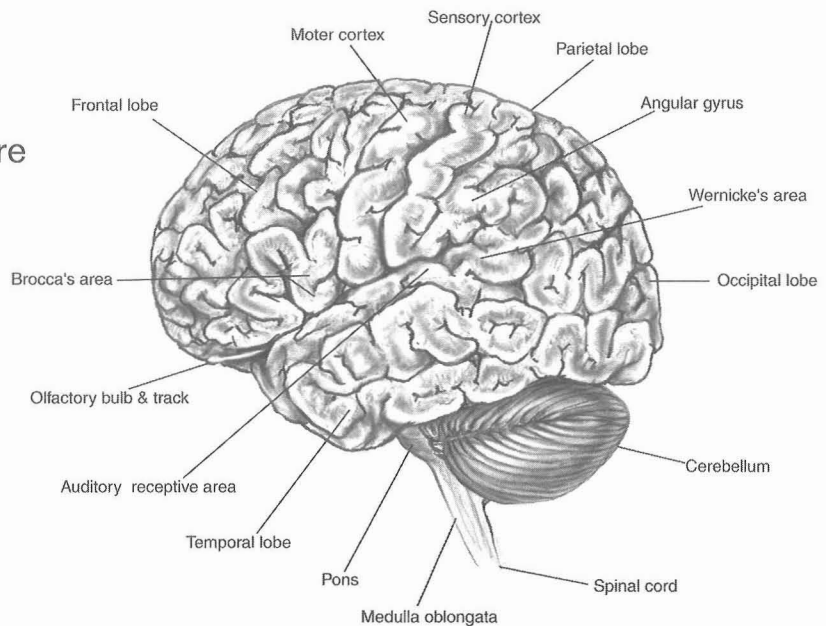


Aesthetic Challenges for Cognition in the Public Sphere

by Martin Morris



The mind, as the centre of reflection and decision making in every individual, is decisive in the formation of the collective will we associate with legitimate democratic governance and socially transformative action in modern societies. A democratic society is one in which, ideally, citizens collectively govern themselves. They give the laws to themselves and control their own history, which, among other things, requires communication, deliberation, the achievement of some consensus, and effective action. Democratic freedom, or political autonomy, exists when the laws that bind citizens are the product of their will in accordance with insights they have acquired intersubjectively. Such intersubjective communication, however, ought to refer not just to discursive discussion, which is what it means in most of the deliberative democracy literature, but also to aesthetic communication, which can take a great many forms that influence and entwine with deliberation. The theory of democracy ideally clarifies the conditions under which democratic freedom is obtained. Hence, a full understanding of cognition will aid the theory of democracy by clarifying the ways people comprehend, come to understanding with one another, and embody the relationship between knowledge and social action.

It is my contention that the mind must be understood not as an individual phenomenon, but as a social one that relies on communicative interactions of significant complexity along multiple axes of mind and body, body

and environment, and the intersubjective relations of mind and other minds that are the products of society and politics. It is precisely because the processes of the mind occur in communicative (or cultural and political) contexts and are not simply products of physiological processes in the brain or nervous system that the study of cognition is necessarily the study of social cognition (or socio-political cognition). I want to argue that, as a result, an aesthetics of democracy is required for confluence with deliberation in the public sphere. This article poses a set of questions that I consider important for such an aesthetics of democracy, but which demand further research. Nevertheless, in what follows, I suggest some tentative responses. Specifically, along with Jameson,¹ I wish to affirm the distinctiveness of postmodern consumer culture, but also the dialectic still required by contemporary cultural politics. I begin with a reflection on the ideas of communicative freedom and communicative power by way of a critique of the cognitive theory of mass art. Next, I consider the idea of social cognition in recent cognitive science. I would like to indicate how Marxist critical theory is consistent with recent social cognition research and how changes in postmodern media culture demonstrate this affinity. I conclude with a consideration of the confluence of politics and cognition via a contemporary example that demonstrates the dialectic of an aesthetics of democracy in music technology in the public sphere.

Communicative freedom and communicative power

Communicative freedom may be taken as a key concept in cultural political theory because it mediates the relation between the social complex of aesthetic production-consumption and the public sphere of political communication. Communicative freedom, I contend, ought to denote a broad set of concerns, from the production of cultural artefacts to the constitution of political goods and goals that involves a relationship to the social totality. As such, communicative freedom indicates more than freedom of speech and opinion, which is emphasized in the liberal tradition, although such freedom would be included in any adequate concept of communicative freedom. A safe, communicative context, free from coercion, intimidation, and ideological distortion, corresponds to the former freedom, as does the empowerment of capacities for participating effectively in democratic opinion and will formation. Communicative empowerment is indicated by the need to develop a certain level of communicative competence, for example, or having access to available opinions on matters of importance relevant to one's interests. Such intellectual freedom from constraint and material intellectual empowerment to be capable of such freedoms are among the central normative requirements for the possibility of individual and social development, as authors since Immanuel Kant and John Stuart Mill have argued. The social-democratic side of the liberal tradition continues to emphasize access to adequate resources for the constitution of meaningful freedom and equality in democratic societies, which, when absent or unavailable, entail unjustified inequality and exclusion.² The liberal political economy of communication indicates a similar relationship of necessity between meaningful access to adequate communicative resources for the constitution of democratic citizens in mass democracies, since one must have the opportunity to recognize (and formulate) as well as to respond to one's social interests if political power is to be described as democratic. Such freedom is, as James Bohman argues, inherent to the idea of deliberative democracy.³ When such access is selective, suppressed or absent, we may speak of "distorted" or ideological communication, due to the contradiction between the assumption of free communication and its denial through the effects of unofficial power.

My concern here, however, is to draw attention to the level of constitution that liberal and deliberative democratic thought tends to neglect, namely, the aesthetic constitution of the democratic citizen that precedes and commingles with the citizen's mind in the process of

cognitive achievement. Political theory cannot neglect the importance of this category of constitution, as it bears upon the core concept of freedom in the liberal and deliberative democratic traditions. Aesthetic constitution has been understood as an "aesthetic state," the quest for which has been a major philosophical theme from ancient Greece through modern (especially German) traditions of thought.⁴ Aesthetic freedom, for Plato, was freedom of the individual from the domination of the soul-damaging passions, the corruption of the mind that the body is wont to impose. Plato's aesthetic freedom required significant discipline (from the self and the state) and ethical commitment to the fraternal community of the polis. But the cultural expression of passion is no longer susceptible to such ethical criticism. Besides the fact that Plato's version relies on untenable metaphysical justifications, aesthetic consumption, just as much as production, can constitute communicative freedom and therefore passion cannot be abstracted from ethical performance for the purposes of moral criticism.⁵ The Aristotelian tradition is perhaps more useful than the Platonic regarding aesthetic development and passion, since it continues to pay close attention to the cognitive moment of aesthetic experience in the context of (political) justice and the uses of rhetoric.⁶ But the neo-Aristotelian position that rhetoric therefore can be used for good or ill betrays its limits: the Aristotelian must deny that communication technology itself is capable of producing values independently of what human beings may intend with its use.

Hence, for my purposes, communicative power does not refer to the power of rhetoric or oratory. Such power is communicative in a different sense. The trace of communicative power may be found in rhetoric, but its motivation is not the persuasive force or sheer enjoyment of beautiful speech. The Western philosophical tradition has been justly interested in rhetoric, and the influence of this interest in the history of philosophy and in other humanities and social science disciplines is well recognized. Plato's critique of oratory—perhaps summed up in his analogy, "what cosmetics is to gymnastics, sophistry is to legislation, and what pastry baking is to medicine, oratory is to justice"⁷—conceives the danger of rhetorical power in terms of its corrupting or decadent influence. That is, like Plato's concern with all art, it is the effects of such power that is important. The Aristotelian tradition is far more willing to draw attention to the positive political effects of good rhetoric, but the epistemic interest remains focused on the relation of its cause and effect. When I speak of communicative power, I speak of a

social force at the level of communicative constitution. It is not a rhetorical effect at the level of semantic achievement or that of ethical practice.

In this context it is useful to examine a recent debate over the role of cognitive theory in cultural studies. David Bordwell's work on the poetics of film seeks to understand the principles by which films are designed to achieve certain effects on audiences, and is explicitly conceived as a social-psychological alternative to hermeneutic and critical sociological analyses of film that arise from semiotics and poststructuralism (and, by implication, my own approach).⁸ Similarly, from a philosophical perspective that draws on Aristotle and "ordinary language" philosophy, Noël Carroll⁹ foregrounds a cognitive approach to film study in which an innate "recognition" rather than learned convention (linguistic or cultural code-based¹⁰) is decisive in pictorial comprehension. Without fully engaging with Carroll's interpretations and extensive criticism of contemporary film theory and critical theory, I would like to note the naturalistic and methodological aspects of his proposal for a cognitive theory of mass art.

Carroll's position emerges from the Anglo-American tradition of analytic philosophy, which has tended, until recently, to ignore or dismiss mass art as a worthy philosophical topic. Carroll seeks to redress this in a series of studies of primarily moving film and television images, culminating in "a philosophy of mass art" that emphasizes the cognitive moment. Carroll considers inquiry into mass art to be philosophical when it concerns the nature of mass art. The nature of mass art, Carroll contends, is determined by the fact that "it is designed to serve mass society... it is *for* mass consumption." Mass art is something produced and distributed by a mass technology and its structural features tend toward "those choices that promise accessibility with minimum effort... for the largest number of untutored (or relatively untutored) audiences."¹¹ The research question that emerges from this concerns "what it is about the relevant works that enables them to command the attention of large audiences." For Carroll, devices of mass movie and TV narration (for example, point-of-view editing) or rock and roll (the backbeat, the "broad emotive contours" of its tones) can help explain the nature of mass art and its intended function, which is "to elicit mass engagement." Standardized plots, formulaic structures, and repetition are not somehow failings of mass art, but are in fact design features that enable understanding.¹²

Carroll's emphasis on cognition—the functional requirement of mass accessibility for mass art—is deepened

in detailed discussions of mass art in connection with emotions, morality, and ideology. For example, the function of emotions for narrative fictions and mass art is "the management of the audience's attention" via the mobilization of certain pre-existing dispositions and preferences so that the manipulation of emotions in mass art provides "an affective cement" that fixes and shapes our attention to the text.¹³ For Carroll, criticisms that mass art panders to superficial or shallow emotions or relies on emotions that are "standardized" (Adorno) or "canned" (R. G. Collingwood) are misguided, not only because it is a functional requirement of mass art to use easily-accessible emotional appeals, but also because there exist "nearly universal emotions" as well as a corresponding human capacity to recognize them, shared cross-culturally. This is how Carroll explains the international popularity of motion pictures and confirms that such "universal" appeals are indeed a condition of possibility for the employment of such central narrative devices of visual communication in mass art, for example, point-of-view editing.¹⁴

Carroll's functionalist approach to mass art is clear regarding its limited applicability to evaluating mass artworks: accessibility and comprehensibility to large audiences cannot provide a standard by which to judge the value of mass artworks except insofar as an artwork can be considered "good" if it succeeds in being accessible and comprehensible to large audiences. But one may nevertheless judge the appropriateness of, for example, the emotional address of a mass artwork, by following Aristotle. We may assess whether "the right emotion is brought to bear on the right object with the right level intensity for the right reason."¹⁵ A propaganda film that encourages race hatred by eliciting disgust for an ethnic group can be judged to be emotionally inappropriate. The sentimental mass artwork presents a level of emotional intensity that is out of proportion with its object. Such assessments are to be done on a case-by-case basis and cannot be applied to mass artworks on a whole. In such a conception, everything hangs upon what is judged to be "right" or "appropriate." However, Carroll says nothing about the sociological conditions that stand behind judgments of right and appropriateness. He does not acknowledge that the activity of judgment is always a communicative process that requires a set of intellectual and material conditions in order to be possible. And this set of intellectual and material conditions is not simply given, but must be actively produced and reproduced in the dynamic communicative interaction between audience and artwork.

As a result, neither Bordwell nor Carroll explain how the motivation they identify in audience guidance mechanisms is generated or from what process comes the “moral imagination” admitted to be present in audiences, except insofar as they are mobilizations of existing culturally-acquired knowledges and “innate” capacities for recognition. To a large extent, this limit is imposed by the positivist methodology that both authors rely upon. Carroll seems to presume that the nature of mass art is something essential, as if it could be determined by the “facts” that he assembles and to which he refers. This tends to be a characteristic of all functionalist approaches. Competing theories, for example, fail to “fit” or “correspond to” the “facts” of mass art.¹⁶ This begs the question of just how these facts are determined and isolated such that they can function as a determining moment in the system and in his argument. The facts of observable phenomena and the identification of innate capacities are generated through a communicative process that involves the philosopher. Carroll fails to include any account of such a hermeneutic self-reflexive theory, which would require, among other things, an adequate sociology of knowledge. Critical theory, along with other social theories such as hermeneutics and systems theory (although with different conceptions), provide self-reflective accounts of the communicative generation of their own theories, and thus are epistemologically superior.¹⁷ In order to provide an adequate account of the moral imagination of audiences, one needs to involve not just observations of existing dispositions, but the communicative process through which moral imagination is acquired, reproduced, and developed. My question—how is the audience guided (at all)?—is thus at different logical and methodological levels than Bordwell’s and Carroll’s analyses of particular filmic conventions, styles, grammars, or emotive manipulations. My contention is that we can explain motivation at this level as a systematic-creative process of synthesizing perception, thought, and aesthetic orientation—communicative power—that relies on the structure and activity of interpretation as an aesthetic-cognitive achievement. Interpretive action, as I understand it, always occurs as an aesthetic-cognitive event, a dynamic communicative encounter between audiences and artworks within a historical context. Carroll neglects this historical communicative process, gazing straight through it as though it were a glassy slide.

The concept of aesthetic that is to be used must be modern to the degree that it accounts for the self-reflexive context of production and cannot invoke or assume any particular cultural form or political order as ground. Yet

in sympathy with the ancient idea, it is crucial to continue to regard the aesthetic to be of the body as well as of art. For as political economy emphasizes, production and consumption are but two sides of the same coin. What is to be called the aesthetic is thus a complex system of social, intellectual, and somatic elements and their relationships that remains open to continual development and complexification (or de-complexification, depending on the process). As such, it refers to a domain and a set of relations rather than a state of being (which marks the decisive difference with a Plato or an Aristotle). I am interested especially in how we may understand the sensorium as a body-mind that makes sense only within a socio-historical context, a body-mind in constant dynamic relations with its social environment. How does the aesthetic domain correspond to and complete cognitive achievement?

Cognitive science and culture

The term “information society” registers the enormous transfer of cognition to computers—artificial intelligence—that has occurred over the last decades. Yet there is no natural programming for human interaction with artificial information processing systems, hence the need to consciously evolve a new “cognitive map” in order to orient people toward their new socio-cultural environment.¹⁸ Critical theory has always maintained that there is a close relationship between the processes of mind, bodily experience, and cultural context, but, with a few exceptions within poststructuralist critical theory, such as William Connolly,¹⁹ Marxistological critical theory has not yet availed itself of the contributions of recent cognitive science. For this, Jameson’s notion of cognitive mapping²⁰ is useful: in postmodernity, our minds are presently incapable of mapping “the great global multinational and decentred communicational network in which we find ourselves caught as individual subjects.”²¹ Jameson calls for an aesthetic of cognitive mapping as a response, “a pedagogical political culture which seeks to endow the individual subject with some new heightened sense of its place in the global system” so that “individual and collective subjects may regain the capacity to act and struggle.”²² Cognitive mapping projects aesthetics and politics under postmodern conditions; it seeks to represent to the collectivity its real conditions of existence in the interests of democratic empowerment. This, however, is no easy task.

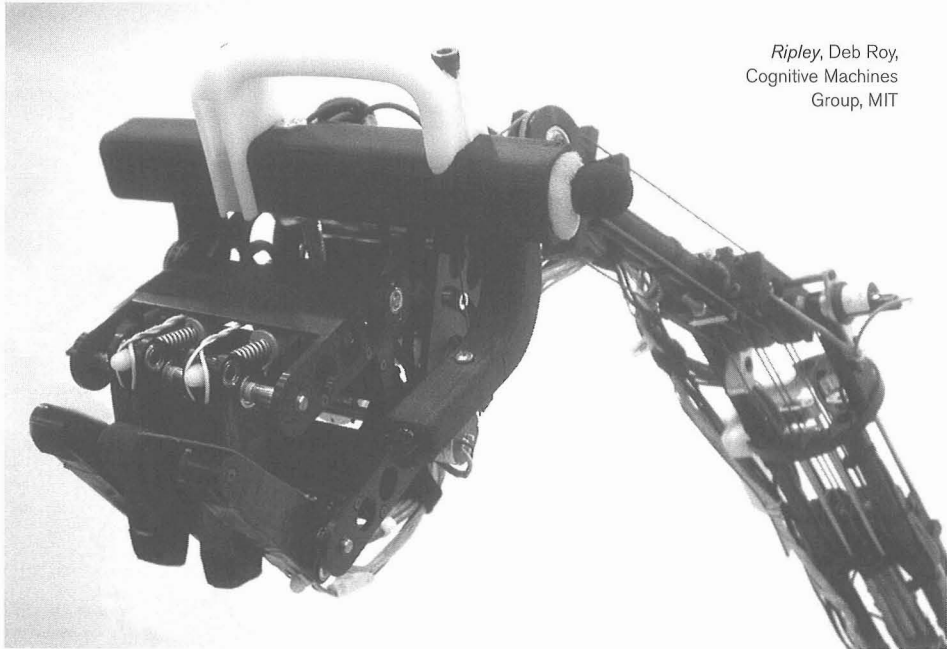
Despite the burgeoning research on social cognition, there remains a great deal of confusion and controversy in philosophical and social scientific discussions about the relationship between cognition and culture, as my

discussion of Bordwell and Carroll indicated. Behaviourist and positivist approaches are nevertheless being challenged by data that indicate a mutually-determining relationship between cognitive behaviour and the organism's environment (its culture and natural setting). The behaviourist assumes a hard-wired natural condition for and a set of dispositions to the psychology of the human subject, which can be revealed through experimental observation—in neuroscience, Leslie Brothers calls this “neuroism.”²³ However, recent cognitive science and psychology reveals an “enactive,” mutual relationship between the mind and its embodied experience of the world that belies the subjective ground for knowledge that the behaviourist or neuroist assumes.²⁴ Moreover, Bruce E. Wexler argues that a requirement for dynamic consistency between internal cognitive structure, which can be shown to be a product of historical social learning, and external cultural or environmental structure can be observed in social psychological studies.²⁵ Wexler, a psychiatrist reaching to other disciplines, suggests that social pathologies such as anomie and ethnic conflict can be (partially) explained by the dissonance between internal brain structure and external cultural structure within a historical context.

If we examine analytic philosophy of cognition and culture once more, we find erroneous assumptions similar to behaviourism. As I have discussed, Carroll employs a cognitive approach to the study of mass art by using an “ordinary language” methodology, heavily indebted to positivism, that seeks to reveal the nature of mass art through a “classificatory” approach (that is, he seeks to classify not to criticize mass art). Carroll achieves this by maintaining a strict separation between the work of mass art and its audience such that it is the audience that brings a “working folk psychology” to the text “as a condition of narrative intelligibility”—the manufacturers of mass art do not impose ideological viewpoints on their audiences, instead they stimulate pre-existing attitudes and knowledges. Neither does mass art automatize and stupefy the mental faculties of its audience, as he believes Max Horkheimer and Adorno,²⁶ among others argue, for there are many mass artworks that can be said to stimulate the imagination (for example, *The X-Files* or the horror genre, which often leaves its monsters off-screen in order to activate audience imagination).²⁷ Through the rhetorical strategy of the narrative enthymeme (leaving something out of the story in order to have the audience fill in the missing premise), Carroll contends that “mass artworks do not function as the source of new beliefs about human conduct, but mobilize pre-existing ones

[and] activate audience preconceptions.”²⁸ Hence, mass artworks may reinforce ideology, but they are not a major originating source. Indeed, for Carroll, mediation has no mode of consciousness or political construction—technologies, “in and of themselves, are morally neutral.”²⁹ Carroll's strict separation of human subject and cultural object permits him to make this argument. Perception, for Carroll, is not very plastic at all: “The human sensorium is a biological mechanism.” To suggest that culture affects perception is to confuse literal perception with conceptual perception: “what we literally see is a matter of biology, not culture or history.”³⁰ But it is precisely this notion that has been thrown into doubt by recent interdisciplinary cognitive studies and, at another level, the history of critical theory. Cognitive studies appears to confirm rather than to contradict critical theory's view of cognition and culture. A more detailed engagement with Carroll's and Bordwell's work, which would require far more space than is available here, will reveal the full extent of the epistemological and political deficiencies of such approaches that do not take the mutual determination of cognition and culture seriously.

Assumptions such as Carroll's have nevertheless stood behind “cognitivism” in cognitive disciplines for decades. Cognitivism refers in general to the assumption that information processing is symbolic computation—the rule-based manipulation of symbols such that when the symbols appropriately represent some aspect of the real world, information processing can lead to a successful solution of the problem given to the system.³¹ In this approach, the digital computer is the dominant metaphor for understanding symbolic processing of the brain. The brain consists of multiple subsystems processing and interacting below the level of consciousness, such that cognition occurs without requiring the sense of “self.” Artificial intelligence (AI) could be produced through correct programming and arrangement of subsystem processing units that, once complex and fast enough to match the dazzling parallel computing power of the brain, would make possible the dreams of AI researchers like Hans Moravec and Marvin Minsky, who think that one day human beings can slough off the “wet” embodiment of consciousness and potentially live forever by placing their consciousnesses in “dry” silicon-based machines. After decades of computer manipulation of increasing complexity, such cognitive science has utterly failed to reproduce anything remotely like human consciousness in a machine (although literary, cinematic, and televisual visions of such AI and cyborgs proliferate). The reason for failure was, in large part, the



Ripley, Deb Roy,
Cognitive Machines
Group, MIT

faulty epistemology. Conceiving of cognitive processes as representational processes reduces communication to reified symbols and thereby makes it impossible to see the immanent intersubjective and social dimensions of the communication that forms minds. Symbolic representation is constructed at a different logical level than that of meaning. The former is governed by rules and their application, the latter is the result of the interpretation of the rules of application. Such interpretation involves bringing forth the world in which the cognitive object “makes sense,” and this bringing forth of the world cannot simply be an application of more rules. If it were simply the application of more rules, it would entail an infinite regress (logical incoherence), since the move in logical level would never occur. But more importantly, making sense in the world requires the concept and practice of narrative. We cannot apply the rules of symbolic representation without placing that application within a narrative context. Above all else, this hermeneutic insight undermines any notion of the brain or mind as a computer, since it observes that the brain always functions in relationship to a social domain in which the “self” that makes sense is produced and that is external to the brain’s physiological rule-governed processes. Hence, rejecting the representational model of information processing

brings cognitive science toward social science. If artificial human intelligence is possible at all—and Roger Penrose, Hubert Dreyfus, and John Searle adamantly contend that it is not³²—it will not be by sophisticated programming alone but by developing such consciousness through social learning processes that must occur over time and within bodily and social contexts, just as it is for humans. This, it seems to me, is just what Deb Roy, director of the Cognitive Machines Group at Massachusetts Institute of Technology, is currently attempting with his robots. Ripley, a robot “child,” is gradually being taught about the world through social interaction with people, not through programming knowledge. For example, Roy and his team have studied pre-linguistic infants to see how mothers talk to their babies about toy objects while the babies play with them. The researchers adapt this behaviour for teaching the robot.³³ Roy combines concepts from semiotics and schema theory to develop a holistic approach to linguistic meaning that seeks to connect language and world for “meaning machines.”³⁴ Others are likewise attempting to unblock AI research by developing models of intelligence and reasoning that recognize the importance of “conversation and narrative,”³⁵ along with emotion and feeling.³⁶

The activity of the bringing forth of a contextual world appears to be a quasi-transcendental feature of human communication. Contextual world appearance remains, like language itself, in a peculiar half-transcendence to linguistic subjects—able to be observed but never quite able to be captured completely as the object of a linguistic utterance. For to identify this activity as an object, one has already brought forth the world in which this activity makes sense. As such, it seems necessary to understand the phenomenon of bringing forth the world in interpretive action as somehow “emergent” from, but not identical to, the structural elements, pathic content, and textual meaning of the communicative artefacts of comprehension. Emergence is a concept derived from systems theory. It names the qualitative process through which new features or behaviours arise in a dynamic system that relate to the combination or interaction of the elements of the system but cannot be causally reduced to those elements. The pattern recognition of the moiré phenomenon, or the perception of the morphology of a face, are examples of this. World appearance is emergent because it must be actualized in the process of communication and because the cognitive “pattern” of comprehension emerges from but cannot be reduced to the ideas, images, or symbols that comprise it. There is a gap, a non-identical step or move in which the power of comprehension manifests itself but which cannot itself be observed or, it seems, be at all known to theory in any conventional sense.

This emergent quality is profound in the philosophical sense, but it is also decisive theoretically for understanding human communication for a number of reasons. Emergence, like the non-identical, cannot properly be an object of speech or communication, for that would make it merely a symbol, a coded element of a semantic formulation that is exhausted at the semiotic level. Neither is it quite a structural component of communication such as grammar or, at a social level, political ordering—for example, the political bias of discourses and practices in Michel Foucault’s sense. I suggest that it is perhaps best understood as the constitutive non-identical communicative power of comprehension, of human creativity itself, within the symbolic universe, and must remain in this peculiar half-transcendence.

Instead of finding a deconstructive limit in the necessary “illusion” of all perception,³⁷ one may employ the media theory of cybernetics and its cognitive science, along with critical theory’s emphasis on the centrality of interpretive power, in order to think the process of perception from the inside. One does not thereby avoid

or overcome the condition that perception (and therefore theory) cannot exist without illusion, but illusion does then lose its suspicious sense. Illusion is, in fact, a necessary condition of the human nervous system (and, it stands to reason, any nervous system) since the nervous system only operates with information internal to its own functions—that is, transforms, constructs, *gestalts*. Sensory organs are stimulated or perturbed by outside forces but the experience of such sensory data is always mediated by the transmission process (a process that remains, and I suspect will always remain, a mystery to cognitive science). As a consequence, no information can be transmitted directly from the outside.³⁸ The whole organism must always translate and construct its relationship to its outside from the information that the closed nervous system provides. Again, this contrasts radically with computers or any known machine. A computer receives instructions from a user that are inputted directly via the user interface and it uses a machine language to communicate internally between its components and externally with other computers. There is no translation in computer operations in the sense I am using this term, because the computer is an integrated extension of human technical control and not simply an external entity.

This internal level of nervous system translation is the first domain of cognitive experience, but it is only one element in human cognition. Such translation can become complete as a properly human cognitive achievement only by joining or becoming part of the imaginative domain of social interaction with others capable of such imagination. The symbolic domain always remains distinct from the materiality of the sign.³⁹ We establish the sense of the self that begins to perceive and coordinate its behaviour with the world and with others only by internalizing structurally and pragmatically independent communicative relations. But it is the need to join in the imaginative domain of aesthetic comprehension that fully completes human understanding (even if such completion is distorted by social arrangements today).

Cognition and the political

To emphasize the notion of social cognition is not to set aside or devalue the experiential processes of the body—quite the contrary. Bodies are individual and their experiences are unique. The body’s singularity is nevertheless always already incorporated into the social, since each perception makes sense only as the result of a history of learning processes within the social contexts in which the particular body-mind relation has developed. In this

way, the body can be inscribed with social relations of domination⁴⁰ constituted by the biopower of institutions and discourses,⁴¹ and it can react, often violently as Michael Hardt and Antonio Negri point out, in the biopolitics of resistance to the harms of globalization.⁴² It is precisely the complexity of this set of relations between the sensate body and the social mind that needs to be carefully elaborated and clarified. To reduce the mind to a product of physiological processes (neuroist cognitive science) or genetic determinations (the search for the gene for crime, for example, which, according to Ted Peters, is impossible⁴³) is to reify the body-mind relation. Conversely, to ignore the body and conceive of the mind as a product of social and cultural processes—the radical social constructivism of some poststructuralists, for example, Jean Baudrillard,⁴⁴ or equally in this respect the emphasis of communitarians such as Alasdair MacIntyre⁴⁵ on practical virtues, tradition and ritual—is to reify the relation from the opposite direction. Cognition cannot be abstracted from the social, nor from the experience and materiality of the body. David McNally's recent work has drawn especially on Walter Benjamin's analysis of the bodily, erotic, and mimetic dimensions of language to argue that communication must always be seen as a matter of life and labour, which, under the alienated conditions of capitalist society, entails that the analysis of communication involves liberation.⁴⁶

Also following Benjamin in a Marxiological framework, Susan Buck-Morss observes that the shock of the imposition of machine culture on the human body under capitalism—the injury to every one of the human senses that the factory system entails—forces a dialectical reversal to the human aesthetic system: “The human sensorium changes from a mode of being ‘in touch’ with reality to a means of blocking out reality. Aesthetics—sensory perception—becomes *anaesthetics*, a numbing of the senses’ cognitive capacity that destroys the human organism’s power to respond politically even when self-preservation is at stake.”⁴⁷ This dialectic plays itself out at many levels and in many contexts in postmodern society.

If cognitive science has begun to discover the cultural, must it also recognize the political as a result of this dialectic? My belief is that it must. It would be reasonable to hypothesize that, if the new interdisciplinary cognitive studies is correct and there is a much closer relationship between culture and cognitive formation than previously thought, there must be something like a “politics of thinking.” All culture contains a political relationship—following Louis Althusser, culture is always ideological since it expresses “the subject’s imaginary relationship to

the real,” which is infused with historical relationships of class, power, and domination. If there is a cultural determination of cognition, then cognitive structure has a political dimension, or at least a political confluence.

Commodification, the central process of capitalism, is driven by capitalism’s inherent need for accumulation. Firms that fail to accumulate more capital for further investment in the development of productive capacities and for profit (that is, for shareholders) decline or are driven out of business by competitors. The need for new markets and productive resources (including labour) drives capitalism around the globe, as Marx noted in the nineteenth century, but it also drives capitalism to seek these necessities within existing social space. Hence, in the twentieth century, Frankfurt School critical theory pioneered the social psychological analysis of mass culture and mass entertainment as cultural commodification, the imposition of the commodity form into people’s hearts and minds, so to speak, transforming their desires, hopes and dreams outside the dull routine of the workplace into those that express the needs of capitalism. For example, the capitalist culture industry takes a young woman’s love of herself (her *amour de soi*) and sells it back to her as this or that hair product, makeup, or smart piece of clothing. It manufactures pre-digested and standardized entertainment products, whose fabrication imitate the standardized routines of work life. While “all needs should be presented to individuals as capable of fulfilment by the culture industry, they should be so set up in advance that individuals experience themselves through their needs only as eternal consumers, as the culture industry’s object ... that they must make do with what is offered, whatever it may be.”⁴⁸ As a result, the “dreamworlds” of mass culture anaesthetize the consumer against the harm and robbery that he or she suffers at the hands of capitalism,⁴⁹ and mass culture serves the ideological function of pacifying class conflict and aiding the social stability required for continued accumulation. People unknowingly affirm and support a system that impedes their interests as autonomous beings and harms their potential development. Capitalism harms with respect to cultural value because it offers a vision of life and a form of development that is extremely narrow compared to the possibilities that human life possesses in principle—the only development supported is that which is capable of serving accumulation goals and all else is irrelevant, relegated to the cultural and political margins.⁵⁰ Capitalism harms human beings through neglect rather than through terror.⁵¹ People’s quality of life and well-being are adversely affected by such developments, the widespread experience of which

has given rise not only to the new social movements of the late twentieth century but to dangerous reactions of *ressentiment*—expressions of ethnic hatred, racism, and even identity politics can also be understood to bear the weight of the sufferings of capitalist development.⁵²

The fundamental operations of accumulation and commodification have not changed in late capitalism. If anything, they have intensified and extended in this new stage or phase of multinational, globalizing capitalism. New information technologies have allowed a massive speedup of financial transactions, greatly increased the sensitivity of stock and production monitoring (just-in-time production) and the coordination with consumer preferences via surveillance, and they have created new phantasmagorias of virtual realities for consumption and entertainment (for example, the Internet, software and video games).⁵³ In late capitalism, the economy has become cultural and culture has become economic, as Jameson argues.⁵⁴ Ideology has not at all ended in post-modernity, as empirical studies continue to demonstrate,⁵⁵ and the analytic value of the concept continues to be affirmed in the face of postmodern cynicism.⁵⁶

Consumerism as an ideology, however, now appears to operate differently than it did in its modern monopoly capitalist phase, which was through much of the twentieth century. The cognitive operation of ideology has changed or is in the process of changing under postmodern and post-human conditions, which is one of Jameson's and my convictions. One needs to test this hypothesis of a "politics of thinking" through assessments of the new cognitive studies literature that are framed by a focus on interpretive power and, more generally, the thesis concerning the aesthetics of democracy. Following Jameson's analysis of postmodern media culture as "the consumption of sheer commodification as a process,"⁵⁷ one may argue that such media culture is less a case of mobilizing desire for the product (for example, the "commodity aesthetics" of Fordism⁵⁸) than of engaging with what may be called the "interpretive power" of the consumer.⁵⁹ The consumption of commodification as a process draws the consumer into the commodification process at the level of his or her achievement of cognitive sense making—it requires significant reflective interpretive activity. The "ambiguity, obscurity, or hypersignified nature of post-modern advertising in general" requires significant "interpretive power generated by communicative interaction."⁶⁰ In the new literature on culture and cognition, some attempts are made to recognize an immanent political dimension to human cognition. Yet Karen Cerulo's collection on the sociology of culture and

cognition, while documenting many worthy connections, contains very little on the political and no reference at all to the perspective of cognitive mapping and critical theory that I seek to advance.⁶¹ N. Katherine Hayles hints at the political when she discusses the new kinds of cultural configurations made possible by the post-human replacement of the dualism of presence/absence with that of pattern/randomness.⁶² New ways of thinking about the relationship between human and machine become possible with the correlated decline of the liberal human subject. But Hayles is never explicit about a political structure to post-human cognition. Recent histories of social cognition, while mentioning ideological analyses, have very little to say about the importance of the political to cognitive structure.⁶³ Can the new cognitive science deepen our understanding of how consumers are being drawn into commodification processes? My suspicion is that cognitive science can help if further ways to connect its results with critical theory can be developed.

Communicative processes are now significantly bound up with the "immaterial labour" of the entertainment-advertising industries and the symbolic manipulation of video and computerization such that new forms of subjectivity and mediation are being generated by the communicative power of the virtual.⁶⁴ The "pressure toward dematerialization" found in the new "virtual bodies"⁶⁵ that correspond to material changes in human bodies are directly associated with the new information technologies.⁶⁶ Studies of the new virtual technologies show that their visual media affect the construction of reality by users.⁶⁷ If, as a result of the need to recover or maintain a purchase on the "wet" or "naked"⁶⁸ material embodiment of human life against its virtual disappearance, there is an "affective turn"⁶⁹ occurring in the human sciences, then the question of the relationship of cognition to embodiment requires political investigation (in my mind, most usefully thought of as an aesthetics of democracy). I am hence less concerned with the social construction of scientific discourse about nature, the body, gender or the mind, which is exemplary in the work of Donna Haraway, Bruno Latour, or Emily Martin, than with the philosophical reconstruction of political structure within cognitive processes that are understood as a moment of the social totality. Adorno and Jameson argue for the need to maintain a purchase on the social totality; Adorno thought of totality negatively—against Hegel's "intellectual forced march" of systemic logic⁷⁰—in order to think of the non-conceptual, non-identical bodily social

reproduction of life that is the condition of consciousness under capitalism and also to hold onto a dialectical (political) resolution for this condition's social suffering. Jameson confirms that the social totality cannot be represented aesthetically under conditions of multinational capitalism, but it can be thought of scientifically, as he believes Ernest Mandel's analysis shows.⁷¹ The concept of the totality nevertheless remains necessary to any transformative, utopian cultural politics of the future and can be in any case "cognitively mapped" or observed in the allegories of cultural texts (such as in Jameson's work). As Hardt and Weeks point out, when one observes the impossibility of representation in any naïve or mimetic sense by using concepts such as totality, cognitive mapping, or allegory, one highlights the process of interpretation itself.⁷² I wish to conclude with a brief consideration of the dialectic of an aesthetics of democracy in the public sphere—via an analysis of the cognitive and bodily involvement of the consumer with the music technology of the MP3 and iPod.

iPod culture and the public sphere

Launched in 2001, Apple's iPod is a mobile music listening device with earphones that uses digitally-encoded MP3 file formats. Users of the iPod (and other less popular MP3 players) are a common sight in the urban environment. Discussions of iPod culture have tended to take as their point of departure the work of Michael Bull,⁷³ which builds upon and develops Raymond Williams's notion of "mobile privatization"⁷⁴ in the history of the Sony Walkman.⁷⁵ Drawing on international interview data, Bull argues that iPod users manage their experience of the city and transit via the power of sound to direct that experience. The iPod is used overwhelmingly while travelling through the urban environment. The iPod user attempts to exercise "autonomy over time and space through the creation of a privatized auditory bubble" that, following Adorno, generates a comforting warmth of personal audio experience against the alienated chill of the city. There is great flexibility in selecting the desired music through the navigation wheel that accesses an entire music collection easily and the organized playlist function, which allows for significant advanced planning. Along with the enormous storage capacity of the iPod, these features significantly increase the autonomy and freedom of the user to manage his or her sonic experience compared to previous mobile music technologies. At the same time, users may "construct fantasies and maintain feelings of security precisely by not interacting with others or the environment"—the street is instead made

to conform to the aesthetic desire of the user and interactional possibilities are neglected or ignored.⁷⁶ The specific fantasy of solidarity with others that music listening affords is, according to Adorno, immanent to the experience, "The compositional subject is no individual thing, but a collective one. All music, however individual it may be in stylistic terms, possesses an inalienable collective substance: every sound says 'we.'"⁷⁷

Theoretically, however, Bull does not make any connection between iPod use and the historical distinctiveness of the postmodern media culture out of which it emerges. Jameson argues that there is a "spatialization of music" in postmodernity in which musical objects are not offered for "contemplation and gustation"; instead, the context is wired up and the space made musical around the consumer.⁷⁸ The iPod technology expresses this. Jameson, along with Harvey, directly link such spatialization with the cultural logic of multinational capitalism embodied in the technology and its use. Certainly there is, as Bull points out, a "cognitive orientation to space" in operation here, but is there not a dialectic being played out rather than simply "potentially ambiguous results" to this process?⁷⁹ The bringing forth of a contextual world in which the cognitive object is made to make sense that I argued earlier is at the centre of human cognition is actualized here through a unique interaction between the listening technology, the mobilization of consumer cognitive activity, and bodily—*aesthetic—enactment*. Jonathan Sterne has pointed out that a significant amount of data is deleted by the encoder that creates MP3 compression in order to make the MP3 so portable and transmittable. The algorithms that achieve this are based on the psychoacoustic principle that one may "lose most of the vibrations in a recorded sound and still hear it as roughly the same sound as the version with no data compression . . . Psychoacoustically, the MP3 is designed to throw away sonic material that listeners supposedly would not hear otherwise." It is not only the ear, but the whole head and chest cavity that can conduct vibration. Hence, Sterne argues that the psychoacoustic body "shapes vibrations before they enter the ear and become sound." Since the MP3 offers only a fraction of the original sound, listeners' bodies are allowed to do the rest of the work: "The MP3 plays its listener."⁸⁰ For Bull, iPod users create "spaces of freedom for themselves through the very use of technologies that tie them into consumer culture."⁸¹ But following Sterne, we can see that there is much more going on in terms of cognitive and aesthetic performance. The increased freedom and autonomy to shape one's emotive experience and

the narrative of one's movement through the urban landscape is paid for by iPod users with increased sonic inferiority, the exploitation of users' cognitive and bodily capacities to compensate for this increased sonic inferiority, and the substitution of fantasized solidarity with the collective undercurrent of musical experience instead of communicative interaction with others. Integration into late capitalism is achieved through enhanced autonomy in the fantasized solidarity of a musical bubble. Yet the freedom and autonomy is real so, considering the possibilities for musical education extended by iPod use, can such empowerment be sublimated into the political? More research is required to assess the effects of this privatized communicative freedom on the capacities and resources for communicative freedom in the public sphere.

To conclude, this theory of the aesthetics of democracy must always be understood dialectically, for it describes at once the domination of the citizen-consumer in postmodernity and the sources of liberation folded into this experience. It dramatizes a rather different contradiction, however, than that of Adorno's Fordist experience, in which the substitute is always consumed instead of the authentic, as the perpetually broken promise of the culture industry "that the diner must be satisfied with reading the menu."⁸² Yet the truth content of Adorno's analysis of the alternative to this may still retain its importance even if his analysis of mass culture is today superseded, namely, that what is suppressed by the contradiction—even this new postmodern contradiction—is precisely the "secret of aesthetic sublimation: to present fulfilment in its brokenness."⁸³ Art still retains this possibility and vocation, the hope of aesthetic negativity to inspire "non-aesthetic" social critique, but it must somehow respond to the new cognitive contexts being established by the new communications technologies and their increasingly important somatic dimensions and entwinements.

NOTES

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- 2 See, for example, Amartya Sen, *Inequality Reexamined* (Cambridge, Mass.: Harvard University Press, 1992) and *Development as Freedom* (New York: Knopf, 1999).
- 3 James Bohman, "Deliberative Democracy and Effective Social Freedoms: Capabilities, Resources, and Opportunities," James Bohman and William Rehg, eds., *Deliberative Democracy: Essays on Reason and Politics* (Cambridge, Mass.: MIT Press, 1997), 321–348.
- 4 Josef Chytrý, *The Aesthetic State: A Quest in Modern German Thought* (Berkeley: University of California Press, 1989).
- 5 Much of Theodor Adorno's and Herbert Marcuse's work is devoted to what I call aesthetic constitution that is explicitly anti-Platonic in its approach. As well, in much of Michel Foucault's later work, a similar theme of an "aesthetics of existence" comes to the fore that draws in large part from discussions of ancient practices of self care or self-fashioning and is directly opposed to the Platonic tradition of aesthetic freedom.
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- 8 David Bordwell, *Making Meaning: Inference and Rhetoric in the Interpretation of Cinema* (Cambridge, Mass.: Harvard University Press, 1991) and *Figures Traced in Light: On Cinematic Staging* (Berkeley: University of California Press, 2005).
- 9 Carroll, *A Philosophy of Mass Art; Mystifying Movies: Fads & Fallacies in Contemporary Film Theory* (New York: Columbia University Press, 1988); *Theorizing the Moving Image: Cambridge Studies in Film* (New York: Cambridge University Press, 1996); *Engaging the Moving Image* (New Haven: Yale University Press, 2003).
- 10 See, for example, Christian Metz, *Language and Cinema: Approaches to Semiotics* (The Hague: Mouton, 1974) and *The Imaginary Signifier: Psychoanalysis and the Cinema* (Bloomington, Ind.: Indiana University Press, 1982).
- 11 Carroll, *A Philosophy of Mass Art*, 186–187, 196.
- 12 *Ibid.*, 193, 202–203, 206.
- 13 *Ibid.*, 269.
- 14 *Ibid.*, 283, 288.
- 15 *Ibid.* 290.
- 16 *Ibid.*, 108, 315.
- 17 Such hermeneutic philosophical critiques of positivism and behaviourism are well established. See, for example, Theodor W. Adorno, *The Positivist Dispute in German Sociology* (London: Heinemann, 1976); Hans-Georg Gadamer, *Truth and Method* (New York: Continuum, 1975); Jurgen Habermas, *Knowledge and Human Interests*, J.J. Shapiro, trans. (Boston: Beacon Press, 1971) and *The Theory of Communicative Action: Reason and the Rationalization of Society*, vol. 1., T. McCarthy, trans. (Boston: Beacon Press, 1989). Carroll ignores them at his peril.
- 18 Ervin Laszlo and Ignazio Masulli, eds., *The Evolution of Cognitive Maps* (Philadelphia: Gordon and Breach, 1993).
- 19 William E. Connolly, *Neuropolitics: Thinking, Culture, Speed* (Minneapolis: University of Minnesota Press, 2002).
- 20 Jameson, *Postmodernism; The Geopolitical Aesthetic: Cinema and Space in the World System* (Bloomington: Indiana University Press, 1992); "Cognitive Mapping," *The Jameson Reader*, Michael Hardt and Kathi Weeks, eds. (Oxford: Blackwell, 2000), 277–287.
- 21 Jameson, *Postmodernism*, 44.
- 22 *Ibid.*, 54.
- 23 Leslie Brothers, *Mistaken Identity: The Mind-Brain Problem Reconsidered* (Albany: State University of New York Press, 2001).
- 24 *Ibid.*; James M.M. Good, "The Affordances for Social Psychology of the Ecological Approach to Social Knowing," *Theory and Psychology* 17 no. 2 (2007): 265–295; Francisco Varela, Evan Thomson, Eleanor Rosch, *The Embodied Mind: Cognitive Science and Human Experience* (Cambridge, Mass.: MIT Press, 1991).
- 25 Bruce E. Wexler, *Brain and Culture: Neurobiology, Ideology, and Social Change* (Cambridge, Mass.: MIT Press, 2006).
- 26 Max Horkheimer and Theodor W. Adorno, *The Dialectic of Enlightenment: Philosophical Fragments*, Edmund Jephcott, trans. (Stanford: Stanford University Press, 2002).
- 27 Carroll, *Mystifying Movies*, 82–83.
- 28 *Ibid.*, 399.
- 29 *Ibid.*, 139.
- 30 *Ibid.*, 158–159.
- 31 Varela et al., *The Embodied Mind*, 42–43.
- 32 Roger Penrose, *The Emperor's New Mind: Concerning Computers, Minds, and the Laws of Physics* (Oxford: Oxford University Press, 1990); Hubert L. Dreyfus, *What Computers Still Can't Do: A Critique of Artificial Reason* (Cambridge, Mass.: MIT Press, 1993); John R. Searle, "Is the Brain a Digital Computer?" *Proceedings and Addresses of the American Philosophical Association*, 64 no. 3(1990).
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- 34 Deb Roy, "Semiotic Schemas: A Framework for Grounding Language in Action and Perception" *Artificial Intelligence*, 167 no. 1–2(2005): 170–205.

- 35 William F. Clocksin, "Artificial Intelligence and the Future," *Philosophical Transactions: Mathematical, Physical, and Engineering Sciences*, 361 no. 1809 (2003).
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- 37 W. J. T. Mitchell, *Picture Theory: Essays on Verbal and Visual Representation* (Chicago: University of Chicago Press, 1994), 364.
- 38 Humberto R. Maturana and Francisco J. Varela, *The Tree of Knowledge: The Biological Roots of Human Understanding* (Boston: Shambhala, 1992).
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- 40 Horkheimer and Adorno, 2002.
- 41 Giorgio Agamben, *Homo Sacer: Sovereign Power and Bare Life* (Stanford: Stanford University Press, 1998); Michel Foucault, *The History of Sexuality*, Vol. 1 (New York: Vintage Books, 1980).
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- 43 Ted Peters, *Playing God? Genetic Determinism and Human Freedom*, second edition (New York: Routledge, 2003).
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- 47 Susan Buck-Morss, *Dreamworld and Catastrophe: The Passing of Mass Utopia in East and West* (Cambridge, Mass.: MIT Press, 2000).
- 48 Horkheimer and Adorno, 113.
- 49 Buck-Morss, *Dreamworld*.
- 50 Marshall Berman, *All That is Solid Melts into Air: The Experience of Modernity* (New York: Penguin Books, 1988).
- 51 Buck-Morss, 118.
- 52 Wendy Brown, *States of Injury: Power and Freedom in Late Modernity* (Princeton: Princeton University Press, 1995); Rosemary Hennessy, *Profit and Pleasure: Sexual Identities in Late Capitalism* (New York: Routledge, 2000).
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- 57 Jameson, *Postmodernism*, x.
- 58 See Wolfgang Fritz Haug, *Critique of Commodity Aesthetics: Appearance, Sexuality, and Advertising in Capitalist Society* (Cambridge: Polity Press, 1986).
- 59 Martin Morris, "Interpretability and Social Power, or, How Postmodern Advertising Works," *Media, Culture & Society*, 27 no. 5 (2005): 697–718.
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71 Ernest Mandel, *Late Capitalism* (London: Verso, 1980).

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73 Michael Bull, "Automobility and the Power of Sound," *Theory, Culture & Society*, 21 no. 4/5(2004): 243–256 and "No Dead Air! The iPod and the Culture of Mobile Listening," *Leisure Studies*, 24 no. 4(2005): 343–355.

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76 Bull, "No Dead Air!," 346, 350, 353, 344.

77 Adorno, *Sound Figures* (Stanford: Stanford University Press, 1999), 9.

78 Jameson, *Postmodernism*, 299–300.

79 Bull, "No Dead Air!," 353, 351.

80 Jonathan Sterne, "The MP3 as Cultural Artifact," *New Media & Society*, 8 no. 5 (2006): 825–842.

81 Bull, "No Dead Air!," 346.

82 Horkheimer and Adorno, 111.

83 *Ibid.*