

The politics of consumer data

Marketing Theory

2020, Vol. 20(1) 45–63

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DOI: 10.1177/1470593119847252

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Abstract

Data is key to marketing. But data is not a neutral thing. It is political. There are *macro-politics* that validate, motivate and justify the use of particular forms of data and *micro-politics* between consumers, marketing organizations and other cultural institutions who want control over data. This study examines these politics by analysing attempts to restrict how marketers could access digital consumer data for the purpose of targeted advertising. Adopting a science and technology studies perspective, it concludes that *caring* for digital consumer data as a *common* resource is an important, ongoing and often unacknowledged aspect of contemporary marketing practice. It creates and maintains a market for marketing.

Keywords

Data, digital marketing, do not track, politics, power

Introduction

Where would contemporary marketing be without data? It makes it possible. But while researchers, consultants and thought leaders routinely tout the benefits of data-driven marketing decisions and push the boundaries of what marketers can do with data, there have been fewer considerations of the ways that marketers create and maintain particular forms of data in the first place. This marketing work is essential. Data does not just exist. It must be created, structured, stored and maintained. In the process, marketers confront technical, ethical and political choices.

This is illustrated in a number of recent high-profile cases such as the Cambridge Analytica scandal, racial targeting of advertising on social media, erroneous Facebook viewing metrics and the ad-fraud scandal in which a faulty data standard has cost brands billions of dollars each year. Among these cases, we see time and time again that when marketing data practices are exposed to critical scrutiny, they are found wanting not because of any technical issue but because of political and ethical ones. Understanding how and why marketers deal with these issues before a scandal emerges is, accordingly, a pertinent line of inquiry.

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The Do Not Track (DNT) initiative offers a revealing case in this respect. Here, a new set of standards was proposed to allow consumers to opt-out of data-driven online marketing. The debates that took place in this initiative demonstrate how quickly technical discussions politicize consumer data. To open these discussions to critical scrutiny, the article offers a frame analysis on the DNT initiative. It suggests that consumer data is politicized in two ways. The *macro-politics of consumer data* refers to the interests and concerns which lead actors to value digital data in different ways. The *micro-politics of consumer data* concerns the ways that consumers, marketing organizations and other cultural institutions take advantage of discursive tactics, authority and organizational processes to make consumer data work for them.

Distinguishing the politics of data develops marketing theory. First, it allows us to expand the theorization of power and data. Here, the study illustrates how power relations are embedded in data itself. Second, it expands our ideas about the ideology of marketing to include notions of obligation and respect. On this point, the article introduces the *commons* as the basis of the market for marketing. Finally, contributing to the emerging social studies of marketing literature, the study argues that marketers *care* for digital consumer data. In this respect, the analysis also has important implications for practitioners. If the responsibility to care for data is left to a small group of marketers, it can be shaped by their particular interests. Marketers, of course, are not homogenous and must be wary of being enrolled into decision shaped by others' interests. For consumers and privacy advocates, too, the analysis shows that what is agreed in theory can be undermined in practice. It is easy to find agreement on macro-political ideas such as the need to respect consumer privacy, but these can just as easily be written out of marketing practices through micro-political manoeuvres. Critical interventions that seek to improve consumer privacy or resist marketing power overlook micro-politics at their peril.

By way of overview, the article outlines the theoretical motivation for the study. The DNT case is then introduced and the method is justified. The results of the frame analysis are presented. These are theorized and related to wider theoretical discussions. In the concluding section, future paths for research and limitations of the study are considered.

Open the data black box: Social studies of marketing

The theoretical motivation for this study is an emerging literature that applies science and technology studies (STS) to marketing practice. A line of thinking in this literature has been referred to as the social studies of marketing (see Muniesa, 2014). It allows us to approach quantitative data as a political object.

The politics of things

What is politics? An STS view that extends politics to physical objects and their relationships with human actors. It is grounded in the idea that all objects privilege some users over others. In designing an object, for example, decisions must be made about whom it should work for and whose needs are not important. These decisions then are embedded into the ways that objects work. The end results are that they come to shape human associations and activities in favour of some groups at the expense of others.

Winner (1980) offers the example of set of bridges in Long Island to illustrate this process. The height of these bridges was 'extraordinarily low' and was 'deliberately designed and built that way . . . to achieve a particular social effect' (1986: 2). Buses could not fit through them. This meant that lower socio-economic and minority groups who relied on public transport were unable

to pass through. As a result, the beaches beyond the bridges remained the property of '[a]uto-mobile-owning whites of "upper" and "comfortable middle" classes' (1986: 3). For Winner, therefore, 'the details of form' provide 'a way of engineering relations among people' that eventually become 'part of the landscape' (1986: 3).

Latour (1994) describes this as *black-boxing*. Going about our daily lives, he argues, we have to overlook objects to get things done. Instead of questioning how they work and who they work for, we 'black-box' them. In this sense, the STS view of politics focuses on the design of things, how they work *and* what their users overlook. Accordingly, research uncovers the affordances hidden inside a range of economic black boxes including retail displays (Cochoy, 2010), shopping bags (Hagberg, 2015) and product packaging (Hawkins, 2012) to name but a few. It shows us how consumer behaviours and market structures are shaped by the interests of small groups of actors who are able to embed their politics into marketing things (see Cluley, 2018).

The politics of calculation

Accepting that objects have politics, researchers inspired by STS have moved on to consider how different kinds of objects work politically. Here, there has been a movement from considering physical and material objects to thinking about representational techniques as well. The central argument is that economic and social activity can only take place once particular ways of 'sorting things out' have become black-boxed (Bowker and Star, 2000a, 2000b). These black-boxes are not necessarily physical, but they are designed with particular assumptions and values at their hearts (Johnson, 1988). They do politics.

Within the *social studies of finance* literature, for example, MacKenzie (2006) details how assumptions in financial models allowed financial institutions to open up new markets but, simultaneously, changed the nature of existing markets in favour of their designers. This perspective has also been applied to consumer markets (e.g. Callon et al., 2002; Law, 2009; Muniesa, 2014). Cochoy (2008), in particular, analyses the effects produced by shopping carts. He argues that a shopping cart moves the 'pusher to become a shopper' by facilitating particular forms of calculation at certain points in the store (2008: 20).

A key concept here is the notion of *performativity*. It tells us that marketing techniques produce what they claim to describe (Araujo, 2007). This has inspired researchers to reverse engineer marketing concepts and techniques to reveal the theoretical, political, cultural and social assumptions that are black-boxed in them (Schwarzkopf, 2015; Schneider and Woolgar, 2012). Zwick and Bradshaw (2014), for instance, argue that the concept of 'brand communities' makes a series of ideological assumptions about the nature of consumers and consumption which go unquestioned in marketing practices.

Latour's (2002) distinction between *matters of fact* and *matters of concern* gets at this issue. He suggests that what is accepted as true is a fabrication or production. That is, the truth is often really a *matter of concern* for a particular group of actors that has been generalized. These *concerns* become true when others to accept them as *matters of fact*. Usually, this involves black-boxing them and their associated networks of devices, representations and physical objects.

Thinking about markets in this way – as relationships between people, things and representations – opens up a 'new way of conceiving of the relations of domination running through and structuring markets' (Callon and Muniesa, 2005: 1239). It focuses our attention on the *calculative* and *descriptive power* of different actors (Muniesa, 2014). The supermarket, for instance, with its massive data sets of transactions has more power to shape what happens in store in comparison with

the supposedly sovereign individual consumer. As Callon and Muniesa explain, ‘irrespective of how strong the consumer’s calculative agency . . . it remains weak compared with the calculative power of supply, which is highly equipped’ (2005: 1238). Politics, then, moves on to include an appreciation of who has the power to shape not only how things are designed but who is represented.

The politics of data

A logical step from thinking about the politics of calculation and representation is to consider the inputs of calculations and representations as political objects too. In order to exercise calculative power, there must be something to calculate. There must be data. Indeed, an emerging body of work in computer and information science which also draws on STS encourages us to explore the politics of different types of data objects in the same way as physical and representational ones (Fuller and Goffey, 2012; Pollock and Williams, 2011; Star and Lampland, 2009).

Perhaps, the most influential study in this regard is Latour and Woolgar’s (1979) ethnography of scientific practice. They traced the steps taken by a research team as they moved from the field to a scientific discovery. They found that, rather than a single eureka moment, various *inscription devices* removed qualifications initially attached to the data until it became too difficult to question whether it was true or not. Latour and Woolgar were attracted by the ways that scientists could use these devices without question. They argued that a discovery was produced when a network of actors could collectively ignore the very messy nature of the data they were using to represent the world – that is, when *concerns* became *facts*. Scientific data was another black-box (see also Latour, 1982).

The idea that marketing practice black-boxes data in this way is well established in the emerging social studies of marketing. Callon and Muniesa assert that the work of ‘a large number of “marketing professionals”’ is focused on making markets calculable – that is, finding ways to translate consumer behaviours, feelings and cognition into structured data (2005: 1234). Segmentation, for instance, orders consumer markets into manageable chunks that can become real as brands design new products, communicate new meanings and promote offers to particular segments (Zwick and Knott, 2009; Zwick and Dholakia, 2004a, 2004b).

However, focusing on the construction of data, rather than its uses, takes this analysis a step further. The data marketers build segments from shapes the types of segments and representations they can produce in the same way that bridges shape social interactions (Cluley and Brown, 2015). Data has affordances and, like physical objects, is something that is intentionally designed for a particular purpose and to serve particular interests of particular users (Cluley, 2018). Data is political.

To bring this together, we can see that from STS we inherit a view of politics as the activity of choosing who something should work for and a process through which things shape interactions between different groups. This perspective was first used to think about physical objects, then representational ones. Now, there is increasing concern for thinking about data in this way too. The key point here is not just that data has effects. Rather it is that to understand *what counts* we have to be clear *who it counts for*. To get to this, we must explore how choices are made about consumer data through the interactions between different groups (Callon and Law, 1982).

Case and method

Research context: W3C and DNT

While there have been many recent high-profile cases concerning the ethics, economics and politics of consumer data that would allow us to explore these issues such as the Cambridge

Analytica scandal. They tend to be clouded by commercial sensitivity, legal issues and concerns with data access. The DNT initiative presents an important opportunity in this regard. It was an attempt to provide web users with greater choice about the data they shared over the web that was formalized through the World Wide Web Consortium (W3C). This is a non-profit organization which administers the web through 'high-quality standards based on community consensus'. It provides a public archive of its operations and overcomes the data access issues associated with other examples.

Background

By 2011, a number of web browsers offered privacy features that allowed their users to opt-out of online surveillance. Of particular concern here was the use of 'third party tracking' – a technique that forms the basis of much digital marketing practice (Cluley and Brown, 2015). In an effort to standardize these offerings, the W3C published a draft on what it called the Tracking Preference Expression. In 2012, it created a working group called the Tracking Preference Working Group (TPWG) 'to study issues and propose solutions' related to this document. Its mission was 'to improve user privacy and user control by defining mechanisms for expressing user preferences around web tracking and for blocking or allowing web tracking elements'. The group set out to 'actively engage governmental, industry, academic and advocacy organizations to seek global consensus definitions and codes of conduct'. Success would be measured by the adoption of DNT by web users and compliance by industry.

The working group issued seven working drafts and released their final recommendation in 2015. Yet the TPWG is largely considered a failure. As the *New York Times* (2014) reported, it suffered a slow death. It is not that technical solutions were impossible. Rather it was impossible to agree who DNT was *for*. Despite support from the Federal Trade Commission, W3C, advertisers, technology companies, consumer groups and academic institutions, by the time of its final proposals, many members had resigned from the group and many other bodies had embedded their own solutions.

Data gathering and analysis

Documents produced by TPWG are publicly available through the W3C's online archive. These have been recorded for this project. The archives include 279 inter-related email discussion lists. These provide access to over 10,000 public emails sent between members of the working group. The email lists are organized around 'issues' which could be raised by any member of the group. They range from a single short post to multithread posts with hundreds of contributions.

A sample from this data set has been analysed using frame analysis (Benford and Snow, 2000; Goffman, 1974). This method uncovers latent collective perceptions of social phenomenon and reveals how particular ways of thinking are black-boxed in social interactions. While much STS-inspired work focuses on unpacking material objects, often through historical or technical analysis, this ethnomethodological approach reflects the wider tradition in science studies. Here there is a focus on observing the interactions, translations and dialogue through which an object turns into a black-box and matters of concern become matters of fact. Indeed, frame analysis is 'ubiquitous across traditions of management and organizational research' (Cornelissen and Werner, 2014: 181).

This study follows Kaplan's (2008) protocol for frame analysis. This starts by thinking about an issue in terms of *pivotal decisions*. In this article, a single pivotal decision is analysed: should

Table 1. Participants in 'proposed text for local law and public purpose'.

Sender	Email/Stated affiliation	Number of emails
Chris Mejia	iab.net	33
Walter van Holst	xs4all.nl	15
David Wainberg	networkadvertising.org	15
Rigo Wenning	w3.org	11
Brooks Dobbs	kbgm.com	10
Jeffrey Chester	democraticmedia.org	9
Kimon Zorbas	iabeurope.eu	6
John Simpson	consumerwatchdog.org	5
Ed Felten	felten.com	4
Amy Colando	microsoft.com	4
Joseph Lorenzo Hall	cdt.org	4
Rob van Eijk	blaeu.com	3
Dan Auerbach	eff.org	3
Jonathan Mayer	stanford.edu	3
Lauren Gelman	blurryedge.com	2
Mike O'Neill	baycloud.com	2
James Grimmelmann	nyls.edu	2
Fred Andrews	live.com	2
Richard Weaver	comscore.com	1
Ninja Marnau	datenschutzzentrum.de	1
Roy T. Fielding	gbiv.com	1
Vinay Goel	adobe.com	1
Total emails		137

marketing applications be allowed within the DNT standards? In simple terms, this would mean that user data could still be collected for marketing purposes even if the user had indicated they did not want to be tracked through the DNT function. The proposal was explicitly discussed in two email discussions (Issue 178 and Issue 180). Both of these discussions linked to a third discussion titled 'Proposed Text for Local Law and Public Purpose'. This contained over 130 email messages and was one of the TPWG's most sustained online discussions (see Table 1 for an overview).

Participants in these discussions are split into *proponents* and *opponents*. *Proponents* represent those who appeared to be in favour of the proposals. *Opponents* are those who appear to oppose them (see Table 2). To establish these positions, two coders read the discussions focusing on a single participant at a time. After coding each participants' contribution and relevant responses from others, they were asked three questions: (1) 'Based on what the participant writes, do you think they are in strongly favor of the proposal?'; (2) 'Based on what others write, do you think others view this participants as being in strongly in favor of the proposal?'; and (3) 'Overall, do you think this participant is strongly in favor of the proposal?'. Discrepancies were judged by the author. To be clear, this analysis is not meant to attribute individual attitudes or motivations but rather to reveal collective ways of thinking accepted within the discussions. Indeed, the binary nature of this analysis reflects the binary nature of the discussions. The proposals were offered in a 'take or leave it' manner just as the DNT function itself offered users a binary opt-in/opt-out choice.

Table 2. Sample of participants and interpreted positions on proposals.

Key Sender	Email/Stated affiliation	Interpreted position
Amy Colando	@microsoft.com	Proponent 180
John M. Simpson	Consumer Advocate, Consumer Watchdog	Opponent 180
Richard Weaver	Deputy Privacy Officer, comScore	Proponent 180
Jeffrey Chester	Center for Digital Democracy	Opponent 180
Brooks Dobbs	Chief Privacy Officer, Wunderman Network	Proponent 180
Kimon Zorbas	@iabeurope.eu	Proponent 180
Jonathan Mayer	@stanford.edu	Opponent 180
Chris Mejia	Interactive Advertising Bureau	Proponent 180
Rob van Eijk	@blaeu.com	Opponent 180
Rachel Thomas	@the-dma.org	Proponent 178
Roy T. Fielding	@gbiv.com, Adobe Systems	Opponent 178
Chris Hoofnagle	@law.berkeley.edu	Opponent 178
David Wainberg	@networkadvertising.org	Proponent 178

Table 3. Cross-fertilization of diagnostic and prognostic repertoires.

Diagnostic repertoires	Prognostic repertoires		
	Administrative	Compatibility	Ethical
Right to privacy	Following W3C protocols, it is impossible to protect the economic infrastructure.	Existing protocol accepted by stakeholders in other contexts offers an equivalent provision for DNT.	Web users should be protected even if that jeopardizes some business models
Right to do business	Following W3C protocols, the economic infrastructure must be a primary consideration.	Existing protocol accepted by stakeholders in other contexts is not compatible DNT.	The advertiser ecosystem must be supported even if that means scrapping DNT.

W3C: World Wide Web Consortium; DNT: do not track.

Axial coding produced two *diagnostic repertoires* and three *prognostic repertoires* which are described below. Diagnostic repertoires answer the question ‘What’s the problem?’. Prognostic repertoires answer the question ‘What’s the solution?’. Repertoires mark the available perspectives that emerged in each discussion and allowed participants to frame the issue in a particular way. The repertoires are summarized in Table 3. Axial coding was also used to explore the *framing practices* through which dominant repertoires were established.

In what follows, text from the discussions is presented verbatim with interpretations developed from the analysis. The data presented includes personal information such as names, institutional affiliations and job titles. Typically, such data would be anonymized, but in this case, a simple web search would locate it. Moreover, much of it is relevant to the analysis as it indicates participants’ interests and backgrounds. Importantly, participants in these discussions were aware at the time of posting that their contributions would be publicly available – including identifying personal

information such as email addresses. The W3C states that these are ‘an essential part of the record’. Indeed, W3C policy related to public posts states that its archives are not edited to remove ‘traces of embarrassing or inconvenient Public postings’.

Diagnosis: Business or privacy?

Two competing *diagnostic repertoires* start the pivotal decision in the discussions. For some, the question of whether marketing applications should be allowed within DNT addresses an economic question: What kind of economic activity should be allowed on the web? Their diagnosis of the problem focuses on a *right to do business repertoire*. They see DNT as a problem as it impinges their economic interests. In response, others frame the issue as a civic question: What kind of social space should the web be? They approach DNT through a *right to privacy repertoire* and see DNT as a solution to intrusive advertising.

The right to do business repertoire

The proposals start through a particular framing that centres on business interests. The email discussion ‘Proposed Text for Local Law and Public Purpose’ opens with a proposal that the following section of text is added to the DNT documentation:

Regardless of DNT signal, information MAY be collected, retained, used and shared for complying with applicable laws, regulations, legal obligations and other public purposes, including, but not limited to, intellectual property protection, delivery of emergency services, and relevant self-regulatory verification requirements. (Amy Colando, 17 October 2012, 8:05 am)

This post is met with a request for further details. The author responds that the text ‘was intended to address the MRC accreditation scenario’ (Amy Colando, 17 October, 2012, 1:46 pm). This is the first move to frame DNT around marketing practice. The original proposal refers to a broad range of compliance issues. But the discussion quickly boils down to a single requirement by the USA-based Media Rating Council (MRC).

For context, MRC accreditation is a requirement many leading brands place on advertising media providers. It dictates that they meet MRC data standards. Subsequent posts focus on this frame. One message states that it is vital to the ‘advertising ecosystem’ that there are accredited measures that can be used ‘as a basis for payment’. Another describes MRC accreditation through an analogy with ‘state agencies that certify that gas stations are measuring gallons of gas accurately and billing consumers accordingly’. One post even suggests that without such measures, the Internet will ‘break’ because advertising revenues that support so many web services rely on the presence of data standards.

At the heart of this repertoire is an image of the web as an economic space. Rather than asking whether advertisers have a right to do business on the web, it assumes they do and that DNT should support this right. Unsurprisingly, many participants who use this repertoire come from advertising industry organizations and all seem to support the proposal to allow marketing and advertising to operate within DNT.

The right to privacy repertoire

Responses to this proposal set out an alternative frame. In place of concerns for the advertising ecosystem, it speaks about ‘user choice’ and ‘privacy concerns’ (Jeffrey Chester, 20 October 2012,

4:49 pm). Picturing the web more as a civic space than an economic one, this frame privileges web users' right to privacy over advertisers right to do business. Seen through this repertoire, the proposed text is problematic. It legitimizes the very practices that the TPWG is meant to stop.

This is illustrated in one participant's claims that industry guidelines should not 'impact our work to provide user choice in a meaningful manner' because they 'do not reflect the privacy concerns addressed by this group' (Jeffrey Chester, 20 October 2012, 4:49 pm). The MRC, this post continues, 'is a media/industry industry (*sic*) run initiative, involved in a wide range of TV and online measurement tools that play a key role in the user targeting experience' that the TPWG is trying to counteract.

Unsurprisingly, many participants identified as opponents in the analysis draw on this repertoire. Consequently, as the discussions progress, the proposal is framed in a binary way. It is either good or bad, acceptable or unacceptable. There is no middle ground.

Prognosis: Administrative, compatibility and ethical solutions

The split between diagnostic repertoires creates space for a decision. The route forward is shaped by *prognostic repertoires*. Three emerged in this case.

Administrative repertoire

An *administrative repertoire* privileges the formal procedures, practices and protocol of the W3C. The argument implicit in this repertoire is that administrative techniques will produce a fair and unbiased result – even if it serves the interests of one group over others. For example, the final message in the Issue 178 discussion dismisses the proposal because it 'overrides DNT. Not just specific, but in a very broad way'. This message explains that the group has been following a 'path of narrowing down, with help of proportionality, business necessity and privacy friendly subsidiary solutions' by only accepting 'the "least objectionable proposals"'. Privileging the W3C processes and working practices as a way forward, it states: 'If you want a permitted use for DRM, I suggest to open an issue for it, likewise for MRC and for all the purposes in the proposed text' (Rob van Eijk, 24 October 2012, 12:45 am). Put simply, the *administrative repertoire* values organizational authority as the way to settle matters.

Compatibility repertoire

A *compatibility repertoire* privileges laws, legal requirements and self-regulatory policies. This is most obviously revealed in the discussion of MRC accreditation summarized above. As we have seen, several proponents argue that DNT must work with advertisers' MRC requirements. However, the compatibility repertoire is not limited to proponents of the proposal. Opponents also turn to external standards as a way to settle the decision – including the MRC ones. For example, a post from an opponent points to MRC documentation that states that media providers only need to record 'unsuccessful attempts to obtain' data (Jonathan Mayer, 27 September 2012, 6:18 pm). This, they argue, means that as long as media companies report that a web user has used DNT, they satisfy the MRC requirements. The message continues: 'Until a working group member can furnish an MRC or MRC-like *requirement* that users have their browsing histories collected, this entire conversation seems moot'. Used both for support or opposition, then, this frame privileges decisions made by other bodies.

Ethical repertoire

An *ethical repertoire* uses moral positions to chart a route forward. For example, when asked why marketing should be considered as a permitted use in Issue 178, a participant replies:

Marketing fuels the world. It is as American as apple pie and delivers relevant advertising to consumers about products they will be interested at a time they are interested. DNT should permit it as one of the most important values of civil society. Its byproduct also furthers democracy, free speech, and – most importantly in these times – JOBS. It is as critical to society – and the economy – as fraud prevention and IP protection and should be treated the same way. (Rachel Thomas, 4 October 2012, 8:42 am)

Here, a range of normative ethical claims are used to justify the proposal. Put simply, it says that marketing should be permitted because marketing is virtuous. It promotes civil society, democracy and free speech. It supports consumers and creates jobs. It has the right cultural values. It is as ‘American as apple pie’. However, as with other repertoires, the ethical repertoire is also used to justify a different prognosis. Another contributor states: ‘The purpose of DNT is to express a user preference to not be tracked. Losing targeted marketing (but not contextual marketing) is a trade-off that is best chosen by the user, presuming DNT reflects their actual choice’ (Roy T. Fielding, 5 October 2012, 3:20 am). In other words, this participant opposes the proposals because they value individual freedom above the value of marketing. Their judgment is based on an ethics in which the individual is championed rather than high ideals or virtues. So, although they differ in the conclusion they support, ethical repertoires all privilege moral positions as the basis for action.

Framing practices

Exploring *diagnostic* and *prognostic* repertoires demonstrates why some problems and solutions make sense for particular participants. Perhaps most interestingly, it reveals that the same frames can be used by both proponents and opponents (see Table 3). This creates opportunities for participants to align their competing positions. However, these opportunities also create problems. Participants might not get what they want even if they agree on the framing of the problem. So, where proponents and opponents rely on the same repertoire to support different interests, they engage in framing practices to impose their way of thinking on the discussions. Three such practices emerged in this case.

Undermine a frame to legitimize a frame

One tactic employed in DNT is for participants to undermine opposing frames. For example, proponents attack the legitimacy of the *right to privacy repertoire* by highlighting where it failed to recognize pragmatic issues – in particular, those facing the advertising industry. To do this, participants provide basic explanations of the industry and, in so doing, imply that their opponents do not understand the reality of the situation. The following message refers back to the MRC Accreditation issue and offers a ‘101 on the ad serving economy’:

If I spend \$150 k on 200 k lbs of frozen pork bellies at 75 cents a pound a huge tractor trailer(s) show up and I see frozen pork bellies. I can further weigh them on an NTEP certified scale, and if it turns out that only 180 k lbs are there I can negotiate a \$15 k discount. We can agree on this because even though the bellies were weighed at my facility, they scales were certified by an organization both buyer and seller trust. If alternatively, I spend \$150 k on 10 k CPMs of advertising on Big1stParty.com at \$15/CPM

targeted to IP addresses in the Spokane WA area from 4 pm to 7 pm local time – where’s the beef? I live in Atlanta. If the ad buy was delivered correctly, I should see exactly ZERO of the ads. How then does the purchaser have confidence that all 10 k CPMs occurred? . . . MRC is the answer here. MRC will give both parties confidence that they have a common frame of reference from which to conduct business. . . . If you are suggesting that accommodating MRC audits shouldn’t play a role in these discussions, the argument is akin to saying no one should certify scales in the commodities market. (Brooks Dobbs, 22 October 2012, 9:12 am)

In this contribution, we can see how a participant seeks to undermine an opposing frame by illustrating that they are missing crucial details. It offers a detailed description of the workings of the online advertising market and reframes these in terms of a more tangible industry. This comparison performs important rhetorical work. It relegates opponents to a position of ignorance in need of a basic *101* (i.e. a foundation course). This also allows the author to present the advertising industry as a complex and interrelated network, an ecosystem, which will be destroyed if it is thrown out of balance. It implies that there are consequences to DNT which opponents of the proposals do not understand.

Undermine a claim maker to legitimize a frame

A second framing practice involves reference to personal sources of authority. Following on from the interactions where an opponent of the proposals quoted MRC policies to dismiss the proposals, a proponent suggests that reading documents is not enough. They argue, instead, that an individual’s experience is most important. The sender describes themselves ‘as an expert in this domain’. But, in this instance, not only do they seek to establish their personal authority, they also seek to undermine their opponents’ authority at the same time. They write: ‘The issue is by no means closed, nor are you qualified to close it . . . You are a Stanford grad student’. The messages continue:

I sit on the MRC’s Digital Audit Review Committee. As such, I have attended countless MRC audits, and am asked to apply the MRC guidelines to the audited companies – I do this, every week. . . . Unless you are accusing me of lying or not being qualified (please be transparent and direct if you are), then I am attesting to the fact that data retention, of any data that relates to the bought/billed unit (impression, click, action, etc.) is required per the guidelines. (Chris Mejia, 23 October 2012, 11:49 pm)

The author, a representative of the Interactive Advertising Bureau, accuses his opponent of ‘simply reading a document online and pulling parts of it out of context to suit your ill-placed argument’. This, the post continues, ‘is not only detrimental to this working group’s mission, it reflects poorly on the institution you are representing’. Finally, this message takes an overtly aggressive and combative tone:

I’d like to know who your academic advisor is, or the official at Stanford who supervises your contribution to the W3C? Since your membership to this forum seems to be associated with your student affiliation at Stanford University, I’d be interested in understanding whether your views and actions here are those of the University, or just yourself as a private citizen? (Chris Mejia, 23 October 2012, 11:49 pm)

It is notable here that another email discussion deals directly with this question. It is titled ‘Your W3C affiliation with Stanford University?’. This discussion starts with a copy of private email

from Chris Mejia to Jonathan Meyer that asks for clarification on Jonathan Meyer's institutional affiliation. It is posted to the public list by Jonathan Meyer who then responds to this public list stating his position at Stanford University and clarifying that his contributions to the TPWG are made as a private citizen. To this, Mejia responds that he has 'launched an inquiry about your/Stanford's participation in this working group, and your conduct here'. A new discussant intervenes at this stage. They point out: 'It is hard to see a request like this to speak with an academic's supervisor as anything other than intimidation' (Joseph Lorenzo Hall, 25 October 2012, 3:41 am). In a final twist, Meyer resigned from the group and his resignation letter was quoted by proponents of these proposals, including the IAB, as capturing 'the sense of futility' at the unwieldy, hostile and unproductive discussions in DNT. This, they suggest, makes the TPWG inferior to accepted advertising industry-led initiatives.

Breaking consensus

This last example hints the contextual nature of the framing practices in DNT. There is a question as to whether the proposals were raised with the intention that they would ever be adopted. An early contribution in the discussion of Issue 178 makes this point. It acknowledges that marketing trade groups have 'done a lot of work in a somewhat related area' but states that 'raising issues that you know quite well will not be adopted is not an effective way to contribute to this process' (Roy T. Fielding, 5 October 2012, 03:20 am).

So why raises these issues? If we contextualize these framing contests, we can begin to understand the value of this tactic for those who want digital marketing to continue. The TPWG was set up with the aim of achieving 'global consensus'. As long as there was no consensus, the TPWG would be unable to initiate any technical solutions for the Tracking Preference Expression. DNT, in short, would die. Opening up certainties into a series of questions, creating discussion and introducing tensions meant that consensus was impossible. As a result, the proposal that marketing and advertising be permitted with DNT has been accepted in practice without being accepted in policy.

Indeed, the proposals that marketing and advertising be permitted uses within DNT have been closed without action. But opponents of these proposals did not win. In the absence of consensus, the whole DNT initiative has fallen by the wayside. The TPWG's membership fractured and, while the proposal documents continued to be discussed, digital marketing also continued. Leading tech and media companies have introduced their own standards such as 'In-private' browsing (Microsoft) and 'Incognito' (Apple).

Analysis: The macro-politics and micro-politics of consumer data

The DNT initiative was an attempt to allow web users to opt-out of targeted marketing. But in developing a standard technical solution to this problem, consumer groups and marketing representatives were forced to agree on the nature of digital consumer data itself. They had to agree on whom it was for and why it existed. Some framed it as something owned by individual web users who had the right to control how it was used. Others viewed it as economic resource that they could exchange and exploit. To settle matters, participants drew on their ethical commitments, matters of compliance and administrative sources of authority.

Perhaps the most striking aspect of the case was the ways in which the technical discussions quickly turned away from technical issues towards political, economic and cultural ones. One way to think about this is to return to the idea of politics developed in STS – that is, as a process through which the *matters of concerns* of one group of actors turns into a *matter of fact*. In this regard, it is

useful to separate out the *matters of concern* from the practices and processes through which they become *matters of fact*. To do this, we can distinguish between two levels of politics: *macro-politics* covers the ideologies that serve particular actors' interests, while *micro-politics* refers to the practices through which participants claim power in a given context.

Macro-politics of data

Many of the discursive repertoires that diagnose the pertinent issues in the DNT initiative can be described as being macro-political. That is, they relate to grand narratives and cultural and social values. When, for example, a participant justifies marketing practice because it is as American as apple-pie, it is difficult to interpret this any other way than as an attempt to valorize marketing by mobilizing specific economic, social and cultural values. Likewise, when opponents of the proposal claim to represent consumers, they do so with reference to social values of choice and freedom. Ironically, they make no attempt to actually give voice to consumers but rather treat them as an abstract ideal.

Put otherwise, at the macro-political level, consumer data is valued through specific ideological positions. At this level, though, consumer data can exist as a somewhat curious object. In this case, both opponents and proponents of the proposals seem to agree on many of the same macro-political ideas. They both value individual decisions above centralized administration and respect capitalist markets. They both acknowledge the need for considered regulation to support decision makers and markets. In short, both accept a liberal philosophy and political economy. This suggests an obvious conclusion: the issue in this case was not just about macro-politics. It was also about the ways that ideological ideas were presented to advance particular interests. This is a different form of politics – one involving practices and rhetoric not ideas.

Micro-politics of data

The concept of micro-politics refers specifically to this type of political activity (see Burns, 1961). It encourages us to view interactions between groups as strategic and competitive exchanges in which one group seek to establish their dominance over others. Specifically, it tells us that these exchanges are really conflicts between frameworks, discourses and perspectives. Groups use any mechanisms of power and authority they can to organize a social space around the frames which give them further power. Bourdieu (1997) offers the metaphor of a social battlefield structured by the victor's landmarks to get at this.

Unlike macro-political *ideas*, though, micro-political *actions* only make sense in specific contexts. In this case, for example, the consensus-based nature of the W3C organization itself allowed opponents of the proposal to be enrolled into the very decisions they opposed. That is, because proponents could open up debates and create conflict, they could stop new landmarks from structuring the field. The clearest instance of this strategy occurs when representatives of marketing interests used the conflicts they had created as evidence that the entire DNT initiative had failed. Through this, they won the framing contest. They played a more successful micro-political game than their opponents.

Discussion

Separating out these two forms of political work not only helps to illuminate why DNT failed, it also allows us to relate the case to wider discussion about politics in marketing. Three themes

present themselves here: the micro-politics of data speaks to discussions about power in marketing; the macro-politics of data speaks to discussions of ideology and marketing; and together they allow us to define the *matters of care* at the heart of contemporary marketing practices.

Power

The prominent approach to theorizing power in marketing theory follows a Foucauldian perspective (see Knott and Tadajewski, 2017; Zwick and Knott, 2009). In terms of quantitative representations of consumers, the central argument here is that data allow marketers to wield disciplinary power over consumers. As quantitative data is fed-back to consumers through loyalty systems, recommendations or invitations to participate in brand communities, consumers change their behaviour around perceived norms (Zwick et al., 2008). Foucauldian notions of biopolitics and subjectivation have been particularly relevant in this regard (Zwick and Bradshaw, 2014).

An STS-informed analysis complements this body of work by emphasizing the grounded, contextually defined micro-political actions through which such data technologies are constructed and maintained. If the Foucauldian approach shows us the importance of a panopticon, the STS-inspired approach shows us the importance of the building materials that are needed to construct one. Indeed, in DNT, consumers, marketing organizations, academics, policymakers and advocates each had an opportunity to put forward their macro-politics. But there was no master discourse or authority at play who could decide matters. Instead, there was a contest that was settled through micro-politics.

The power of marketing over consumers, in other words, was not assumed in DNT. It had to be created within the discussions. In this sense, an STS-inspired analysis emphasizes the instability of macro-politics, technologies and practices (see Hacking, 2004). It shows that seemingly powerful marketing actors are constantly challenged in the everyday practice of marketing (Heath et al., 2017). In this case, the addition of a simple technical requirement on web developers was seen as an existential threat to the entire digital marketing industry. Further, it shows that it is precisely, and maybe ironically, through such challenges that the power of marketing is confirmed. The power of marketing practice does not come simply from its access to consumer data but from its ability to maintain access to it when challenged.

Ideology

Stretching back to the Frankfurt School, critical marketing scholars argue that marketing is manipulative and exploitative (Cluley, 2011). More recently, it has been argued that marketing is intimately bound up with a particular set of neo-liberal ideological values (Hackley, 2003). It individualizes consumers and undermines community (Varman and Saha, 2009). It champions instrumental-rationality and profit-maximization over ecological and ethical concerns (Varman et al., 2011).

In DNT, though, things are more complex. Although proponents of the proposals appeared to argue for an economic view of the web, the frame they put forward was based on obligation, reciprocity and community. The exchange they describe between web users and content providers is more social than economic. On their reading, advertisers subsidize the delivery of web content and web services in exchange for the ability to advertise to consumers of the content and services. They argued that if consumers did not reciprocate their investments, they would be forced to withdraw them and the web, as we know it, would either die or fall into monopoly hands.

Expanding this, proponents argued that if data was not available as a collective resource that all marketers could access, the current advertising ecosystem would breakdown. However, this would not mean the end of targeted advertising nor would it grant consumers the ability to choose whether they were exposed to targeted adverts. It would simply mean that targeted advertising became the exclusive offering of a small oligopoly of first-party data holders such as Google, Facebook and Yahoo as their access to data would not be affected by DNT.

In this sense, representatives of marketing were arguing for a *commons* – understood as a collaborative way of surviving based on equal access to shared resources (see Standing, 2016). In a similar way that Marx (1842) understood the enclosure of woodlands into private property as a way of prohibiting a way of life, marketers explain that if they cannot have equal access to a resource necessary for their survival, their industry would die. But this is not to say that the proponents of the proposals were anti-markets or critical of marketing. It is to say that they rely on a common resource as a basis for their competition. In DNT, they protect the market for marketing.

In this regard, Davies (2014) points out that ““competitors” must begin with something in common if they are to “compete”” (2014: 41). He argues that this requirement represents a limit to the totalizing tendency of neo-liberal ideology. That is, agreeing on the need for a common good both forms a basis of competition but also a bulwark to all out conflict. Behind the ideology of competitive markets, there is more collaboration than we might think. Creating a market for marketing is one of the most important, but largely unacknowledged, functions of modern marketing (Tadajewski, 2010).

Conversely, while on the surface opponents of the proposals seemed to be arguing against the market in favour of a civic space, the nature of the civic space they describe largely conforms to the marketing ideology imagined in critical marketing studies. Their macro-politics valued individual choices by web users and implied a very transactional relationship between web users and content and service providers. It presents data as an individual possession, or currency, that users exchange for other services.

It is notable here that representatives of consumer groups did not offer any evidence of consulting consumers for their opinions. In fact, neither proponents nor opponents pay any attention to the diversity of consumers who would ultimately be affected by their decisions. They all assumed that ‘the consumer’ is concerned about privacy but only enough to make an all-or-nothing option. Both sides ignore any contributors to the discussions which come from outside the United States.

In this case, then, it is the marketers who value what would typically be assumed to be anti-marketing macro-political ideas and their opponents who end up arguing for more consumption-based perspectives. However, the marketers do so in order to maintain their market. They are working to create a market for marketing. These macro-political switch points between the two groups became manifest in the switch points between the diagnostic and prognostic frames evidenced above. These opened space for participants to engage in micro-political action.

Care

The DNT case shows how the interests of marketers are enacted through the things they use. To put this in STS terminology, the case demonstrates how matters of concern for particular groups of actors become taken as matters of fact for everyone else. According to De La Bellacasa (2011: 91), though, there is a subtle conceptual distinction between *concerns* and *cares* that is necessary for really getting at the ‘heart of the politics of things’.

Concerns relate to material conditions. For example, many participants in this case treated their macro-political concerns as a matter of fact because their livelihoods, not to mention the advertising ecosystem, were seen to depend on digital consumer data. Care, in contrast, is ‘an ethically and politically charged practice’ (De La Bellacasa, 2011: 91). To care for something is not just to value it but to invest time, resources and effort to look after it. Understanding what groups *care* for show us what is key to their activities – the common resources they need to survive and which structure, however faintly, how they work.

In this case, the problem was that proponents and opponents cared for two different things. Opponents of the proposals claimed they cared about consumers – although they actually silenced them. Proponents, in contrast, cared about their representational practices. For them, consumer data was not just something essential to their economic interests. It related to who they are, their cultural values, ethics and understanding of the world.

Understood in this way, the distinction between *concerns* and *cares* makes a useful contribution to critical marketing studies. It has often been said that critical marketing studies struggle to impact marketing practice. But, De La Bellacasa explains, ‘if we really want to affect’ the use of any object or technology ‘we must also engage with the concerns that animate those who support them. This means that to effectively care for a thing we cannot cut off those with whom we disagree from the thing’s political ecology’ (2011: 90). In other words, a powerful critical intervention could respect, contextualize and understand the cares of marketers. When marketers’ cares are black-boxed, critical interventions are more likely to fail. Likewise, when marketers adopt a short-term approach to the things they care about, or leave the caring to others, they may undermine their own interests in the long run. This calls for critical imagination to innovate new caring practices and shape what marketers care about.

Conclusion

Consumer data is political. In fact, it is *deeply* political. It only works as the basis of calculation once it has been stabilized as an object that can serve particular purposes for particular interests. This involves both macro-politics and micro-politics. The rights, responsibilities and role of data – its macro-politics – are all open to debate. They concern the type of civic spaces we want and the kinds of economic relations we value. To settle these debates, social actors engage in micro-political interactions to secure consumer data their purposes. Alternative value systems are silenced or enrolled. Through these actions, marketers create a market for marketing. They care for their commons.

In closing, it is worth noting a particular rhetorical limitation of this study. Through the DNT discussions, and throughout the analysis offered in the study, consumers, marketers and marketing are routinely treated as homogeneous things. In reality, of course, they are not. Not all consumers care about privacy. Not all marketers care about digital data. Moreover, even those who do, care for different reasons and in different ways. In this regard, in opening one black-box, we have found (or constructed) new ones.

An implication of this is that future research must explore how these black-boxes can be opened up. It could investigate how different types of data are embedded in particular marketing practices and how particular concerns get universalized as concerns of ‘consumers’ and ‘marketers’ generally. For example, the role of organizations like the IAB and MRC needs to be exposed to critical analysis. Conversely, we must also explore how particular macro-politics come to dominate even in situations where the majority opinion runs against them. Such work is not only essential for

critical studies of contemporary marketing practices – which increasingly rely on data – but also for those involved in marketing practices. If marketers, collectively, fail to care for the data they use, they may find their black-boxes break into pieces.


Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

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References

- Araujo, L. (2007) 'Markets, Market-Making and Marketing', *Marketing Theory* 7(3): 211–226.
- Benford, R.D. and Snow, D.A. (2000) 'Framing Processes and Social Movements: An Overview and Assessment', *Annual Review of Sociology* 26: 611–639.
- Bourdieu, P. (1997) *Outline of a Theory of Practice*. Cambridge: Cambridge University Press.
- Bowker, G.C. and Star, S.L. (2000a) 'Invisible Mediators of Action: Classification and The Ubiquity of Standards', *Mind, Culture, and Activity* 7(1-2): 147–163.
- Bowker, G.C. and Star, S.L. (2000b) *Sorting Things Out: Classification and Its Consequences*. Boston: MIT press.
- Burns, T. (1961) 'Micropolitics: Mechanisms of Institutional Change', *Administrative Science Quarterly* 6: 257–281.
- Callon, M. and Law, J. (1982) 'On Interests and Their Transformation: Enrolment and Counter-Enrolment', *Social Studies of Science* 12(4): 615–625.
- Callon, M. and Muniesa, F. (2005) 'Peripheral Vision Economic Markets As Calculative Collective Devices', *Organization Studies* 26(8): 1229–1250.
- Callon, M., Cécile, M. and Vololona, R. (2002) 'The Economy of Qualities', *Economy and Society* 31(2): 194–217.
- Cluley, R. (2011) 'Critical Theory', in T. Mark, M. Pauline, P. Elizabeth, and P. Martin (eds.), *Key concepts in CMS*, pp. 92–95. Los Angeles: SAGE.
- Cluley, R. (2018). The construction of marketing measures: The case of viewability. *Marketing Theory* 18(3): 287–305.
- Cluley, R. and Brown, S.D. (2015) 'The Dividualised Consumer: Sketching the New Mask of the Consumer', *Journal of Marketing Management* 31(1-2): 107–122.
- Cochoy, F. (2008) 'Calculation, Qualculation, Calculation: Shopping Cart Arithmetic, Equipped Cognition and the Clustered Consumer', *Marketing Theory* 8(1): 15–44.
- Cochoy, F. (2010) "How to Build Displays That Sell" The Politics of Performativity in American Grocery Stores (Progressive Grocer, 1929–1946)', *Journal of Cultural Economy* 3(2): 299–315.
- Cornelissen, J.P. and Werner, M.D. (2014) 'Putting Framing in Perspective: A Review of Framing and Frame Analysis Across the Management and Organizational Literature', *Academy of Management Annals* 8: 181–235.
- Davies, W. (2014) *The Limits of Neoliberalism: Authority, Sovereignty and The Logic of Competition*. London: SAGE.

- De La Bellacasa, M.P. (2011) 'Matters of Care in Technoscience: Assembling Neglected Things', *Social Studies of Science* 41(1): 85–106.
- Fuller, M. and Goffey, A. (2012) *Evil Media*. Boston: MIT Press.
- Hacking, I. (2004) 'Between Michel Foucault and Erving Goffman: Between Discourse in the Abstract and Face-To-Face Interaction', *Economy and Society* 33(3): 277–302.
- Hackley, C. (2003) 'We Are All Customers Now . . .': Rhetorical Strategy and Ideological Control in Marketing Management Texts', *Journal of Management Studies* 40(5): 1325–1352.
- Hagberg, J. (2015) 'Ageing Practices: A Historical Exploration of Shopping Bags', *Consumption Markets and Culture* 19(1): 1–22.
- Hawkins, G. (2012) 'The Performativity of Food Packaging: Market Devices, Waste Crisis and Recycling', *The Sociological Review* 60(S2): 66–83.
- Heath, T., Cluley, R. and O'Malley, L. (2017) 'Beating, Ditching and Hiding: Consumers' Everyday Resistance to Marketing', *Journal of Marketing Management* 33(15-16): 1281–1303.
- Johnson, J. (1988) 'Mixing Humans and Nonhumans Together: The Sociology of a Door-Closer', *Social Problems* 35: 298–310.
- Kaplan, S. (2008) 'Framing Contests: Strategy Making Under Uncertainty', *Organization Science* 19(5): 729–752.
- Knott, J.D. and Tadajewski, M. (2017) 'Sanctioning Value: The Legal System, Hyper-Power and the Legitimation of Mp3', *Marketing Theory* 17(2): 219–240.
- Latour, B. (1982) *Science in Action*. Cambridge: Harvard University Press.
- Latour, B. (1994) 'On Technical Mediation', *Common Knowledge* 3(2): 29–64.
- Latour, B. (2002) 'Why Has Critique Run Out of Steam? From Matters of Fact to Matters of Concern', *Critical Inquiry* 30(2): 225–248.
- Latour, B. and Woolgar, S. (1979). *Laboratory Life: The Social Construction of Scientific Facts*. New York: Princeton University Press.
- Law, J. (2009) 'Seeing Like a Survey', *Cultural Sociology* 3(2): 239–256.
- MacKenzie, D. (2006) *An Engine, Not A Camera: How Financial Models Shape Markets (Inside Technology)*. Boston: MIT Press.
- Muniesa, F. (2014) *The Provoked Economy: Economic Reality and The Performative Turn*. London: Routledge.
- Pollock, N. and Williams, R. (2011) 'Who Decides the Shape of Product Markets? The Knowledge Institutions that Name and Categorise New Technologies', *Information and Organization* 21(4): 194–217.
- Schneider, T. and Woolgar, S. (2012) 'Technologies of Ironic Revelation: Enacting Consumers in Neuro-markets', *Consumption Markets and Culture* 15(2): 169–189.
- Schwarzkopf, S. (2015). Measurement devices and the psychophysiology of consumer behaviour: A post-human genealogy of neuromarketing. *BioSocieties* 10(4): 465–482.
- Standing, G. (2016). *The Corruption of Capitalism: Why Rentiers Thrive and Work Does Not Pay*. London: Biteback.
- Star, S.L. and Lampland, M. (2009) 'Reckoning with Standards', in L. Martha and S. S. Leigh (eds.), *Standard and their stories: how quantifying, classifying, and formalizing practices shape everyday life*, pp. 3–34. London: Cornell University Press.
- Tadajewski, M. (2010) 'Reading "The Marketing Revolution" Through the Prism of the FBI', *Journal of Marketing Management* 26(1-2): 90–107.
- Varman, R. and Saha, B. (2009) 'Disciplining the Discipline: Understanding Postcolonial Epistemic Ideology in Marketing', *Journal of Marketing Management* 25(7-8): 811–824.
- Varman, R., Biswatosh, S. and Per, S. (2011) 'Market Subjectivity and Neoliberal Governmentality in Higher Education', *Journal of Marketing Management* 27(11): 1163–1185.
- Winner, L. (1980) 'Do Artifacts Have Politics?', *Daedalus* 109: 121–136.

- Zwick, D. and Bradshaw, A. (2014) 'Capital's New Commons: Consumer Communities, Marketing and the Work of the Audience in Communicative Capitalism', in V. Manzerolle and L. McGuigan (eds.), *The Audience Commodity in a Digital Age*, pp. 157–172. New York: Peter Lang, Incorporated.
- Zwick, D. and Dholakia, N. (2004a) 'Consumer Subjectivity in the Age of Internet: The Radical Concept of Marketing Control Through Customer Relationship Management', *Information and Organization* 14(3): 211–236.
- Zwick, D. and Dholakia, N. (2004b) 'Whose Identity Is It Anyway? Consumer Representation in the Age of Database Marketing', *Journal of Macromarketing* 24(1): 31–43.
- Zwick, D. and Knott, J.D. (2009) 'Manufacturing Customers: The Database as New Means of Production', *Journal of Consumer Culture* 9(2): 221–247.
- Zwick, D., Bonsu, S.K. and Aron, D. (2008) 'Putting Consumers to Work: 'Co-Creation' and New Marketing Govern-Mentality', *Journal of Consumer Culture* 8(2): 163–196.

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