in interdisciplinary collaboration on important contemporary issues.

The book explores the history of medicine's relationships with its audiences, from the early twentieth century to the present. Throughout, the authors discuss in what ways professional historians and others with

an interest in historical issues have created and interacted with audiences and how the demands of impact have been envisioned and enacted. Addressing several national contexts and focusing on broad areas where medical history is put to use, including medical education, policy-making, exhibitions and museums, film and television, the volume makes an original historical and historiographical contribution to the field and reflects on the relevance of the history of medicine for current debates and future challenges.

### Audiences and audienceing

In recent years, historians in many fields have begun to take a greater interest in the roles and activities of past audiences. As noted by Ludmilla Jordanova in Chapter 10 of this book, as well as elsewhere, visual and material cultures are especially rich areas for historical research on audiences in their various performances and contexts.<sup>4</sup> This holds true for historians of medicine who increasingly have begun to look at how media of all sorts have been used to inform, persuade, educate and entertain a diversity of audiences about health and medicine. For scholars working with historical materials relating to intersections between medicine and the media, the question of audience impact has most often been treated with a dose of scepticism of whether it is possible to know what people thought and felt in the past.<sup>5</sup>

Less attention has been directed to the ways that the professional history of medicine has been involved with issues related to audiences. To develop an awareness – critical as well as constructive – of the importance of audiences for medical history, we propose to bring in theoretical perspectives and approaches from media and cultural studies. We argue that this can help put current notions of ‘impact’ in research policy into perspective. While being inspired by the work of media and cultural studies, we maintain that discussions on audiences and impact must be historically informed, not least to avoid the ubiquitous ‘rhetoric of newness’ around digital media that assumes active and politically engaged audiences to be exclusive to our times.<sup>6</sup> As will be demonstrated throughout this book, active audiences have always been integral to the discipline’s knowledge production as it has engaged medical students, doctors and nurses as well as policy-makers and wider non-medical groups.

A first lesson to be learnt from media and cultural studies is that the concept 'audience' is by no means clear-cut or fixed. The usefulness of the term as well as the relationship between 'audience' and 'public' have often been the subject of discussion.<sup>7</sup> 'Audience' suggests a situation where a number of people simultaneously experience a play, opera, lecture or another kind of live performance. Nevertheless, audience researchers investigating the reception of mediated communication have long used the term as a collective noun that spans media to include readers, listeners and viewers of books, press, radio, television and cinema.<sup>8</sup> It has been argued that this notion of 'audience' no longer applies in a media landscape like the present one, where the dichotomy between production and consumption has broken down.<sup>9</sup> Others have found the shift away from a language of 'audiences' toward 'users' or 'producers' profoundly misleading, since the large majority of people are still consuming media produced by others.<sup>10</sup> We agree with the editors of the recent volume, *Audience Transformations*, that a broad notion of audience that embeds changes of communicational practices in a historical, societal, cultural, ideological, technological and economic context is productive and valid.<sup>11</sup>

Traditionally, there has been a tendency to view 'audiences' and 'publics' as mutually opposed. Theorists and cultural critics like Jürgen Habermas or Richard Sennett claim that the media have undermined the public sphere, turning publics and engaged citizens into passive audiences and consumers of mass culture.<sup>12</sup> Sonia Livingstone has argued that even now it is commonplace to distinguish between audiences and publics: 'In both popular and elite discourses, audiences are denigrated as trivial, passive, individualized, while publics are valued as active, critically engaged and politically significant'. But, as she notes, in the changing contemporary media environment, 'characterized by both the mediation of publics and the participation of audiences', this distinction becomes increasingly blurred. She suggests 'civic culture' or 'civil society' as a mediating domain positioned between 'the public' and 'the audience'.<sup>13</sup> This strategy is picked up in Chapter 6 by Sasha Mullally and Greg Marchildon where they analyse how doctors in the 1962 Saskatchewan strike against Canada's Medicare plan became an audience for the political rhetoric surrounding the event and at the same time an empowered public working to mobilize the larger citizenry as an audience for their protesting views. But doctors did

not speak unanimously. There were two 'medical publics', each laying emphasis on different aspects of the history of medicine in Canada.

A second and related lesson from media and cultural studies is that audiences are actively constructed by media producers and others. Sonia Livingstone and Peter Lunt use the term 'implied audience' to 'make explicit the commonplace but often unnoticed and, arguably, ungrounded assumptions that get mobilized in policy discourses about how people ordinarily relate to media and communications'.<sup>14</sup> More broadly, the term 'audiencing' has been coined to describe the process of creating audiences: they 'do not exist until "called forth", more or less successfully, by those who wish to address them'. In addition, people perform 'audiencing', thereby constructing themselves as audiences.<sup>15</sup> This notion is relevant for understanding the communicative activities of historians. For instance, as she discusses in Chapter 5, Lene Koch's academic work in the 1990s on modern biotechnology and the history of eugenics gave her a media platform to engage with general as well as specific audiences that were often driven by an interest in possible similarities between early eugenics and modern genetics. She reflects on how this exercise in audiencing increasingly raised methodological and historiographic problems for her as a professional historian of medicine as her views changed in a direction that no longer chimed with expectations among an audience she herself had helped create. Similarly, Elisabet Björklund describes in Chapter 8 how her research on sex education films easily mobilized an audience titillated by the subject matter and often, as in Koch's case, with expectations shaped by pre-conceived notions rather than an interest in the historian's perspective. Björklund analyses this same tension in the history of sex education films that developed in tandem with the medicalization of sex and where the history of medicine was used in the legitimization process of both.

Third, there is much to learn from the never-ending debate on media effects in audience research. As has often been noted, the field of communications and media studies emerged from a concern about the media's impact on society in the first half of the twentieth century. Early studies on media effects were initiated during the First World War, in large part as a response to fears about the spread of propaganda, but also in relation to an expanding advertising industry. Through metaphors of bullets and hypodermic needles the media were attributed

with powerful and harmful effects on largely helpless audiences.<sup>16</sup> Interestingly, the same metaphors were used in the medical world but with the opposite meaning – ‘magic bullets’ and ‘hypodermic needles’ symbolizing the ability to cure an infected host.<sup>17</sup> Censorship regulation often followed anxieties over media consumption, as discussed by Björklund in her chapter on Swedish sex-education films. Yet, from the mid-1940s, empirical studies began to suggest that mass media had only partial effects on individuals and audiences. This ‘limited effects model’ was again shifted in the 1960s and a number of theories emphasizing moderate to powerful effects emerged, including Marshall McLuhan’s widely discussed idea that it is not the content but the characteristics of the medium itself that affects society, encapsulated in the phrase ‘the medium is the message’.<sup>18</sup> During the 1970s and onwards the media-effects tradition became increasingly the target of criticism from Stuart Hall and other cultural studies researchers stressing the agency, active responses and resistant readings of consumers of popular culture.<sup>19</sup>

Today, the once dominant model of communication as information transferred from a sender to a receiver is seen as far too crude. A more productive analysis will allow for considering the circulation and transformation of meaning across time and space. There are no passive audiences, only agents that can use, rework and elaborate ‘content’ or ‘messages’ in manners that often are quite alien to the aims and intentions of the producers.<sup>20</sup> For the purpose of this book, the questions posed in the field of audience research are a useful reminder that there are no simple ways to evaluate the impact of historical work.

Historians of medicine seeking to engage with people about their work regularly find themselves navigating in a complex landscape influenced by the appearance of digital technologies, the media industry and various interest groups. Yet, even if this landscape has been shifting, the strategies for disseminating historical research seem not to have changed in any radical way. We perhaps optimistically expect that the audiences are out there somewhere and that our work has at least some sort of effect on their views of medicine and health in past societies or that our historical insights contribute relevant perspectives on contemporary dilemmas and issues. More and more, however, humanities researchers are requested to provide detailed accounts of the ‘impact’ of their work on audiences. This tendency is most evident in research policy, where

media visibility is indeed counted as one important form of impact among many.

### Stakeholders and impact

With the broader concepts of audiences and publics offered by media and cultural studies, the interaction between historians of medicine and their audiences may in fact be seen as a special case of a larger phenomenon: the communication of academic knowledge to interest groups, including the 'general public', some of which have the power to strongly influence the development of research. This phenomenon has received growing attention since the Second World War, with the rise of science policy and an increasing awareness of the transformative power of research as witnessed in, e.g., science-based technology, medicine and economics. From the 1960s there has been a growing interest in analysing science-society relations within the academic community, manifested in the emergence of Science and Technology Studies (STS) and innovation studies. Later, governments started to evaluate research from cost-benefit and new-public-management perspectives, while scientific literacy in relation to democratic decision-making has likewise come under scrutiny as the hegemony of scientific expertise is challenged (true of history as well as medicine) on political as well as grass-root levels.<sup>21</sup> The audience-public tension in this development is illustrated by the movement from a public-understanding-of-science discourse to one of public *engagement* with science and technology. In research policy there has been a similar turn from the unidirectional so-called linear model of R & D to a growing realization that innovation emerges in systems and networks.

The relationship between all academic fields, including history of medicine, and their audiences are currently being investigated from a broad array of perspectives, including those of media and cultural studies. More specifically, the humanities have to some extent moved in a direction where audiences have become defined from a utilitarian perspective – environmental humanities being a case in point, and with medical humanities being particularly relevant for historians of medicine. As the evaluation of direct effects of research outside of the academic system are put into practice in, e.g., the UK, the Netherlands, Australia and Sweden, these effects are routinely being described in

terms of 'impact'.<sup>22</sup> In this context audiences are often envisioned as stakeholders and the relationship between research and stakeholders as unidirectional and measurable.

Within the humanities, the reaction to these developments has been ambiguous. The common view, that the humanities represent non-utilitarian values and/or a cultural-critical ambition, has seemingly been at odds with the ambition to promote practically oriented agendas and to hold researchers 'accountable'. These developments have been seen by some as a welcome opportunity to demonstrate the often-overlooked value of humanities research and by others as a threat to the field's autonomy.

In the humanities, the view of researchers as service providers and audiences as stakeholders or consumers is controversial for at least two reasons. First, it runs counter to the idea that humanist scholarship is concerned with imponderables such as culture or the development of character. Second, critically oriented humanities have long dismissed some ideas that underpin evaluations of impact, for example that there is a linear relationship between research and innovation, or between media and audiences (as discussed above). The history and sociology of medicine, science and technology, and also popular models in innovation studies deriving from evolutionary economics, have emphasized that the impact of new knowledge is a complicated and time-consuming process involving relations between many actors within historically specific cultural and economic frameworks. Furthermore, it has long been argued in these fields that knowledge, like mediated information, is not a homogenous commodity but rather, as Ludwik Fleck has already pointed out in the 1930s, a shape-shifting entity that undergoes transformations as it circulates between knowledge producers and knowledge users (making this very distinction suspect) – an analytical approach that also lies behind the recent interest in so-called knowledge history.<sup>23</sup> These insights belie the conception that audiences are passive recipients of knowledge and, importantly, that knowledge impact is a short-term phenomenon.

For historians of medicine the tension between a utilitarian and a more traditional humanist approach has been noticeable in relation to the medical community as an object of study, which is also courted for collaborative partnership, not least within the cross-disciplinary field of medical humanities. In Chapter 9, Michael Sappol comments on the



sometimes problematic and sometimes constructive relationship between the history of medicine and its professional audience, not least the custodians of that profession's status. More than that, however, the chapter's idiosyncratic tone and content aim in a small way to break the mould of academic writing with regard to style as well as expectations of scholarly relevance or impactful utility. In a personal reflection on the driving forces behind his work on the iconography of anatomy, in connection with a particularly successful historical exhibition, he defends the historian's right to search for insight by following the pleasure principle of research based on interest and instinct rather than the expectations of any imagined audience. Ylva Söderfeldt and Matthis Krischel comment, in Chapter 3, on what might happen under conditions opposite to those described by Sappol, demonstrating that important issues are indeed at stake when the professional audience of historians gains the upper hand over scholarship. They argue that the recent institutionalization of the teaching of the history of medicine at German medical schools has directed historical researchers towards a form of audiencing that imperils their own professional standards.

The question of the history of medicine and its audiences is not only theoretical. It is, as Sappol and Koch both point out, a matter of practical concern for any academic who is interested in outreach, which is increasingly the case. Beatrix Hoffman's chapter focuses especially on this issue; she argues that it is important to think creatively about strategies that scholars can use (e.g., blogs and social media) in order to help correct myths and misinformation about health care. Her contribution may be read as a comment on how to achieve impact, not only in a vague sense but with the purpose of effecting positive change.

Because of the trend of evaluating impact when allocating funding, it is also increasingly a matter of professional survival. Most famously, impact was used in 2014, in the British Research Excellence Framework, and the discussion about this initiative in the UK has been massive, not least because impact measures have been introduced in all academic disciplines, including those – notoriously the humanities – where it has been common to disregard utilitarian notions of research, at least from a short-term perspective.

Opposition to the Research Excellence Framework of evaluating impact has been far from unanimous.<sup>24</sup> Among those who reject 'a tribal opposition to the notion of impact', problematic aspects of the British

experiment (planned to be repeated in 2021) have nevertheless been pointed out.<sup>25</sup> An important criticism is directed against the methodology used to evaluate impact from case studies where the uses of specific results are demonstrated.<sup>26</sup> As mentioned above, this linear understanding of impact has long been criticized for oversimplifying very complex relations, not least through a tendency towards short-termism (obvious in the case of the Research Excellence Framework, despite the fact that older research may be used as evidence of impact if it has occurred in the last five years).<sup>27</sup> The Research Excellence Framework has also been criticized for vagueness, for suppressing narratives regarding impact other than the linear one, for encouraging ‘game playing’ and for imposing a very costly evaluation apparatus with no obvious benefits.<sup>28</sup>

A similar discussion is ongoing in medical humanities where a trade journal in 2008 devoted a special issue to the question of how to promote humanistic issues in a utilitarian context, framing it in terms of ‘Humane Health Care or Tool of Governance’. The editors claimed that the common view regarding the value of humanities in health education is that they provide a ‘counterbalance to the relentless reductionism of the biomedical sciences’.<sup>29</sup> They asked if ‘evidence-based practice corrupts the humanity of the medical humanities’, and several contributors to the special issue indeed pointed to such dangers:<sup>30</sup>

The humanities [...] are not evidence-based in a positivist sense. They tend to emphasize process over product; hence any argument for a ‘product’, defined for example as the ‘development of humanity’, must rest upon the hermeneutic enterprise. But as anyone who has ever applied for government funding well knows, it’s hard to argue for process. Products so much more readily fit into categories and lend themselves to quantitative assessment; products, we think, belong in the real world.<sup>31</sup>

On the other hand, some researchers have taken a more positive attitude to the idea of impact in the humanities. Charlotte Blease has argued against the idea that the value of the humanities is somehow ‘intrinsic’, maintaining that the dichotomy between instrumental and intrinsic value is not only false but harmful to the medical-humanities agenda, as it deepens ‘the fissure between the humanities and the sciences’.<sup>32</sup> What is usually meant by ‘intrinsic value’ – the development of critical thinking, sound judgement, etc. – should, according to Blease, be seen as no less instrumental than, e.g., the therapeutic uses of book

reading: 'Learning is prized [...] because it yields outcomes'.<sup>33</sup> The humanities should be valued because they provide health workers with expertise in understanding the conditions of their profession and with tools for scrutinizing a plethora of professional issues, including scientific ones. Frank Huisman's chapter indeed shows how this may be done in an educational context – teaching students in the Netherlands about the societal conditions for medical work and disease prevention with the aim to prepare them for the realities of professional life. Taking the question 'What does good medical citizenship entail?' as a point of departure, he relates experiences from the development of medical-humanities teaching at the University Medical Center (UMC) at Utrecht. Sarah Chaney's and Jennifer Walke's chapter likewise discusses a form of outreach that goes well beyond the linear model of media communication or research implementation, using 'community engagement' in the context of a series of exhibitions and related activities at the Bethlem Museum of the Mind in London to effect changes in, e.g., the perception of mental illness.

So what happens when historians of medicine are actually asked to provide evidence of the impact of their work? Useful indicators are the reports in the Research Excellence Framework database of 'impact case studies' from 2014.<sup>34</sup> Searching the database using 'history of medicine' as keywords results in 26 hits (a sample of research in this area in the UK, unclear how representative this is). An analysis of how impact is described in these case studies shows – perhaps not surprisingly – that a majority (16) are didactically oriented, emphasizing that new knowledge has been disseminated to specific groups or the general public. Phrases like 'enhance/advance/raise/expand awareness/understanding' indicate the general tenor of these descriptions of impact: they tend to stress the importance of research for education on different levels, as well as what has often been called the 'public understanding of science' (including impact on museums and in the media). Authors of case-study reports also stress that they have contributed to an improved 'understanding' among stakeholders, e.g. in policy, among patient groups, health professionals or even local historians. A smaller group (5) focuses on concrete impact among health professionals, e.g. by providing 'historical evidence' in areas of interest, by 'influencing' conceptions of medicine, such as how it is affected by culture. A few (4) reports focus more concretely on the critical (or emancipatory) understanding

of medical issues, e.g. how research has helped change attitudes to Muslim medicine or mental illness. A few describe policy (3) and commercial (1) impacts in a sense that is in line with the Research Excellence Framework's general ambition to measure direct effects.

In this sample of (enforced) descriptions of the utility of research in history of medicine, the general tendency is hence to emphasize something close to the 'intrinsic value' discussed by Blease. The historians mostly portray impact as a form of enlightenment, producing and disseminating knowledge that is of interest to the general public and also to special interest groups, though its practical utility is often not well defined.

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It has become increasingly evident that there are indeed huge potential audiences for the history of medicine. As demonstrated by best-selling books such as *The Immortal Life of Henrietta Lacks* and *The Emperor of All Maladies*, many people beyond the academic audience are eager to engage with histories of medicine, successful as well as problematic ones. Notably, neither of these books was written by a historian.<sup>35</sup> But some academic historians of medicine have achieved considerable impact as measured by media attention and/or policy influence, for instance Susan Reverby with her research on US syphilis experiments in Guatemala, Lene Koch as detailed in her chapter in this volume, or similarly Mattias Tydén and Gunnar Broberg, whose work resulted in substantial government compensations to victims of eugenic sterilization in Sweden.<sup>36</sup> The growing demand for impact in policy is problematic because it is used in evaluations and might therefore encourage opportunism and short-termism. On the other hand, we recognize that impact is important as long as it is not imposed in the form of a policy straitjacket. The chapters in this book give ample evidence that the history of medicine not only has an audience but that it has made a difference in numerous ways, touching the severely afflicted as well as the architects of health-care systems. The audience concept is central for understanding how advanced knowledge reaches beyond the confines of professional expertise, achieving a broad impact in real-life circumstances.

Insights from media and cultural studies, as well as from STS, indicate several ways in which the study of audiences is relevant for the history of medicine and therefore also for the medical community. We want to emphasize three such areas. First, the multiplicity of past audiences (and publics) in the history of medicine, and the various techniques of audiencing adopted by the medical community and other actors with a stake in health issues, offer a rich field for scholarly exploration. Second, awareness of the intricacies of audiencing is key to identifying, mobilizing and connecting with audiences for the history of medicine itself. Third, an understanding of audiences is central for critical and constructive engagement with policy in the area of research and higher education – not only because of the trend towards impact assessment but generally, because all matters concerned with ‘knowledge politics’ include interaction between the sometimes overlapping categories of knowledge producers and knowledge consumers.<sup>37</sup> If those who are professional researchers and teachers do not grasp the mechanisms behind – and repercussions of – such interaction, they divest themselves of power to control their own fate.

## Notes

- 1 For a recent discussion on the modern reworking of the metaphor of the ivory tower, see S. Shapin, ‘The Ivory Tower: The History of a Figure of Speech and its Cultural Uses’, *The British Journal for the History of Science*, 45:1 (2012), 1–27.
- 2 ‘Miss Friman’s War’ (*Fröken Frimans krig*), written by P. Oljelund, directed by M. Hellström and H. Hamrell, was aired on SVT in 2013–2017, and the documentary ‘The Women at the Time of Miss Friman’ (*Kvinnorna på fröken Frimans tid*), produced and directed by L. Wahlbom, was aired on SVT in 2016. The criticism was targeted against SVT as well as the production company Mediabruket, see, for instance, K. Östberg, ‘Forskningen nämns inte med ett enda ord’, *Expressen*, 4 January 2017; E. Witt-Brattström, ‘Sluta att sexualisera kulturkvinnan, SVT!’, *Expressen*, 6 January 2017. As a result of this debate Mediabruket published a ‘reference list’ covering all the people and literature that had ‘helped with information and facts’; see SVT’s website: <https://www.svt.se/kvinnorna-pa-froken-frimans-tid/referenslista-for-kvinnorna-pa-froken-frimans-tid> (accessed 29 January 2018).

- 3 S. Shapin, 'The Invisible Technican', *American Scientist*, 77:6 (1989), 554–563.
- 4 L. Jordanova, *The Look of the Past: Visual and Material Evidence in Historical Practice* (Cambridge: Cambridge University Press, 2012), see especially chapter 4, 'Audiences and Display', pp. 154–206.
- 5 For a discussion and bibliography of this research, see T. Boon, 'Medical Film and Television: An Alternative Path to the Cultures of Biomedicine', in M. Jackson (ed.), *The Oxford Handbook of the History of Medicine* (Oxford: Oxford University Press, 2013), pp. 627–633. Also see V. Berridge and K. Loughlin (eds), *Medicine, the Market and Mass Media: Producing Health in the Twentieth Century* (London: Routledge, 2005); B. Hansen, *Picturing Medical Progress from Pasteur to Polio: A History of Mass Media Images and Popular Attitudes in America* (New Brunswick, NJ: Rutgers University Press, 2009); N. Hopwood et al. (eds), 'Communicating Reproduction', special issue, *Bulletin of the History of Medicine*, 89 (2015), 379–556; A. Nathoo, *Hearts Exposed: Transplants and the Media in 1960s Britain* (Basingstoke: Palgrave Macmillan, 2009).
- 6 A. Ekström et al., 'Participatory Media in Historical Perspective: An Introduction', in Ekström et al. (eds), *History of Participatory Media: Politics and Publics, 1750–2000* (New York: Routledge, 2011), pp. 1–9.
- 7 For useful overviews, see R. Butsch (ed.), *Media and Public Spheres* (Basingstoke: Palgrave Macmillan, 2007); S. Livingstone (ed.), *Audiences and Publics: When Cultural Engagement Matters for the Public Sphere* (Bristol: Intellect, 2005); and V. Nightingale (ed.), *Handbook of Media Audiences* (Malden: Wiley-Blackwell, 2011).
- 8 V. Nightingale, 'Introduction', in Nightingale (ed.), *Handbook of Media Audiences*, pp. 1–15.
- 9 A. Bruns, *Blogs, Wikipedia, Second Life, and Beyond: From Production to Produsage* (New York: Peter Lang, 2008); H. Jenkins, *Convergence Culture: Where Old and New Media Collide* (New York: New York University Press, 2006).
- 10 J. Van Dijck and D. Nieborg, 'Wikinomics and its Discontents: A Critical Analysis of Web 2.0 Business Manifestos', *New Media & Society*, 11:5 (2009), 855–874.
- 11 N. Carpentier et al., 'Audience/Society Transformations', in Carpentier et al. (eds), *Audience Transformations: Shifting Audience Positions in Late Modernity* (New York: Routledge, 2013), p. 4.
- 12 Ekström et al., 'Participatory Media in Historical Perspective', p. 3.
- 13 S. Livingstone, 'On the Relation Between Audiences and Publics', in Livingstone (ed.), *Audiences and Publics*, p. 18.

- 14 S. Livingstone and P. Lunt, 'The Implied Audience of Communications Policy Making: Regulating Media in the Interests of Citizens and Consumers', in Nightingale (ed.), *Handbook of Media Audiences*, p. 171.
- 15 N. Castree, *Making Sense of Nature: Representation, Politics and Democracy* (London: Routledge, 2014), p. 185. It was John Fiske who coined the term 'audienicing' to convey the active role of participating as an audience in communication. See J. Fiske, 'Audienicing: A Cultural Studies Approach to Watching Television', *Poetics*, 21:4 (1992), 345–359.
- 16 J. Bryant and D. Zillman, 'A Retrospective and Prospective Look at Media Effects', in R. L. Nabi and M. B. Oliver (eds), *The SAGE Handbook of Media Processes and Effects* (Los Angeles: SAGE, 2009), p. 11.
- 17 On this suggestive link between media studies and contagion narratives, see G. Thibault, 'Needles and Bullets: Media Theory, Medicine, and Propaganda, 1910–1940', in K. Nixon and L. Servitje (eds), *Endemic: Essays in Contagion Theory* (Basingstoke: Palgrave Macmillan, 2016).
- 18 For a brief overview, see Bryant and Zillman, 'A Retrospective and Prospective Look at Media Effects', p. 13.
- 19 Stuart Hall's 'encoding–decoding' model of communication had a major influence on early cultural and media studies, see his 'Encoding/Decoding', in S. Hall et al. (eds), *Culture, Media, Language – Working Papers in Cultural Studies, 1972–79* (London: Routledge, 1980), pp. 117–127.
- 20 This argument is summarized by S. Livingstone in 'Media Audiences, Interpreters and Users', in M. Gillespie (ed.), *Media Audiences* (Maidenhead: Open University Press, 2005), pp. 9–50.
- 21 On scientific literacy and democracy, see P. Kitcher, *Science in a Democratic Society* (New York: Prometheus Books, 2011).
- 22 See the overview of initiatives to measure impact produced by the Swedish Research Council (Vetenskapsrådet): B. Myrman, B. Sandberg and S. Söderberg, *Om utvärdering av forskningens genomslag utanför akademien: Översikt över några nationella modeller, metoder och initiativ* (Stockholm: Vetenskapsrådet, 2017).
- 23 P. Burke, *What is the History of Knowledge?* (Cambridge: Polity Press, 2016); L. Daston, 'The History of Science and the History of Knowledge', *KNOW: A Journal on the Formation of Knowledge*, 1:1 (2017), 131–154; J. Östling et al. (eds), *Circulation of Knowledge: Explorations in the History of Knowledge* (Lund: Nordic Academic Press, 2017).
- 24 According to the Swedish Research Council (Myrman et al., *Om utvärdering av forskningens genomslag utanför akademien*) there has been no opposition to the Research Excellence Framework at all. The report claims that impact evaluation has been especially appreciated in the humanities and social sciences, where researchers have welcomed being asked to produce



- evidence of the usefulness of their work. The same tendency characterizes two reports commissioned by UK higher education funding bodies, including HEFCE, and by the UK minister of Universities and Science: C. Manville et al., *Assessing Impact Submissions for REF 2014: An Evaluation* (Santa Monica, CA and Cambridge: RAND Corporation, 2015); Lord N. Stern, *Building on Success and Learning from Experience: An Independent Review of the Research Excellence Framework* (London: Department for Business, Energy & Industrial Strategy, 2017), <https://www.gov.uk/government/publications/research-excellence-framework-review> (accessed 30 January 2018).
- 25 A. N. Mhurchú, L. McLeod, S. Collins and G. Siles-Brügge, 'The Present and the Future of the Research Excellence Framework Impact Agenda in the UK Academy: A Reflection from Politics and International Studies', *Political Studies Review*, 15:1 (2017), 60–72, on p. 61.
  - 26 N. K. Shortt et al., 'Taking Health Geography Out of the Academy: Measuring Academic Impact', *Social Science and Medicine*, 168 (2016), 265–272.
  - 27 K. Grandin et al. (eds), *The Science-Industry Nexus: History, Policy, Implications*, Nobel Symposium 123 (Sagamore Beach, MA: Science History Publications, 2004).
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