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Labovitz School of Business & Economics, University of Minnesota Duluth, 11 E. Superior Street, Suite 210, Duluth, MN 55802

## **The Body and Technology: Discourses Shaping Consumer Experience and Marketing Communications of Technological Products and Services**

Margo Buchanan-Oliver, The University of Auckland, New Zealand

Angela Cruz, The University of Auckland, New Zealand

Frontiers of thought in other disciplines, popular culture, and marketing communications are continually 're-visioning' technology and influencing how consumers think about and experience technology-based products and services. Providing a glimpse into these frontiers, this paper re-introduces the body into theorisations of consumer-technology interaction and reviews interdisciplinary discourses shaping views of the body and technology. The key theoretical discourses of body-machine liminality, control and freedom, embodied interaction, and identity are discussed. These discourses expand conceptualisations of technology beyond a limiting focus on functional benefits, offering new frames and foundations for investigating consumer experience and marketing communications of technology-based offerings.

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# The Body and Technology: Discourses Shaping Consumer Experience and Marketing Communications of Technological Products and Services

Margo Buchanan-Oliver, The University of Auckland, New Zealand  
Angela Cruz, The University of Auckland, New Zealand

## ABSTRACT

Frontiers of thought in other disciplines, popular culture, and marketing communications are continually 're-visioning' technology and influencing how consumers think about and experience technology-based products and services. Providing a glimpse into these frontiers, this paper re-introduces the body into theorisations of consumer-technology interaction and reviews interdisciplinary discourses shaping views of the body and technology. The key theoretical discourses of body-machine liminality, control and freedom, embodied interaction, and identity are discussed. These discourses expand conceptualisations of technology beyond a limiting focus on functional benefits, offering new frames and foundations for investigating consumer experience and marketing communications of technology-based offerings.

## INTRODUCTION

How do consumers understand and experience technology? How do marketers and advertisers communicate these experiences in a compelling way? In addressing these issues, present theorisations of consumer-technology interaction in marketing literature offer a narrow perspective, with a lack of attention to the body restricting the focus of marketing theory to the functional benefits of technology.

Underlying this pervasive disembodiment of the consumer is an assumed Cartesian dualism which not only separates the mind from the body but also privileges the former over the latter. Such dualism is evident, for instance, in the assumption of a simple dichotomy between the online self and the physical self in explaining consumers' construction of online identities (Schau and Gilly 2003). However, this Cartesian dualism underlying dominant conceptions of the self in consumer research is profoundly unsettled by consumers' interaction with increasingly ubiquitous technologies. Today, there is a proliferation of mechanical, digital, and biomedical technologies which not only allow consumers to transform and communicate their bodies across time and space (e.g. avatars in immersive virtual environments such as *Second Life*), transport themselves beyond their immediate physical location (e.g. cell phones), but also increasingly merge with and enter consumers' bodies in a more literal sense (e.g. pacemakers). Thus, such interactions are destabilising the traditional mapping of the individual self onto a single biological body.

In addition, rather than a natural, pre-determined, and discretely-bounded entity, the body is increasingly revealed as a malleable and porous construction. Not only does the body function as a site for multiple, shifting layers of cultural meaning (Schroeder and Dobers 2006), but its actual materiality is similarly elastic. Featherstone (2000), for instance, sees body modification ranging from simple prosthetic devices to enhance body motor and sensory functions (e.g. spectacles), to the building of technological environments around the body, to the incorporation of technology into the body. These interactions reveal a complex negotiation occurring in the boundary between the body and technology than is initially apparent through a Cartesian-framed first glance. In essence, the ubiquity of machines and the diversity of consumers' interactions with them are dramatically dissolving the boundaries between the body and technology and raising fundamental questions about what it means to be and to have a body, and what it means to be human, in an environment saturated with technology.

Conversations around these issues have circulated in other academic disciplines, popular imagination, and in marketing communications viz. Apple's classic '1984' advertisement (Scott 1991), Ericsson's 'Designer Technology' print campaign (Schroeder and Dobers 2006), Sony's print campaign for the Memory Stick™ (Venkatesh, Karababa, and Ger 2002), and Nike Lab's 'Les Jumelles' and 'Eye(D)' (Campbell, O'Driscoll, and Saren 2006) television commercials (TVC) have recently been analysed as exemplifying the merger of the body with technology.

These explorations have emerged from a visual cultural approach in marketing communications research. Schroeder and Dobers (2006), for instance, illustrate how visual rhetoric is used in a range of print advertisements to represent information technologies in increasingly corporeal ways, using the body as a means of anthropomorphising abstract technologies and rendering them familiar and accessible. Campbell et al. (2006) have presented a brief typology of visual tropes used to represent the posthuman technologised body, as exemplified in Nike's TVC 'Les Jumelles'.

However, understanding visual rhetoric per se, while insightful, requires contextualisation within existing discourses which inform the construction and interpretation of specific tropes. As Arnould and Thompson (2005, p. 869) note, these "manifestations of consumer culture are constituted, sustained, transformed, and shaped by broader historical forces (such as cultural narratives, myths, and ideologies)." These discourses therefore provide a discursive context to ideologies articulated in consumer narratives around technology (Kozinets 2008). Conversely, as these discourses are largely implicated in the social construction of shared cultural meanings, understanding these discourses also enhances understanding of the wider psychological and socio-cultural implications of such representations in marketing communications. These can be linked to emerging works (Venkatesh et al. 2002; Giesler 2004; Giesler and Venkatesh 2005) exploring the notion of 'posthuman consumer culture' as a theoretical lens for consumer research. Thus, an awareness and understanding of these conversations about the body and technology frames not only visual rhetoric in marketing communications involving the body and technology, but also consumers' phenomenological experience of technology. Clearly, these are fundamental discourses which marketing theory cannot afford to ignore.

## METHODOLOGY

To uncover and clarify these discourses, key conceptual and philosophical texts were selected based on their salience for lensing consumers' embodied experience of technology. These were sourced through keyword searches in online ACR proceedings and the ABI/Inform database, and informed by the authors' backgrounds in semiotics, literary theory, postmodern theory, and film, television, and media studies, with further scans conducted through reference lists and Google Scholar. These key works encompassed a range of disciplines including cybernetics, cognitive neuropsychology, media studies, cultural studies and critical theory.

A theoretical discourse analysis methodology guided the induction of discursive categories and related sub-themes from these sources. From each text, main concepts and key themes were identified, which were then categorised into broader themes based on perceived commonalities and linkages. A process of iteration

between the emerging discursive categories and the source texts permitted the development of provisional categories, constructs, and conceptual connections for subsequent exploration, thereby aiding the induction of broader, underlying themes from these sources (Spiggle 1994). Triangulation was further ensured through regular discussions of emerging interpretations between the authors.

## DISCOURSES OF THE BODY AND TECHNOLOGY

The key discourses which emerged from this analysis were: body-machine liminality, a dialectic between control and freedom, consumers' embodied interaction with technology, and the body as a site for the (re)production of identity.

### Body-Machine Liminality

Liminality refers to "a state of transition between two or more boundaries" (Campbell et al. 2006, p. 3). In the context of consumers' interactions with technology, being liminal describes a condition of hybridity, that is, being simultaneously human and machine, and neither human nor machine. Here the boundaries between the human and machine are confounded and revealed as porous and permeable. As Hayles (1999, p. 2-3) writes, "In the posthuman, there are no essential differences or absolute demarcations between bodily existence and computer simulation, cybernetic mechanism and biological organism, robot teleology and human goals."

This discourse of body-machine liminality is fleshed out in various conceptions of posthumanism and cyborgs. Some writings on posthumanism envisage a dramatic discontinuity between the 'human' and 'posthuman'. For instance, when body performance artist Orlan (1996, p. 91) declares that "the body is obsolete," she makes a distinction between the 'natural' body as defined by evolution and the body that is defined by technology. Such conceptions privilege the idea of a 'natural' body which has only been recently surpassed through technology.

This dichotomy between the pre-technological and post-technological body is challenged by Zylinska (2002) who perceives human identity as "inherently prosthetic" (2002, p.3) and by Clark (2003) who conceives of humans as 'natural-born cyborgs' who utilise technology in such a way that it becomes transparent in use and inseparable from our bodies to "extend our sense of presence and our potential for action" (Clark 2003, p. 125). As Clark notes, the plasticity of the brain permits human subjectivity to range over an interactive network of biological and non-biological components, unconstrained by the "biological skin-bag" (Clark 2003, p. 27).

This posthuman dissolution of boundaries is embodied conceptually, figuratively, and metaphorically in the figure of the cyborg which speaks to the inseparability of the body and machine and as a visual representation of this contradictory union (Haraway 1991). The cyborg not only exemplifies the posthuman era (Clarke 2002, Orlan 1996), it is also a manifest representation that technology is an integral aspect of human identity (Clark 2003; Zylinska 2002a).

Specific aspects of body-machine liminality are outlined below.

*Liminality of Substance.* There is an increasing difficulty in distinguishing as separate entities the human body from the machines with which it interacts, such that the emergent entities are always human-machine symbionts (Clark 2003). Furthermore, in the more literal sense of cyborgism, non-biological material is already embedded within the body (e.g. pacemakers, hearing aids, contact lenses).

*Liminality of Form.* Liminality of form occurs when the body and the machine are perceived to resemble one another through repeated metaphorical associations in visual rhetoric (Schroeder and Dobers 2006) and in behavioural repertoires. Developments in

cybernetics and artificial life also illustrate the increasing divestment of human agency onto machines.

Liminality of form is also referenced in the increased plasticity of a biological body in its interaction with technologies such as cosmetic surgery.

*Liminality of Location.* Human-machine interactions are characterised by an indeterminate mapping of the subject with respect to the corporeal body such as occurs in the immersive virtual environment of *Second Life* where users create real-time three-dimensional online bodies which interact with others. In such spaces location of the self proves problematic. Is the self located in the physical body or the online body, in both, or in neither? Steuer's (1992) concept of 'telepresence', in which the consumer simultaneously perceives both their immediate physical environment and the hypermedia computer-mediated environment (Hoffman and Novak 1996), is apposite here.

### Control and Freedom

The body can be seen as both master of and slave to technology. This dialectical master-slave relationship is linked to the indeterminate location of agency within individual and communal bodies.

*Agency.* In its interaction with technology, the body is no longer privileged as the true site of agency, as the self and its associated capacities for independent action extend beyond the boundaries of the skin and are invested in non-biological artefacts. The notion that humans are not the only ones that have an ability to act is explored in Actor-Network Theory (Latour 1993), in which the distinction between human and non-human agents is seen to be an artificial construction of modernity. What emerges in this discourse is a conception of agency which is not unique to the biological body, but rather distributed over a network of hybrid actors.

*Enabled and Dependent Body.* While new technologies have the ability to extend or enhance human capability and introduce new functionality in human life, this is accompanied by an increased dependency on these same technologies. Shilling (2005), suggests that prosthetic technologies can be perceived as dependent 'corporeal replacement' (e.g. crutches), or 'cyborgian enhancement', enabling new functionality (e.g. running shoes).

*Emancipated and Disciplined Body.* Technology can be deployed as an apparatus for the production and control of 'docile bodies' (Foucault 1977) by institutional processes, including marketing (Venkatesh, Meamber, and Firat 1997). Since the industrial era, a drive towards increased control and efficiency have led to the body being seen as an appendage to machines inasmuch as machines are seen to extend the body.

Conversely, interactions with technology may not be reduced to the totalising effects of powerful institutions (de Certeau 1984), as new technologies and cyberspace can promise an emancipatory potential where these computer-mediated environments create an idealised 'public sphere' removed from institutional interest (Habermas 1989; Poster 1997, cited in Lister, Dovey, Giddings, Grant, and Kelly 2003). Clark's (2003) promotion of a 'global informational free lunch' in cyberspace, and Rheingold's (1993) conceptualisation of the virtual community as an 'electronic agora' free from the constraints of the 'electronic panopticon' provide such promise.

*Creative and Emulative Body.* The question of agency encompasses not only interaction between individual consumers and technology, but also communal interaction between consumers where the social 'linking value' of technology products and services takes precedence over their 'use value' (Cova and Cova

2002), and enables intercorporeality, a sense of being connected to and in communication with other embodied beings.

A similar dialectic to that of emancipation and discipline is theorised with regards to communal bodies, with bodies either mirroring or emulating the meanings available in the surrounding consumer culture (Frank 1990) or creatively subverting these meanings and creating alternatives to mainstream consumer culture (Firat and Venkatesh 1995; Giesler and Venkatesh 2005).

### Embodied Interaction

Another central informing discourse concerns embodied interaction at the interface, within which the following themes are articulated.

*Sensory Body.* Consumers' interface with technology involves the senses and engenders embodied experiences of pleasure or pain. The pleasure of interacting with technology has been explored in concepts such as 'flow' and 'telepresence' in computer-mediated environments (Hoffman and Novak 1996), as instantiated by experiences of 'vicarious kinaesthesia' in the immersive video game experience (Darley 2000). In relation to this, Mirzoeff (1999, p. 92) conceptualises virtuality as the transformation of space away from three-dimensional reality to the "polydimensional interior world of the self," asserting that this is not unique to digital technology. In addition, using the example of putting one's avatar on display in public online platforms, Mirzoeff (1999) describes the pleasure of a highly visualised and sensual experience of being both consumer and commodity.

Conversely, the notion of pain at the interface with the machine is highlighted by considering the violence entailed in body modification and prostheticism. As Zylinska (2002b, p. 214) writes, "Physical violence is a manifestation [...] of power exerted on weak but unsubmitive bodies which are then prosthesisized (extended, adjusted, bent, etc.) in an attempt to deprive them of their integrity and inviolability." Consider, for instance, the pain experienced in cosmetic surgery, or the strain of sitting at a computer terminal for extended periods.

*Erotic Body.* Technology facilitates the reproduction of sexual desire, constructing a body which is either/both desired and desiring. Visual culture is particularly implicated in the production of erotic bodies, with relations of desire constructed between gazing subjects (usually male) and gazed objects (usually female), in which the gazing subject is placed in a position of power and domination over the gazed object. Such relations are evident in the use of pornographic codes, particularly the fetish, in the marketing of digital cameras (Schroeder and McDonagh 2006) to signify liminal zones of danger and excitement. In relation to this, Campbell et al. (2006) explore the liminal characteristics of the 'technological gaze' deployed in Nike's 'Les Jumelles', producing a paradoxically sexualised yet empowered female body.

### Identity

Identity is another central informing discourse of the body and technology. In this discourse, the body is viewed as a site of difference between subjects, with technology as an apparatus for the (re)production of such difference. Such 'investments of difference' (Grosz 1994) are crucial to the constitution of identity—a sense of who one is as distinct from some other. From a critical perspective, such investments of difference are also seen to produce differential power relations in society, with hierarchical structures of class, gender, and race persisting in new media in different forms, contrary to utopian notions (Mirzoeff 1999). Discourses of identity centre on the following 'modern' categories of difference.

*Gendered Body.* Bodies are differentiated in terms of gender and sexuality, producing a binary opposition between male and

female bodies, as well as between 'straight' (heterosexual) and 'queer' (non-heterosexual) bodies. Implicated in the construction of gendered identities are particular technologies and modes of visual representation such as 'faceism' (Schroeder and Borgerson 2007) which reinforce these dichotomies. With respect to the body and technology, the figure of the cyborg is contradictory in that it can be seen to offer both liberatory identifications for women while simultaneously confirming gendered stereotypes (Gonzalez 1999).

*Ethnic Body.* Bodies are also differentiated in terms of race and ethnicity, producing a binary opposition between Western bodies and 'Oriental' (non-Western) bodies, as framed by a Eurocentric view which privileges the former over the latter (Said 1978). In this view, bodies are conceptualised as semiotically charged carriers of meaning, such that the potential for action in racialised bodies is delimited by their history of meaning (Klesse 2000). In this vein, Gordon (1995, cited in Schroeder 2003) posits the concept of an 'epidermal schema' which suggests a variance in cultural associations attached to different skin colours. Moreover, with regards to the technological reproduction of ethnicity, Hammonds (1999) shows how visual technologies have always been, and still are, implicated in the attempts to establish categories of race.

*Political Body.* In addition, bodies are differentiated in terms of access to technological resources, producing a hierarchical relation in which the privileged upper class comes to dominate the excluded lower class. An increasing inequality between the technological 'haves' and 'have-nots' led Castells (1996) to coin the term 'digital divide', describing a situation in which access to advanced technology and the ability to realise its full potential is concentrated in the developed world. Inequitable class relations are sustained through this concentration of economic and educational capital in the hands of a privileged few (Bourdieu 1984).

*Mutable Body.* Bodies are also differentiated in terms of age, with discourses of the cyborg implicitly privileging youth over old age. On one hand, authors such as Farquhar (1999) champion the liberatory potential of the cyborg concept, citing the example of reproductive technologies which enable previously excluded women to become mothers. On the other hand, Woodward (1999) writes of normalising discourses in which 'bad' or monstrous mothers are constructed in relation to 'good' or 'natural' mothers, effectively preventing older women from accessing reproductive technologies. This underlines the differential access to technology for people of different ages, as well as the differential meanings ascribed to different kinds of cyborgs. As Woodward (1994) writes, "most of us fear the future prospect of frailty as a cyborg, "hooked up" [...] to a machine."

## IMPLICATIONS AND FURTHER RESEARCH

### Communicating Technology

These discourses, which pervade consumer culture predominantly through popular texts and marketing communications, reflect an expanding, if not shifting, cultural zeitgeist with regards to how technology is viewed: technology is not merely all around us; it is (inside) us. Marketing communications needs to reflect these concerns in order to pierce the heart of what technology means to consumers.

With regards to visual rhetoric in marketing communications, therefore, one might ask what discourses predominate and what discourses are missing in the communication of technology, how these might differ across product categories and brands, and how these might relate to advertising resonance. Such an inquiry will not only enable a description of dominant practices in marketing communications, but also highlight under-utilised opportunities for creating more compelling appeals and increasing the cut-through of

marketing messages. It is notable, for instance, that the print advertisements analysed in Schroeder and Dobers (2006) predominantly deploy discourses of functionality or enablement. However, it is conceivable that a message based on the sensory aspects of interaction, or on the 'negative' aspects of interaction such as dependency or addiction, can be equally, if not more, compelling (e.g. video game advertisements).

Thus, for brand managers, marketing communications managers, and advertisers, these discourses provide a compass for navigating the turbulent and mysterious waters of socio-cultural meaning. For a marketer of technology-based products and services in a cluttered communications environment, such a compass is essential for illuminating creative blind spots and finding ways to break out of existing formulations. The ability to create unique and resonant messages, based on knowledge of these discourses and the ways in which these are being deployed in one's industry, would certainly endow one's communications with a competitive edge.

### Discourses in Consumer Culture

Moreover, this analysis raises questions around the wider socio-cultural repercussions of deploying these discourses in advertising. With regards to gender identity, for instance, one might consider how the visual trope of representing technology using the female body might reflect and perpetuate differential power relations between men and women. On this note, Clarke (2002, p. 35) observes that "Liminal beings are [...] perceived as polluting [...] and are more often than not characterized as monstrous, diseased, queer, marginal, black, insane or female." In a similar vein, advertisements which deploy 'Oriental' (i.e. non-European) bodies as a more potent symbol of liminality may be seen to reinforce binary narratives of ethnicity.

However, it is interesting to consider not only the ways in which traditional dichotomies are articulated, iterated, and reinforced, but also the ways in which these are disrupted. While technology can be seen as an apparatus for the reproduction of such dichotomies, the multiplicity of ways in which consumers interact with machines underlines the artificial and constructed nature of these oppositions and allows for the emergence of ambiguous 'thirdspaces of knowledge' which unsettle traditional binary categories (Campbell et al. 2006). As Campbell et al. (2006, p. 7) write, "Posthuman images produce paradoxical social meaning," in that they blur "the lines that separate the masculine from the feminine, the mechanical and the visceral, and even the divide between nature and culture." Fundamental questions can therefore be raised about the ontological implications of body-machine liminality, and how this might raise questions about what it means to be human or posthuman (Giesler 2004; Giesler and Venkatesh 2005).

### Understanding Consumer Experience

Since images of posthumanism already proliferate in the realm of marketing communications (Schroeder and Dobers 2006; Venkatesh et al. 2002), we need to explore how such images might impact consumer experiences with technology. Consumer ambivalence towards technology as examined by Mick and Fournier (1998) might be impacted by the destabilising effect of posthumanism on 'essential' human nature. It might also be shaped by the socio-culturally contested figure of the cyborg (Clarke 2002).

### CONCLUSION

In summary, this paper presented and discussed key discourses shaping consumers' views of the body and technology. Through a

discourse analysis methodology, theoretical perspectives on the body and technology from key works across a range of disciplines were summarised. The central discourses found were: body-machine liminality, a dialectic between control and freedom, consumer experience at the interface, and the (re)production of identity.

These discourses of the body and technology represent the frontier in theorisations of technology and provide a promising platform for further research. In order to create compelling communications resonant with consumers' experiences of technology, a deep understanding of the meanings surrounding the body-technology interface and how these are being read by consumers is required. This can provide an insight not only into the ways in which these representations influence how consumers think about and interact with technology, but also how consumers think about themselves and construct their own identities, thereby opening up and framing much-needed discussion around the wider phenomenological, ideological, and ethical implications of marketing communications practice.

### REFERENCES

- Arnould, Eric J. and Craig J. Thompson (2005), "Consumer Culture Theory (CCT): Twenty Years of Research," *Journal of Consumer Research*, 31 (March), 868-82.
- Bourdieu, Pierre (1984), *Distinction: A Social Critique of the Judgement of Taste*, London: Routledge and Kegan Paul.
- Campbell, Norah, Aidan O'Driscoll, and Michael Saren (2006), "Cyborg Consciousness: A Visual Culture Approach to the Technologised Body," in *European Advances in Consumer Research*, 7, in press.
- Castells, Manuel (1996), *The Rise of the Network Society*, Oxford: Blackwell.
- Clark, Andy (2003), *Natural-Born Cyborgs: Minds, Technologies, and the Future of Human Intelligence*, New York: Oxford University Press.
- Clarke, Julie (2002), "The Human/Not Human in the Work of Orlan and Stelarc," in *The Cyborg Experiments: The Extensions of the Body in the Media Age*, ed. Joanna Zylińska, New York: Continuum, 33-55.
- Cova, Bernard and Veronique Cova (2002), "Tribal Marketing: The Tribalisation of Society and Its Impact on the Conduct of Marketing," *European Journal of Marketing*, 36 (5/6), 595-620.
- Darley, Andrew (2000), *Visual Digital Culture: Surface Play and Spectacle in New Media Genres*, London and New York: Routledge.
- de Certeau, Michel (1984), *The Practice of Everyday Life*, Berkeley: University of California Press.
- Farquhar, Dion (1999), "(M)Other Discourses," in *The Gendered Cyborg: A Reader*, ed. Gill Kirkup, Linda Janes, Kathryn Woodward, and Fiona Hovenden, New York: Routledge, 209-20.
- Featherstone, Mike (2000), "Body Modification: An Introduction," in *Body Modification*, ed. Mike Featherstone, London: Sage, 1-14.
- Firat, A. Fuat and Alladi Venkatesh (1995), "Liberatory Postmodernism and the Reenchantment of Consumption," *Journal of Consumer Research*, 22 (December), 239-67.
- Foucault, Michel (1977), *Discipline and Punish: The Birth of the Prison*, New York: Pantheon Books.
- Frank, Arthur W. (1990), "For a Sociology of the Body: An Analytical Review," in *The Body: Social Process and Cultural Theory*, ed. Mike Featherstone, Mike Hepworth, and Bryan S. Turner, London: Sage, 36-102.

- Giesler, Markus (2004), "Consuming Cyborgs: Posthuman Consumer Culture and Its Impact on the Conduct of Marketing," in *Advances in Consumer Research*, Vol. 31, ed. Barbara E. Kahn and Mary Frances Luce, Valdosta, GA: Association for Consumer Research, 400-02.
- Giesler, Markus and Alladi Venkatesh (2005), "Reframing the Embodied Consumer as Cyborg: A Posthumanist Epistemology of Consumption," in *Advances in Consumer Research*, Vol. 32, ed. Geeta Menon and Akshay R. Rao, Duluth, MN: Association for Consumer Research, 661-69.
- Gonzalez, Jennifer (1999), "Envisioning Cyborg Bodies: Notes from Current Research," in *The Gendered Cyborg: A Reader*, ed. Gill Kirkup, Linda Janes, Kathryn Woodward, and Fiona Hovenden, New York: Routledge, 58-73.
- Grosz, Elizabeth A. (1994), *Volatile Bodies: Toward a Corporeal Feminism*, Bloomington: Indiana University Press.
- Hammonds, Evelyn M. (1999), "New Technologies of Race," in *The Gendered Cyborg: A Reader*, ed. Gill Kirkup, Linda Janes, Kathryn Woodward, and Fiona Hovenden, New York: Routledge, 305-14.
- Haraway, Donna Jeanne (1991), *Simians, Cyborgs, and Women: The Reinvention of Nature*, New York: Routledge.
- Hayles, N. Katherine (1999), *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*, Chicago: University of Chicago Press.
- Hoffman, Donna L. and Thomas P. Novak (1996), "Marketing in Hypermedia Computer-Mediated Environments: Conceptual Foundations," *Journal of Marketing*, 60 (3), 50-68.
- Klesse, Christian (2000), "'Modern Primitivism': Non-Mainstream Body Modification and Racialized Representation," in *Body Modification*, ed. Mike Featherstone, London: Sage, 15-38.
- Kozinets, Robert V. (2008), "Technology/Ideology: How Ideological Fields Influence Consumers' Technology Narratives," *Journal of Consumer Research*, 34 (April), 865-81.
- Latour, Bruno (1993), *We Have Never Been Modern*, Cambridge, MA: Harvard University Press.
- Lister, Martin, Jon Dovey, Seth Giddings, Iain Grant, and Kieran Kelly (2003), *New Media: A Critical Introduction*, London: Routledge.
- Mick, David Glen and Susan Fournier (1998), "Paradoxes of Technology: Consumer Cognizance, Emotions, and Coping Strategies," *Journal of Consumer Research*, 25 (September), 123-43.
- Mirzoeff, Nicholas (1999), *An Introduction to Visual Culture*, London and New York: Routledge.
- Orlan (1996), *This Is My Body, This Is My Software*, London: Black Dog Publishing.
- Rheingold, Howard (1993), *The Virtual Community: Homesteading on the Electronic Frontier*, Reading, MA: Addison-Wesley.
- Said, Edward (1978), *Orientalism*, New York: Pantheon Books.
- Schau, Hope Jensen and Mary C. Gilly (2003), "We Are What We Post? Self-Presentation in Personal Web Space," *Journal of Consumer Research*, 30 (3), 385-404.
- Schroeder, Jonathan (2003), "Special Session Summary on Branding the Body: Skin and Consumer Communication," in *European Advances in Consumer Research*, Vol. 6, ed. Darach Turley and Stephen Brown, Provo, UT: Association for Consumer Research, 23-28.
- Schroeder, Jonathan E. and Janet L. Borgerson (2007), "Identity and Iteration: Images and the Constitution of Consuming Subjects," working paper, School of Business and Economics, University of Exeter, Exeter, EX4 4PU.
- Schroeder, Jonathan E. and Peter Dobers (2006), "Imagining Identity: Technology and the Body in Marketing Communications," in *Advances in Consumer Research*, Vol. 34, ed. Gavan Fitzsimons and Vicki Morwitz, Orlando, FL: Association for Consumer Research, in press.
- Schroeder, Jonathan E. and Pierre McDonagh (2006), "The Logic of Pornography in Digital Camera Production," in *Sex in Consumer Culture: The Erotic Content of Media and Marketing*, ed. Tom Reichert and Jacqueline Lambiase, Mahwah, NJ: Lawrence Erlbaum Associates, 219-42.
- Scott, Linda M (1991), "For the rest of us: a reader-oriented interpretation of Apple's '1984' commercial," *Journal of Popular Culture*, 25(1), 67-82.
- Shilling, Chris (2005), *The Body in Culture, Technology and Society*, London: Sage.
- Spiggle, Susan (1994), "Analysis and Interpretation of Qualitative Data in Consumer Research," *Journal of Consumer Research*, 21 (December), 491-503.
- Venkatesh, Alladi, Laurie A. Meamber and Fuat A. Firat (1997) "Cyberspace as the next marketing frontier(?)", ed. Stephen Brown and Darach Turley, *Consumer Research: Postcards from the Edge*, Routledge, London/New York, 300-21.
- Venkatesh, Alladi, Eminegul Karababa, and Guliz Ger (2002), "The Emergence of the Posthuman Consumer and the Fusion of the Virtual and the Real: A Critical Analysis of Sony's Ad for Memory Stick," in *Advances in Consumer Research*, Vol. 29, ed. Susan M. Broniarczyk and Kent Nakamoto, Valdosta, GA: Association for Consumer Research, 446-52.
- Woodward, Kathryn (1994), "From Virtual Cyborgs to Biological Time Bombs: Technocriticism and the Material Body," in *Culture on the Brink: Ideologies of Technology*, ed. Gretchen Bender and Timothy Druckery, Seattle: Bay Press, 47-64.
- \_\_\_\_\_ (1999), "Introduction to Part Three (Representing Reproduction: Reproducing Representation)," in *The Gendered Cyborg: A Reader*, ed. Gill Kirkup, Linda Janes, Kathryn Woodward, and Fiona Hovenden, New York: Routledge, 161-70.
- Zylinska, Joanna (2002a), "Extending McLuhan into the New Media Age: An Introduction," in *The Cyborg Experiments: The Extensions of the Body in the Media Age*, ed. Joanna Zylinska, New York: Continuum, 1-12.
- \_\_\_\_\_ (2002b), "'the Future... Is Monstrous': Prosthetics as Ethics," in *The Cyborg Experiments: The Extensions of the Body in the Media Age*, ed. Joanna Zylinska, New York: Continuum, 214-36.