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Aesthetic Mediation and the Politics of Technology: (re)New(ed) Strategies for a Critical Social Theory

-Andrew J. Pierce

There is a rich history in early critical theory of attempting to harness the power of aesthetic imagination for the purposes of political liberation. Both Adorno and Marcuse pursue this project in different ways. But it has not yet been linked concretely enough to the philosophy of technology. In advanced technological societies, technologies often aid in and embody certain political structures of domination. This has led some theorists to equate technology itself with domination, by way of a technical rationality that is supposedly devoid of any moral, political, or aesthetic content. In his recent work in the philosophy and politics of technology, Andrew Feenberg challenges this thesis, pointing out that the reduction of technologies to their function is a theoretical abstraction rather than a historical fact. As such, it can be understood as a technological fetishism (analogous to commodity fetishism) which conceals rather than clarifies the political character of concrete technologies.¹ Once technologies are seen as socially constructed and mediated, the design and social organization of technology becomes a normative issue. That is, one can then ask, as Feenberg does, how technologies ought to be constructed in order to best serve the interests of a democratic society. It is not my intention to challenge this program of democratizing technology. Rather I would like to draw out and examine a particular aspect or "initiative" within it. Technologies, as concrete objects infused with political content, are especially appropriate for bringing aesthetic elements into the everyday lives of their users. In the first place this is merely the discouraging insight that aesthetically pleasing design is an important feature of commodities in consumption-driven societies. But aesthetic aspects of technologies can resist as well as support the status quo, and further, I will argue, aesthetic initiatives are a vital component of resistance to technocratic (i.e. undemocratic) organizations of technology, since the power of these technological regimes is partly symbolic. The phenomenon of customization and personalization of technologies, although already coopted in a variety of ways, is a testament to such resistance. I begin then, by specifying the conventional method of understanding technological domination: the differentiation thesis. I then show how this understanding of technological development fails to grasp the reality of technologies as they are embodied in social contexts. From the concept of an embodied technology, I demonstrate, through an analysis of customization, that aesthetic imagination plays an important role in politicizing technologies, and enrolling these technologies themselves in the project of resisting the general phenomenon of technological domination. This helps to understand what it might mean to translate the insights of early critical theory into a contemporary critical praxis.

¹ A. Feenberg. *Questioning Technology*. NY: Routledge, 1999. See also Feenberg's *Alternative Modernity: The Technical Turn in Philosophy and Social Theory*. Los Angeles: University of California Press, 1995, and *Transforming Technology: A Critical Theory Revisited*. Oxford University Press, 2002.

1. The Differentiation Thesis

The term 'technology' can be traced etymologically to the Ancient Greek term *techne*, which named all forms of making, both practical and artistic.² How then do these terms become differentiated in modern vernaculars, and more importantly, does this conceptual distinction correspond to a fundamental difference between expressive arts and practical technologies? For critical theory, the differentiation of art and technology is bound up with questions about modernity. For Marx the defining moment of modernity is the birth of the capitalist mode of production, which wrests the economy from its social context and attributes to it an independent logic of exchange. The economy then (not just markets for goods and services in the abstract, but also the material technologies that facilitate them) gains a certain artificial autonomy, such that it can be understood according to certain "laws" which appear as natural, or intrinsic to their objects. In the last analysis, it is these laws which govern the development of society, including its "superstructural," cultural aspects.

Importantly influenced by Marx, but in contrast to his interpretation of the autonomy and fundamentality of the economy, Max Weber's theory of modernity notes that with modernity, the "cultural value spheres" of science, morality, and art also achieve a certain sort of autonomy, even from the basic laws of political economy. These value spheres are differentiated by a process of "rationalization" which attributes to each sphere a constitutive rationality as well as a set of specialized procedures and social roles.

Questions of knowledge are now treated exclusively by scientists, in accordance with the "value-free" (purposive rational) methods of deductive reasoning and experimentation. Questions of justice are dealt with by trained legal experts and ethicists in accordance with "value-rational" procedures designed to test the universal validity, consistency, and effectiveness of norms and laws. And questions of taste are taken up, by professional artists and art critics, in ways that further the development of creative techniques and the appreciation of expressive values.³

Where does technology fit on this model? I take it that the idea that technology is merely applied science has been thoroughly debunked.⁴ But technology does seem to have a specific form of rationality (the principles of engineering perhaps) as well as a specialized group of social actors (engineers, designers, and so on). It might then be seen as having a certain autonomy as well, irreducible to its scientific, moral or aesthetic elements. Early critical theorists like Horkheimer, Adorno and Marcuse took this

² Heidegger points this out in *The Question Concerning Technology*. Trans. William Lovitt. NY: Harper and Row, 1977. p. 12-13, but one need not follow his ontological method, nor accept his conception of technology as "enframing" in order to take the point. Indeed, Heidegger and the hermeneutical tradition he inspired can also be said to put forth a version of the differentiation thesis, where meaning becomes separated from objects in the world, but for the purpose of this paper, I will focus on the version of the differentiation thesis put forward by the Frankfurt school of critical theory and its predecessors.

³ D. Ingram. *Critical Theory and Philosophy*. NY: Paragon House, 1990. p. 57.

⁴ See T. Pinch and W. Bijker. "The Social Construction of Facts and Artifacts" pp. 17-50 in *The Social Construction of Technological Systems*. Eds. Bijker et al. Cambridge, Mass: MIT Press, 1987.

possibility very seriously. They saw in technological societies an inherent tendency toward domination, due to a technological attitude that reduces all questions to questions of instrumentality, efficiency, and so on. In *Dialectic of Enlightenment*, Horkheimer and Adorno write, "knowledge, which is power, knows no limits, either in its enslavement of creation or in its deference to worldly masters...technology is the essence of this knowledge. It aims to produce neither concepts nor images, but method, exploitation of the labor of others, capital."⁵ Similarly, Marcuse begins his *One-Dimensional Man* by asserting that "a comfortable, smooth, reasonable, democratic unfreedom prevails in advanced industrial civilization, a token of technical progress."⁶ With these theorists, the question of technology becomes central, but their supposed equation of domination with rationality itself (technical rationality being just the contemporary instantiation of such a dominating logic) leads some to think that their view amounts to an all-encompassing pessimism, where the emancipatory potential of reason is forgotten.

Habermas in particular condemns such pessimism, and attempts to identify and reconstruct a form of rationality capable of resisting the dominating effects of technical rationality. But he never challenges the idea that technology is governed by an autonomous rationality which, left unchecked, tends toward totalitarian control. Instead, he attempts to bring technical rationality under external control, through communicative rationality. In this way the infectious spread of the technological attitude can be quarantined, and kept from "colonizing the lifeworld" where communicative rationality can carry on the emancipatory legacy of the enlightenment without interference.

This brief sprint through the history of critical theory no doubt misses several important subtleties, some of which will soon be clarified, but it suffices to bring out the centrality of a view of technology as autonomous and inherently geared toward domination and control. In the next section, I will present some challenges to this view, before identifying and developing some causes for optimism in Adorno and Marcuse, relating to the potential for liberation bound up in the aesthetic imagination.

2. Embodied Technologies

In tracing (a version of) the differentiation thesis back to Marx and Weber, one should not forget that they were not only sociologists, but also critics of ideology. That is, though they identify in modernity a certain material and cultural differentiation, they also mean to show that this differentiation is false – that it conceals a certain organic unity of the market and the society in which it appears, of science with the values that are supposedly irrelevant to it, and so on. The laws of the market are challenged (and strictly speaking, refuted as *laws*) whenever economic imperatives run up against the resistance of those whose lives are affected. And even scientific laws are increasingly being shown to be insufficient for explaining the value-laden *practice* of science. The same can be said of technology. Though it would be difficult to deny that a certain purely instrumentalist logic attempts to govern technological development, this logic is not irresistible or

⁵ M. Horkheimer and T.W. Adorno. *Dialectic of Enlightenment*. Trans. Edmund Jephcott. Stanford University Press, 2002. p. 2.

⁶ H. Marcuse. One-Dimensional Man. Boston: Beacon Press, 1964. p.1.

complete. Users influence technological development in a variety of ways, from adapting and changing the technologies to fit their own needs (like the internet), to resisting the very implementation of certain technologies (like nuclear power). And with each intervention, technologies are shown to be sites of resistance to the very forms of power that they are supposed to embody.

But what is meant by an "embodied" technology? More specifically, what do technologies embody? The answer to this question provides the refutation of the differentiation thesis, because what is embodied in technologies is precisely what they are supposed to have shed: moral norms, political imperatives, and (as I will show) aesthetic initiatives. Let me begin with morals, since I think this is a more straightforward case. Bruno Latour clearly outlines the moral imperatives embodied in technologies through the analysis of simple, everyday technologies.⁷ I enter a vehicle and the seatbelt automatically lowers over my chest. The moral imperative to 'wear my seatbelt' has been "delegated" to this particular technology. The same can be said for other safety technologies like childproof lids, but also for technologies to which courtesies like 'please close the door' are delegated, as in Latour's example of the automatic door closer. Examples like these are relatively innocuous, but more sinister examples can be given. Langdon Winner recounts the story of Robert Moses, a powerful and prolific urban planner in mid-twentieth-century New York City.⁸ His designs of bridges, highways and housing projects embodied his own racist and classist prejudices, for example, in overpasses that intentionally prohibited public transportation from passing under them, thus insulating certain communities from "undesirable" visitors. Technologies like this are "not merely the symbol of a social order that rewards some while punishing others [they are] in a true sense an embodiment of that order."⁹ How is this different from the kind of domination that Adorno and Marcuse find inherent in technology? In the first place, for Winner (and perhaps also Latour) the type of domination that can be embodied in technologies is the result of certain discreet social choices and processes, and not of a disembodied technological attitude or rationality that has gained the momentum of history. As such, they admit of a certain range of choices or "structuring decisions". Even when these are limited to a yes or no position on the technology in question, the possibility of transforming the technical infrastructure of a society must be admitted, and the "totalitarian" character of technology as such denied.¹⁰ This brings us to the crux of the argument.

⁹ Ibid, 293.

⁷ B. Latour 'Where Are the Missing Masses? The Sociology of a Few Mundane Artifacts' pp. 225-58 in *Shaping Technology/ Building Society: Studies in Sociotechnical Change*. Eds. W. E. Bijker and J. Law. Cambridge, Mass: MIT Press, 1992.

⁸ L. Winner. 'Do Artifacts Have Politics?' pp. 289-302 in *Readings in the Philosophy of Technology*. Ed. David Kaplan. Lanhand, MD: Rowman & Littlefield, 2004.

¹⁰ Indeed, what may have at first appeared as a similarity now appears as a stark contrast. What early critical theorists saw in technology was not a totalitarian *politics* inherent in technology, since totalitarianism is, in reality, the eradication of politics. Rather they mourned the loss or absence of politics in technological development. In the same way, the complaint about technocratic politics is often that it is *not politics at all*, but the replacement of politics by something else.

3. Aesthetic Mediations-Initiatives

In spite of the previous remarks, let us not cast off the contributions of early critical theory to the philosophy of technology too quickly. It is not that the link between technology and domination is false, but that it is incomplete. Technocratic societies might very well tend toward a certain kind of totalitarianism. It is just that this general tendency does not fully determine (or "enroll" to use Latour's phrase) particular technologies as instruments of domination, as Feenberg notes.¹¹ This is why technologies can be sites of resistance to the very technological attitude they are supposed to embody. Appropriately then, Feenberg suggests a "two-level" critical theory of technology, which acknowledges that at the level of "primary instrumentalization," technologies are in fact wrested from their social context and ascribed a certain objective rationality. This rationality facilitates and embodies domination, in much the same way as the forced separation of markets from society does. But just like the "objective" laws of economics, the "objective" laws of technology are constitutive illusions, which never fully isolate their objects from their concrete conditions of existence, which are social.¹² Accordingly, Feenberg identifies a secondary level of instrumentalization, where technologies are realized and integrated into the fabric of society. This secondary level is "reflexive" in that it "treats functionality [the fetishized product of primary instrumentalization] itself as raw material for higher-level forms of technical action."¹³ The realization of technology at this level produces both social roles ("subjectivizations") and "secondary" properties in the object. "Mediations" are those properties – aesthetic, ethical, cultural – that appear as secondary within the given technological order. "Initiatives" are those social actions that resist the strategies of control imposed by this order including, presumably, the fetishization of function and the corresponding relegation of aesthetic and other properties to a secondary level. This two-level theory is the culmination of Feenberg's critical theory of technology, and it allows me to pose my central question in more specific terms. 1. How can aesthetic mediations act reflexively upon technological rationality itself, in order to transform its dominating and leveling effects? and 2. What sort of initiatives can catalyze this process?

A recent television news story showed Iraqis programming their cell phones to play pro-Shiite ringtones when they are in Shiite neighborhoods, so that their loyalty will not be questioned, and their safe passage assured (or at least, made more likely). What is happening here? A supposedly peripheral aesthetic feature of a given technology – the ability to make one's phone ring with one's favorite song - is being used in innovative and unintended ways. While one may hesitate to call this a *liberating* appropriation of technology (unless one's idea of liberation is mere survival, which should not be shrugged off too quickly in the context of brutal chaos and disorder) it is nonetheless a testament to a certain kind of resistance to the dominating and leveling effects of technology. It is what I will call a *democratic-aesthetic* initiative. It is democratic since it

¹¹ Questioning Technology, p. 78-81.

¹² For an analogous demonstration of the social embeddedness of markets, see K. Polanyi's classic text *The Great Transformation: The Political and Economic Origins of Our Time*. Boston: Beacon Press, 2001.

¹³ Questioning Technology, 207.

is carried out by and born out of the immediate needs of a particular group of people, rather than developed/ imposed by a hierarchically organized structure.¹⁴ It is aesthetic since it blurs the line between primary functional properties and "secondary" aesthetic ones (it *uses* the aesthetic properties of the technology for some purpose). It treats functionality as "raw material," but does this survival tactic constitute a "higher level technical function"? Additional examples can clarify the point.

Customization is fast becoming a new principle of the marketing of goods and services. If I go into an electronics store to purchase a computer, the salesperson will likely ask me a series of questions: what do I plan to use the computer for? Work? Entertainment? Is the computer for my home? My office? Do I enjoy playing games? Watching movies? Am I a writer? The salesperson will then "customize" a computer for my "unique" set of needs. Even automobile companies have begun taking advantage of the kinds of customization that have always been linked to the symbolic aspect of vehicle ownership. Scion, a division of Toyota Motor Corporation, invites consumers to "build their own" Scion, from exterior appearance to interior design. One particular online ad campaign even asks the consumer to choose a personality type, and then loads an image of the sort of customizations that might fit that type.¹⁵ Are these examples of democratic initiative on the part of myself and/or the salesperson? In the first place there appears to be a kind of contradiction in the idea of pre-packaged customization and made-to-order personalization. But Jean Baudrillard, who was one of the first to identify this phenomenon of customization, thinks not. He sees personalization as the ideology appropriate to capitalist consumption, complementing competition as the ideology appropriate to capitalist production: "If we can still view consumption as an independent activity allowing the expression of personal preferences, while on the contrary production appears to be quite definitively planned, this is simply because the techniques of psychological conditioning are not as developed as those of economic planning."¹⁶ With the incorporation of consumer preference into production itself, this thesis seems even more compelling. If democratic initiatives exist to counteract this type of strategic control, we must search for them outside of the realm of consumption proper.

For such a task, we will do well to remember that market-driven customization, like all market imperatives, is parasitic upon existing social practices. So the phenomena co-opted by market strategy should, in some cases, point to tactics and initiatives that may have originally served to resist or transform technological and/or market rationality. Car customization is a case in point, born out of the consumer culture of mid-century

¹⁴ The defender of free markets may object here that *all* commodities are democratic in this way, since production is driven by the wants and needs of consumers. I take the critique of consumer society, to which critical theory has importantly contributed, to show that market capitalism produces in the first place according to its own imperatives of survival, not least of which is the production of certain desires in the consumer, and the transformation of needs into wants. Nonetheless, one can grant that freedom of exchange does embody a *kind* of democratic principle, while still acknowledging that this narrow kind of democracy is insufficient by itself, partly since it limits the range of choices to those that do not threaten market capitalism itself.

¹⁵ See <u>www.scion.com</u>.

¹⁶ J. Baudrillard. 'The System of Objects' pp. 10-28 in *Jean Baudrillard: Selected Writings*. Ed M. Poster. Satnford University Press, 1988. p. 11.

America, but importantly transforming that culture with its technical initiatives. So-called "hot rodders" functionally transformed stock automobiles into racing machines, defying both laws and attempts by automobile manufacturers to discourage such behavior through cancellation of warranties, technical designs that were more difficult to manipulate, and etc. Interestingly, the aesthetic of the hot rod came to embody this rebellious spirit, whether or not the automobiles were actually used for racing. The practice of customizing these vehicles blurred the lines between aesthetics and functionality, and it became central to the development of certain communities of resistance. A particularly interesting variation of this type of initiative is the "lowrider" automobile, initially a result of Mexican-American communities' appropriation of car and customization culture. Unlike their hot-rodding Anglo-American counterparts, the lowriders didn't care much about racing or horsepower. Instead, "the early lowrider found that a trunk load of cement or sandbags created a new look for the car. This was inexpensive and the amount of lowering (in the rear only) depended on the size of the trunk and the strength of the owners back. Soon a car with a lowered rear-end was seen as a lowrider and not an anglo custom."¹⁷ Perhaps even more than the hot rods, these customized vehicles became symbolic and functional centerpieces of their communities. Archaeologist Ruben Mendoza describes their role for the largely impoverished Chicano immigrants and steel workers:

Without any type of job security or insurance, an illness or calamity could destroy their lives. Many of these immigrants formed mutual aid societies, or social clubs, where they would meet and socialize on a regular basis...they would all contribute money, and if any of them got sick or in trouble, that money could be used to help the sick or ailing member out. The focus of these social clubs was often a communally owned car, used by and worked on by several families.¹⁸

This history is embodied in contemporary lowrider culture, in which lowriders (a term referring to both the vehicle and its owner) gather together in public places, talking and displaying their vehicles, often culminating in a sort of informal parade. Compare this with Adorno's cynical description of the automobile as an embodiment of technological domination:

The making of travel aquaintance is reduced by the private automobile to half-threatening encounters with hitchhikers. People travel on rubber tires in strict isolation from one another. What is talked about in one family automobile is the same as in another...Just as every family with a certain income spends the same percentage on housing, cinema, cigarettes, exactly as statistics prescribe, the subject matter of conversations is schematized according to the class of automobile. When they meet on Sunday outings or in restaurants, the menus and décor of which are identical to others in the same price category, the guests find that with increasing isolation they have become more and more alike.¹⁹

¹⁷ R. Genat. Lowriders. St. Paul, MN: MBI Publishing, 2001. p. 14.

¹⁸ R. Mendoza. 'Cruising Art and Culture in Aztlan: Lowriding in the Mexican American Southwest'. U.S. Latino Literatures and Cultures: Transnational Perspectives. F. A. Lomeli and K. Ikas. Hiedelberg, Universitatsverlang C. Winter: 3-36.

¹⁹ Dialectic of Enlightenment, p. 184.

What we discover is that, through democratic-aesthetic initiative, the automobile itself is transformed from a symbol and vehicle of isolation and homogenization, into a symbol and vehicle of resistance to these very phenomena.

Somewhat similarly, the ready-made personalization of computers draws upon well-documented democratic initiatives on the part of users to challenge the hierarchical structure of technological design. The open-source design movement advocates software design that can be modified and redistributed by users. It thus resists both centralized technocratic control and market commodification. Arguments for open source programming often focus on function. By allowing users to modify and redistribute a software's code, those modifications that are deemed most useful are maintained or selected, while those that are not are left behind. Software thus undergoes evolution and innovation at a speed that hierarchical, commercial production cannot begin to match. Predictably, commercial software producers have tried to figure out how to incorporate such initiatives into a for-profit market framework, so far with little success. But the customization of software also integrates aesthetics with functionality. An elegant and aesthetically pleasing website or interface is often also more "user-friendly". Further, one user's purely aesthetic modifications might be "selected" and enrolled for purposes unforeseen by him or her.

Examples like these begin to fill out the concept of a democratic-aesthetic initiative. It is important to note that their co-option and commercialization, contrary to the pessimism of someone like Baudrillard, does not eliminate the original initiatives. Indeed, it is often the groups who initiate such innovations that are the most fervent in resisting the commercial bastardization of their creations. Now that we have some idea of what a democratic-aesthetic initiative looks like, I will return to the question of why initiatives of this type are specially suited to transform technocratic societies, not just piecemeal, but *fundamentally*, thus re-enlisting aesthetic imagination for the political tasks that early critical theory envisioned for it.

4. Technology and Symbolic Power

It cannot be denied that the power and authority of advanced technological societies is, in important respects, material. One need only look, for example, at the United States' massive military-industrial complex to see this material power at its most brutal. However, the power of technological regimes is also significantly symbolic. Feenberg equates this type of power with simple, premodern technological societies: "even where a few strategic technologies, such as irrigation, are controlled from a center, that control is generally not a material, but a symbolic power base. It is doubtful that the farmers of ancient Mesopotamia obeyed because they feared the water being shut off; more likely, mastery of water manifested the divinity of their rulers and made obedience second nature."²⁰ But are advanced technological societies so different in this regard? In *American Technological Sublime*, David Nye shows how the discourse of sublimity, originally reserved for the awe-inspiring objects of art and, especially, nature, reemerges around the time of the industrial revolution to account for the unprecedented

²⁰ *Questioning Technology*, p.138.

achievements of human technology.²¹ It isn't hard to imagine that the willingness to defer to the authority of experts even in matters of general political will formation is an expression of a symbolic reverence, similar in some respects to that of the ancient Mesopotamians. The expert and the technocrat are the shamans of advanced technological society. The democratization of technology must thus acknowledge the symbolic, as well as material dimensions of technical power. What does this mean, concretely?

Recall Robert Moses' overpass. Imagine it now painted with subversive graffiti (I will leave its message to the reader's poetic imagination). Such an aesthetic mediation does not essentially transform the bridge; it does not affect its function of prohibiting the passage of public transportation. Perhaps it raises the consciousness of the community, who then demands its removal. Or perhaps it is viewed as such a nuisance by some authority that the bridge is removed or remodeled. But these material effects are external to the mediation itself, which is primarily symbolic (For all the praise of the graffiti that proliferated in Paris during the May events of 1968, we should not forget that these symbolic initiatives were complemented by a variety of material initiatives, both the students' own and those of their counterparts in the factories. Without this alliance of material and symbolic initiatives, the movement would likely have been much less successful). This is why, for Baudrillard and others who base their theories of society on textual or linguistic models, convincing examples of concrete structural change are often in short supply.

But neither can a naive materialism appropriately ground the project of democratizing technology. It cannot be denied that technologies function within a "symbolic economy" that infuses some technologies with power regardless of function. A college friend from Zimbabwe once expressed to me his joy at being able to pursue whatever subjects of study he desired. I agreed, assuming naively that he was praising the level of academic freedom he enjoyed here, relative to where he was from. 'But no' he explained, 'you must do what you study. I have only to get a degree in *something*.' His point was that, when he returned home, his American degree took on a primarily symbolic value. He could major in philosophy and obtain a job in civil engineering. It mattered very little that this particular degree had little functional value for that particular task. It signified him as intelligent, sophisticated, and therefore employable. Academic degrees are not technologies, but technologies are imparted with symbolic power in an analogous fashion.

For example, imagine now a public housing project (another of Moses' endeavors). Initially a part of progressive, New Deal legislation, massive inner city public housing underwent a process of "ghettofication" in the 1960's and 70's, such that high-rise "projects" became associated with crime, poverty, and general social malaise. In the language I have introduced above, oppression of minorities, economic disadvantage, and other forms of domination became embodied in the technology of public housing. Recognizing that these massive housing projects have largely failed in their initial aims, urban planners have begun dismantling them, and dispersing their residents into a variety of "mixed-income" housing developments. But difficulties have arisen for this strategy also, due to the unwillingness of higher-income communities, market-rate renters and so

²¹ D. Nye. American Technological Sublime. Cambridge, MA: MIT Press, 1996.

on to accept former residents of public housing as their neighbors. Though the material technology may be demolished or redesigned, its symbolic power-effects remain, inscribed upon individuals themselves in the form of stereotypes.

So, since technological domination, taken as a whole and in its particular instantiations, contains both a material and symbolic element, resistance to and transformation of technology in the interests of emancipation must also have a material and symbolic element. Let us not forget though, in speaking somewhat loosely about separate aspects or elements, that these elements are always initially synthesized and embodied in particular technologies. Technologies are the locations of the struggle between systemic imperatives and democratic initiatives. The question we are finally approaching is, why democratic-*aesthetic* initiatives?

In the first place, the aesthetic dimension *is already* symbolic, as Marcuse, following Kant, notes.²² In art, a certain distance and independence from the prevailing reality principle can be achieved. Adorno understands this as a kind of fetishism: "it is this fetishism – the blindness of the art work to the reality of which it is part – that enables the work of art to break the spell of the reality principle and to become a spiritual essence."²³ Yet the fetishism of art, unlike the fetishism of the commodity, contains a potential for emancipation. On this point, Marcuse and Adorno are in agreement.²⁴ Unfortunately, neither thinker makes the implications of this thesis concrete enough. Adorno, anticipating Baudrillard in this respect, sees technological domination as so allpervasive that aesthetic imagination becomes a kind of depoliticized safe-haven. He thus ultimately fails to harness its power for practical purposes. Marcuse is slightly more optimistic, but his failure to properly distinguish technology and scientific rationality leads Habermas to reduce his project of a "new science and technology" to near absurdity.²⁵ And finally, Baudrillard's approach, while initially promising, fails to distinguish between technologies and objects/commodities in general.

By contrast, the present approach allows for the reintegration of aesthetic and practical concerns without any grand thesis about forms of action or rationality. The fetishization of art corresponds to and complements the fetishism of technology. Feenberg notes that "what differentiates technology and tools in general from other types of objects is the fact that they appear always already split into 'primary' and 'secondary' qualities, i.e., functional qualities and all others."²⁶ This is not an ahistorical thesis about the essence of technology, but rather its essence or definition at a particular moment in history – our own. Feenberg is saying that, at present, technology is defined by its fetishization. And just like fetishized art, fetishized technology contains within itself the potential to transform itself, to move beyond its own fetishization. This is the real

²² H. Marcuse. *Eros and Civilization*. Boston: Beacon Press, 1966. p. 174.

²³ T. W. Adorno. *Aesthetic Theory*. Trans. R. Hullot-Kentor. University of Minnesota Press, 1997. p. 341.

²⁴ Critical Theory and Philosophy, p. 74.

²⁵ J. Habermas. 'Technology and Science as 'Ideology'' pp. 81-123 in *Toward a Rational Society*. Trans J. Shapiro. Boston: Beacon Press, 1970.

²⁶ *Questioning Technology*, p. 211.

meaning of a *new technology*. My thesis is that concrete technologies (as opposed to technology in the abstract) must be the foci of this practical pursuit. In a concrete synthesis of art and technology, the fetishization of both is overcome, and their emancipatory potential can be unleashed. This synthesis displays the characteristics that Marcuse and Adorno identify in aesthetic imagination.

In the first place it resolves, in a Hegelian moment, the opposition of subject and object. This is a bold claim that deserves more attention than I can give it here. Let me initially just recall an example of democratic-aesthetic initiative described above. The "lowrider," refers to both the technological object and the subject that "operates" it. The identity of the subject and the character of the object are concretely synthesized. Said another way, the initiative of the subject and the mediation of the object become indistinguishable (I have tried throughout this essay to keep the terms distinct where possible, but now one sees why I am often tempted to hyphenate them, as they often point to the very same thing). No doubt this is not the exclusive domain of *democratic* initiatives. Quite often in technological societies, people come to see their technologies their mobile phones, palm pilots, and computers - as extensions of themselves.²⁷ But when these technologies are outside of one's own control - i.e., subject to strategic, hierarchical control – they do not smoothly integrate subject and object, but result in the kind of fractured identity characteristic of contemporary life. Witness a computer crashing, or a mobile phone achieving its planned obsolescence. Events like these show just how fragile the supposed synthesis is when it depends upon external controls and operations.

Secondly, in enrolling particular technologies to act "reflexively" upon the structure of technology itself (the technological attitude), aesthetic mediations-initiatives synthesize abstract and particular. It is not the case then, that technologies politicized by way of aesthetic initiatives are mere means to developing a new technological order. They are, in fact, embodiments of that order – testaments to a new technology born within the shell of the old. They are, in the Hegelian sense, concrete universals, embodying not only the particular tasks and roles for which they are developed, but also the very ideal of a democratized technological structure. These last points are, of course, the most tentative, but if my thesis is correct, a more thorough analysis of them should lead in positive directions for a critical theory of technology.

5. Conclusions

In the previous pages, I have returned to some questions in early critical theory that seem to have been eclipsed by contemporary critical theory in the Habermasian vein. Feenberg is, of course, an exception, and his efforts should, in my view, be considered monumental. I have tried to specify his conception of mediation-initiative, with particular concern for the role of aesthetic imagination in transforming technology democratically. Other programs for democratizing technology exist, but many focus exclusively on the

²⁷ For an interesting psychoanalytic account of this phenomenon, see S. Turkle's 'Whither Psychoanalysis in Computer Culture?' pp. 415-29 in *Readings in the Philosophy of Technology*.

material aspects of technological power, ignoring its symbolic elements.²⁸ I believe Feenberg's account leaves this dimension of analysis open, despite his sometimes ambiguous comments about the symbolic nature of technological power. Combining his two-level model of technical action with the conception of embodied technologies allows us to re-approach the issue of aesthetic imagination as a force for political emancipation, an issue that remains largely unresolved in critical theory. And the analysis of customization provides cause for optimism in unexpected domains, the very domains of technological production – automobiles and computers – which are often taken to be central to the dominant technological regime. Hopefully then, the long overlooked topic of aesthetic imagination can be broached with new enthusiasm.

²⁸ See for example, R. Sclove's *Democracy and Technology*. New York: Guilford Press, 2000, which, in other respects, resembles Feenberg's account.