

# CYBERLAW AND SOCIAL CHANGE: A DEMOCRATIC APPROACH TO COPYRIGHT LAW IN CYBERSPACE

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## INTRODUCTION

As cyberspace becomes central to the creation and exchange of information, the debate over the future of copyright law in cyberspace is getting heated. For a long time, scholars were pointing at the need to revise copyright law to accommodate the new digitized environment.<sup>1</sup> The nature and extent of copyright reform remained controversial, however. Some believe that copyright law is flexible enough for managing rights in information technologies despite the increasing disparity between the rapid development of new technologies and the lumbering pace of copyright revisions.<sup>2</sup> Others, however, believe that copyright law was tailored to address the special needs of the print technology; needs that are no longer valid in a digitized environment.<sup>3</sup>

What began as a controversy over the appropriateness of copyright law to accommodate the technological changes, became a political battle over the distribution of the potential gains that cyberspace offers.<sup>4</sup> The challenges of digital technology go significantly beyond mere conceptual controversies and beyond disagreement on how to divide potential gains. The challenges of digital technology are, first and foremost, challenges to society. The debate over the future of copyright, therefore, should focus on political questions. Introducing political questions to the debate at this formative stage of the information superhighway is crucial for the future of cyberspace. The infrastructure may be designed and regulated in a way that would be irreversible or difficult to change. This moment presents us with an opportunity to shape cyberspace in a way that is consistent, and supportive of democracy. Introducing democratic theory to the debate would provide an adequate basis for a critical evaluation of the legal rules formulated by the

<sup>1</sup> See PAUL GOLDSTEIN, *COPYRIGHT HIGHWAY: FROM GUTENBERG TO THE CELESTIAL JUKEBOX* 197-236 (1994); Pamela Samuelson, *Digital Media and the Changing Face of Intellectual Property Law*, 16 *RUTGERS COMPUTER & TECH. L.J.* 323 (1990) [hereinafter Samuelson, *Digital Media*]; ANN WELLS BRANSCOMB, *WHO OWNS INFORMATION? FROM PRIVACY TO PUBLIC ACCESS* (1994).

<sup>2</sup> See, e.g., INFORMATION INFRASTRUCTURE TASK FORCE, *INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE: THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS* (Sept. 1995) [hereinafter IITF WHITE PAPER]; Arthur R. Miller, *Copyright Protection For Computer Programs, Databases, and Computer-Generated Works: Is Anything New Since CONTU*, 106 *HARV. L. REV.* 977 (1993) [hereinafter Miller, *Copyright Protection Since CONTU*].

<sup>3</sup> See, e.g., Pamela Samuelson et al., *A Manifesto Concerning the Legal Protection of Computer Programs*, 94 *COLUM. L. REV.* 2308 (1994) [hereinafter Samuelson et al., *Manifesto*]; M. ETHAN KATSH, *THE ELECTRONIC MEDIA AND THE TRANSFORMATION OF LAW* 172-81 (1989); John P. Barlow, *The Economy of Ideas, A Framework for Patents and Copyrights in the Digital Age*, *WIRED*, Mar. 1994, at 85 (arguing that copyright law was developed to convey forms and methods of expression entirely different from digitized medium).

<sup>4</sup> Pamela Samuelson, *The Copyright Grab*, *WIRED*, Jan. 1996, at 134.

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legislature, and for the considerations and legal arguments made in courts.

This Article argues that the future of copyright law in cyberspace is crucial for democracy. It suggests that laws regulating the flow of information in cyberspace should be based on democratic principles. It argues that copyright law should be modified to serve the promise of decentralization and to facilitate participation in the production of knowledge. This argument relies on three claims. The first involves democratic theory; the second involves technology and social change; and the third deals with the relationship between technological development and the law.

Part I hypothesizes that the future of copyright law in cyberspace is crucial for democracy. Cyberspace and democracy often intermingle in political speeches, visionary accounts, and even in scholarly works. Yet, neither the nature of cyberspace, nor the definition of democracy are definite. Consequently, the meaning of "Cyber-Democracy" is very loose. For some, cyberspace promises a more democratic environment that is capable of facilitating direct access to decision makers. Thus, sending e-mail to the White House,<sup>5</sup> or acquiring access to bills introduced in Congress,<sup>6</sup> symbolizes the promise of a whole new way of governance. Others believe that cyberspace may democratize society by electronically generating the old New England Town Hall Meetings that allow the public at large to deliberate.<sup>7</sup> Both views assume that technological applications improve the functioning of existing institutions of mass democracies.

Although this Article shares the hope that cyberspace will facilitate democracy, it argues that the transformative power of cyberspace lies in its capability to decentralize the production and dissemination of knowledge. The vision of democracy that cyber-

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<sup>5</sup> The attempt to make government deliberations more accessible to the public underlies the creation of an electronic bulletin board that would allow citizens to communicate their concerns and opinions to the White House and to their representatives. See BRANSCOMB, *supra* note 1, at 162-63.

<sup>6</sup> House Speaker Newt Gingrich, in testimony before the Ways and Means Committee on January 6, 1995, announced a new on-line service named after Thomas Jefferson, operated by the Library of Congress. This system makes available information ranging from the complete text of every bill introduced in Congress since 1992 to every word uttered in House and Senate floor speeches. See *Cybercitizens On-line*, SEATTLE TIMES, Jan. 9, 1995, at B4. Gingrich announced his vision that a revolution could take place, if more citizens would be able to surf the Internet and "get information beyond the cynicism of the elite." Edmund L. Andrews, *The 104th Congress: The Internet, Mr. Smith Goes to Cyberspace*, N.Y. TIMES, Jan. 6, 1995, at A22. This Article suggests that it is necessary for democracy to do more than merely provide electronic access to government deliberations.

<sup>7</sup> For example, H. Ross Perot put forth this position in his 1992 presidential campaign. See BRANSCOMB, *supra* note 1, at 172.

space may promote is one that is based on participation and decentralization of power. This vision incorporates the insight of deliberative theorists who perceive "will formation processes" as essential for democracy. It therefore emphasizes active dialogic participation, rather than the sporadic passive procedural participation (voting) as key for democratizing decision-making processes. Part I introduces the participatory approach to democracy and discusses the significance of participation and decentralization of social dialogue for democracy.

Part II demonstrates how digital networks may decentralize meaning-making processes. Cyberspace is a medium in which meaning-making processes, identity formation, will formation, preferences, ideas, and ideologies are increasingly being created and manifested. Digital networking, it is argued, may transform the way we create and exchange information, form our preferences, and define our identities. It shifts power among social agents in the context of social and political discourses and meaning-making processes. The special characteristics of digital media may support a particular construction of power relations. By empowering individuals, decentralizing power relations, inducing collaboration, and enhancing accessibility of information, digitization may facilitate a more decentralized and non-hierarchical social dialogue. It has the potential of making social dialogue more dialogic. It may also, however, support a centralized, closely monitored, and exclusionary structure of social dialogue.

Part III demonstrates the role of law in shaping the social outcome of cyberspace. Law in general, and intellectual property law in particular, may play a major role in shaping technological implementation. The significance of copyright law for structuring technological uses and directing technological development is two-fold. First, copyright law shapes the structure of the market in which any given technology develops, by defining the scope of property rights and the circumstances under which they are granted. Second, copyright law, as any other social institution, reflects and communicates an ideology. It, therefore, serves to shape the technological choices that society members perceive as feasible.

#### I. DEMOCRACY AS PARTICIPATION IN SOCIAL DIALOGUE

Digital networks may transform the way we create, exchange, and access information.<sup>8</sup> They may also transform the way we in-

<sup>8</sup> See *infra* part II.B and note 100 and accompanying text.

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interact in private and in public.<sup>9</sup> Furthermore, digital networks may transform our ideas about private and public, and make it difficult to apply our traditional concepts of public interaction. Why would those changes in the way we interact with one another, with old traditions, with culture and subcultures, be significant for democracy? What is the significance of social dialogue for democracy?

#### A. *The Public Sphere and Democratic Theory*

The institutional structure of existing democracies in western societies reflects a liberal model of democracy. Society under this liberal model is perceived as a market-structured network of interactions among private persons.<sup>10</sup> These autonomous individuals enter the political arena with preexisting interests and preferences, and struggle within the system to maximize the satisfaction of those interests.<sup>11</sup>

The assumption that preferences, interests, and values are apolitical and prior to the political process, defines the role of politics under this model. For liberalism, "politics" is a mediating process among predetermined private interests.<sup>12</sup> Collective goals are determined through the competition between conflicting interests and preferences. The political process does not aim at reaching a "common good," but instead, seeks to arrive at a formula that would satisfy as many private interests as possible.<sup>13</sup>

The prevailing method for aggregating the sum of private pre-existing interests is voting. The political process, therefore, focuses

<sup>9</sup> *Id.*

<sup>10</sup> The discussion of the Liberal Model is based on the works of Ronald Dworkin. Ronald Dworkin, *What is Equality? Part I: Equality of Welfare*, 10 PHIL. & PUB. AFF. 185 (1981); Ronald Dworkin, *What is Equality? Part II: Equality of Resources*, 10 PHIL. & PUB. AFF. 283 (1981); Ronald Dworkin, *What is Equality? Part III: The Place of Liberty*, 73 IOWA L. REV. 1 (1987); JOHN RAWLS, *POLITICAL LIBERALISM: NOZICK, ANARCHY, STATE AND UTOPIA* (1974). For an analysis of the assumptions of the liberal model, see Jürgen Habermas, *Three Normative Models of Democracy*, 1 CONSTELLATIONS 1 (1994); see also Nancy Fraser, *Rethinking the Public Sphere: A Contribution to the Critique of Actually Existing Democracy*, in *HABERMAS AND THE PUBLIC SPHERE* 130 (Craig Calhoun ed. 1993).

<sup>11</sup> Fraser, *supra* note 10, at 130. For a critical discussion of the liberal approach, see Stephen M. Feldman, *The Persistence of Power and the Struggle for Dialogic Standards in Postmodern Constitutional Jurisprudence: Michelman, Habermas, and Civic Republicanism*, 81 GEO. L.J. 2243-44 (1993).

<sup>12</sup> *Id.*

<sup>13</sup> See Fraser, *supra* note 10, at 140.

[T]he liberal-individualist model stresses the view of politics as the aggregation of self-interested, individual preferences. Deliberation in the strict sense drops out altogether. Instead, political discourse consists in registering individual preferences and in bargaining, looking for formulas, that satisfy as many private interests as possible. It is assumed that there is no such thing as the common good over and above the sum of all the various individual goods, and so private interests are the legitimate stuff of political discourse.

*Id.*

on voting. The political process is premised on a market structure and aims at facilitating free and equal competition among interests. The political outcome reflects the aggregated sum of preexisting interests reached under the conditions of free and equal competition. Consequently, the liberal model of democracy requires that the political process be based on neutrality and equally weighted voting rights.<sup>14</sup>

While the political process should guarantee the neutral and equal aggregation of private interests into a socially operative agenda, democratic institutions aim at programming the government in the interest of society.<sup>15</sup> The assumption is that the institutions of democracy (elections, parliamentary bodies, government) would reflect the aggregation of those interests in an operative way.<sup>16</sup> The majority rule is restricted by a separation of powers, bill of rights, and judicial review, to guarantee a democratic (just) result.<sup>17</sup> Democracy is thus understood as a mechanism for mediating preexisting private interests into a political will that defines the mandate of government.

One of the most influential attacks on the liberal model is the critique of deliberative theorists.<sup>18</sup> From their perspective, the liberal model fails to adequately address the relationship between the political process and will formation processes.<sup>19</sup> By excluding will

<sup>14</sup> JOHN HART ELY, *DEMOCRACY AND DISTRUST, A THEORY OF JUDICIAL REVIEW* (1980); see MORTON HORWITZ, *The Constitution of Change: Legal Fundamentalism Without Fundamentalism*, 107 HARV. L. REV. 30 (1993) (describing the correlation between the introduction of the "one person one vote" principle into American constitutional law and the rise of the concept of democracy in Supreme Court opinions).

<sup>15</sup> Government is thus perceived as the mechanism which specializes in administratively employing political power for collective goals.

<sup>16</sup> Habermas, *Three Normative Models of Democracy*, *supra* note 10, at 3 ("[Political rights] give citizens the opportunity to assert their private interests in such a way that by means of elections, the composition of parliamentary bodies, and the formation of a government, these interests are finally aggregated into a political will that makes an impact on the administration.").

<sup>17</sup> See ELY, *supra* note 14.

<sup>18</sup> For the purposes of this analysis "deliberative democracy" is understood as any model of democracy that looks at political participation in a broad sense. Namely, any view that rejects the narrow perception of politics under the liberal model and includes not only participation in strictly political institutions (for example voting), but also taking part in any discursive will formation processes in social and cultural spheres.

<sup>19</sup> Even though deliberative approaches to democracy are distinct from one another in many respects, those distinctions are irrelevant for the current analysis. Mapping democratic theory by distinguishing between liberal and deliberative approaches allows me to discuss both the civic republican view of democracy (often referred to as "participatory democracy") and the discursive model of democracy (Habermas, Benhabib, Baynes) under the label of "deliberative approaches."

For a further discussion of this distinction, see Seyla Benhabib, *Models of Public Space: Hannah Arendt, the Liberal Tradition, and Jurgen Habermas*, in HABERMAS AND THE PUBLIC SPHERE 73 (Craig Calhoun ed., 1993) [hereinafter Benhabib, *Models of Public Space*] (distinguishing between the notion of participatory democracy in critical theory and this notion

formation processes, which are crucial for political outcomes, the liberal model fails to articulate the democratic process.

This critique of deliberative theorists is based on several factors.<sup>20</sup> First, critics claim that the liberal model of democracy is based on dubious assumptions about will formation processes. By assuming that individuals' preferences, interests, and identities are given *prior to the political process*, the liberal model fails to recognize that they are in fact constituted by it. The liberal model fails to conceptualize that preferences, interests, and identities are affected and shaped *throughout* political process. Thus, the liberal model does not provide an accurate description of the complexity of modern democracies.

The assumption of exogenous preferences also causes the liberal model to disregard the problem of power. Preferences, interests, and identities are vulnerable to manipulation by power. If they are not pre-political, but are shaped instead by the political process, then it is necessary to guarantee that will formation processes are also democratic. Therefore, equal weight cannot be achieved simply by securing equal rights to citizens (one person one vote).

The model of deliberative democracy seeks to address these deficiencies of the liberal model by shifting the focus of democratic theory. The deliberative democracy model shifts from a narrow view of politics as democratic institutions, to a broader view of politics as discursive will formation processes.<sup>21</sup> Under the deliberative model, political will is not fixed, but instead discursive and constituted through dialogue. This claim is buttressed on several grounds. First, the act of deliberation may itself affect individuals'

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under the civic republican vision); see also Habermas, *Three Normative Models of Democracy*, *supra* note 10 (distinguishing discursive democracy from the republican view of Michelman). For Michelman's dialogic view of politics, see Frank Michelman, *Law's Republic*, 97 YALE L.J. 1493 (1988); Frank Michelman, *Conceptions of Democracy in American Constitutional Argument: The Case of Pornography Regulation*, 56 TENN. L. REV. 291 (1989) [hereinafter Michelman, *The Case of Pornography Regulation*]; Frank Michelman, *Conceptions of Democracy in American Constitutional Argument: Voting Rights*, 41 FLA. L. REV. 443 (1989) [hereinafter Michelman, *Voting Rights*]; Frank Michelman, *Personal But Not Split: Radin Versus Rorty*, 63 S. CAL. L. REV. 1783 (1990) [hereinafter Michelman, *Personal But Not Split*].

<sup>20</sup> The deliberative model also criticizes liberalism for excluding questions of values from politics. The argument is that the liberal model seeks to guarantee neutral politics by excluding assertions of any concept of the good. See BRUCE ACKERMAN, *SOCIAL JUSTICE IN THE LIBERAL STATE* 11 (1980). This model was criticized by deliberative theorists for failing to be neutral. This is because the nature of an issue as an issue of justice or of the good life is not an inherent characteristic of it. Defining the nature of an issue requires the process of an unconstrained public dialogue. See Benhabib, *Models of Public Space*, *supra* note 19, at 82. The perception of the political process under the model of deliberative democracy is different from the liberal model in that politics is conceived of as a contest over questions of values and not simply questions of preferences. See Habermas, *Three Models of Democracy*, *supra* note 10. This debate is, however, beyond the scope of the current discussion.

<sup>21</sup> See Benhabib, *Models of Public Space*, *supra* note 19, at 86.

preferences and opinions. Political deliberation is reflexive in the sense that it requires individuals to be aware of the perspective of all involved, in order to gain the support of their co-deliberators.<sup>22</sup> Furthermore, it is only through political deliberation that individuals are confronted with new information about their preferences and the various ethical and political perspectives of others.<sup>23</sup> The liberal assumption that people in a complex society are able to grasp the consequences and relative merits of each of their potential choices in advance is unrealistic.<sup>24</sup>

From this perspective politics is understood as an ongoing transformative dialogue among citizens.<sup>25</sup> In such a dialogue, citizens confront one another, challenging their "linguistically encoded self-understandings, sensibilities, and ways of knowing."<sup>26</sup> Politics, therefore, does not have the structure of a market in which citizens merely negotiate and bargain for a collective agenda that would satisfy as many private interests as possible.<sup>27</sup> Politics is instead about deliberation. The exchange of views becomes the es-

<sup>22</sup> Seyla Benhabib, *Deliberative Rationality and Models of Democratic Legitimacy*, 1 CONSTELLATIONS 1, 16 (1994) [hereinafter Benhabib, *Deliberative Rationality*].

When presenting their point of view and position to others, individuals must support them by articulating good reason in a public context to their co-deliberator. The process of articulating good reasons in public forces the individual to think of what would count as a good reason for all others involved. One is thus forced to think from the standpoint of all involved for whose agreement one is "wooing."

*Id.* This argument assumes that political deliberation is strategic in that it aims at persuading rather than understanding. It may therefore be inconsistent with the Habermasian model of communicative action. For Habermas, action may take two forms—strategic action, namely purposive-rational action, and communicative action, action aimed at reaching an understanding. Political deliberation should aim at mutual understanding or "communicatively achieved consensus." See Habermas, *Three Normative Models of Democracy*, *supra* note 10, at 2.

<sup>23</sup> Bernard Manin, *On Legitimacy and Deliberation*, 15 POL. THEORY 338, 338-68 (Elly Stein & Jayne Mansbrige trans., 1987) (Deliberative processes are processes that impart information. It is only through deliberation that individuals become aware of the various ethical and political perspectives of others, and of the relevant information necessary to a decision that would affect all.).

<sup>24</sup> Benhabib rejects the assumption, influenced by economic methodology, that individuals have an "ordered set of coherent preferences." This assumption, she argues, is fictional and irrelevant in a complex political world. The idea that individuals have a coherent set of preferences assumes that they can be aware in advance of "the consequences and relative merits" of each of their potential choices. In fact such awareness can only be produced through the deliberative process itself. Benhabib, *Models of Public Space*, *supra* note 19, at 16.

<sup>25</sup> Habermas, *Three Normative Models of Democracy*, *supra* note 10, at 1.

Politics is conceived as the reflective form of substantial ethical life, namely as the medium in which the members of somehow solidary communities become aware of their dependence on one another and acting with full deliberation as citizens, further shape and develop existing relations of reciprocal recognition into an association of free and equal consociates under law.

*Id.*

<sup>26</sup> Michelman, *Personal But Not Split*, *supra* note 19, at 1786.

<sup>27</sup> See Fraser, *supra* note 10, at 140.



sence of politics. Politics under the deliberative model should have the structure of a public dialogue, namely, public communication oriented towards mutual understanding.

The model of deliberative democracy thus makes both a sociological claim and a normative claim. As a sociological model it claims that preferences are formed through dialogue. Political preferences are shaped reflexively, through confrontation with opposing points of view and access to relevant information.<sup>28</sup> Consequently, politics is about will formation. This suggests that politics encompasses both an opportunity and a vulnerability. Ideally, the political process would allow citizens to transform themselves through dialogue,<sup>29</sup> but it is also the sphere in which community members would be most vulnerable to manipulation and the use of power. These opportunities and vulnerabilities require that participation in social dialogue should be shielded from manipulation by power.

However, the model of deliberative democracy also makes a normative claim that seeks to legitimize the use of coercive power by the state.<sup>30</sup> Imposing political decisions on all would be legitimate under the deliberative model only if "all" (that is, "all" who are affected by a decision) are allowed to participate in the deliberation.<sup>31</sup> To be sure, the deliberative model is not an argument for the replacement of existing democratic political institutions (such as voting) with alternative processes in civil society. Instead it suggests that processes in civil society are significant for democracy and may supplement formal political institutions. The deliberative model makes civil society only a supplement to democratic institutions and recognizes the significance of formal political institutions for the operation of mass democracies. Will formation processes alone, though significant for the democratic process, are incapable of fulfilling the needs of modern societies.<sup>32</sup> Even though social

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<sup>28</sup> Benhabib, *Deliberative Rationality*, *supra* note 22, at 32.

<sup>29</sup> Michelman, *Voting Rights*, *supra* note 19, at 485 ("[P]olitics is a field in which persons reciprocally exercise their capacities for changing and becoming by and through communicative relations.")

<sup>30</sup> See Manin, *supra* note 23, at 352 ("It is the process by which everyone's will is formed that confers its legitimacy on the outcome, rather than the sum of already formed wills.")

<sup>31</sup> Democracy therefore requires an inclusive will formation process "in which free and equal citizens reach an understanding on which goals and norms lie in the equal interests of all." Habermas, *Three Normative Models of Democracy*, *supra* note 10, at 3.

<sup>32</sup> Indeed, under the Habermasian model of system and lifeworld, "social dialogue" should not be subject to the functional requirements that are fundamental to the "system." The two different institutional orders necessary for a functioning social order are institutions that are largely integrated through consensually accepted norms (society as lifeworld), and institutions that are largely defined by their capacity to respond to the functional requirements imposed by the environment (society as a system). See KENNETH

dialogue may not replace the institutions of the administrative state, it complements these institutions by generating mass loyalty<sup>33</sup> and legitimacy.<sup>34</sup>

### B. *Social Dialogue and Deliberative Democracy*

Both aspects of the deliberative model—the sociological (phenomenological) claim and the normative standard—make social dialogue significant for democracy. Under the deliberative model, the importance of social dialogue for democracy may be understood in several ways. The deliberative model may be seen as a claim that extends the reach of democratic theory to cover will formation processes. There are other ways, however, to understand the interface between processes in civil society and institutional politics. For example, one may perceive them as two separate spheres which are mutually dependent. From this perspective, processes in civil society are significant for democracy since they have an indirect influence on the outcome of institutional politics. A third way to understand social dialogue under the deliberative model is to view social dialogue as a potential source of legitimacy for institutional democracy.

The following discussion will critically examine these three claims about social dialogue. I will first discuss the second and third claims, and present a critique of these claims, informed by the insight of postmodern theorists. Then, I will return to the first claim, and suggest a reading of the deliberative model that may coexist with the postmodern critique.

#### 1. Indirect Influence

The claim that social dialogue in civil society has an indirect influence upon institutional politics deserves further explanation. Habermas describes this course of influence: “[i]nformal public opinion-formation generates ‘influence’; influence is transformed

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BAYNES, *THE NORMATIVE GROUNDS OF SOCIAL CRITICISM, KANT, RAWLS AND HABERMAS* 179 (1992) (arguing that the political system has to produce mechanisms for accountable decision making and to guarantee an adequate concern for the “common good of the republic as a whole”).

<sup>33</sup> Money, administrative power, and solidarity are perceived by Habermas as the three resources from which modern societies meet their needs for integration. While society as a system (that state and the market) relies on money and administrative power, it fails to generate solidarity. Solidarity is formed through overlapping practical discourses in civil society. See Habermas, *Three Normative Models of Democracy*, *supra* note 10, at 14-15.

<sup>34</sup> Baynes's discussion of the Habermasian approach suggests an illuminating metaphor: “Thus, rather than calling for the dismantling of the formal political system, Habermas has instead spoken of the need for secondary associations of the public sphere to surround and ‘besiege’ it, without however conquering it.” BAYNES, *supra* note 32, at 179.

into 'communicative power' through the channels of political elections; and communicative power is again transformed into 'administrative power' through legislation."<sup>35</sup>

It follows that democratic principles should apply to discursive will formation to guarantee that formal political institutions accurately reflect *the will of the citizens*. Undemocratic processes in the public sphere may distort the outcome of the political system in that the political system would fail to produce political norms that are consistent with the public good. Under this view, will formation processes in civil society should conform with democratic principles in order to guarantee that the outcome of political institutions is undistorted.

This argument is based on two assumptions. The first of these assumptions presumes that it is possible to distinguish between a sphere of meaning (the "lifeworld") and a sphere of action (the "system"), and to purify the sphere of meaning from the prevalence of power. The perception of civil society as a distinct sphere of meaning is founded on Habermas's distinction between the "system" and the "lifeworld." The system/lifeworld dichotomy distinguishes between two different institutional orders in modern societies. Civil society (society as a lifeworld) in this sense is distinct from both the (public) administrative state and the (private) economy in the broad sense of these terms. Civil society is different from "political society of parties, political organizations, and political publics (in particular, parliaments)."<sup>36</sup> It is thus a sphere of human action that is distinct from the state. This sphere is not, however, private. It is distinct from "economic society composed of organizations of production and distribution, usually firms, cooperatives, partnerships, and so on."<sup>37</sup>

Civil society consists of institutions that are largely integrated through consensually accepted norms, while the economic and administrative states consist of institutions that are largely defined by their capacity to respond to the functional requirements imposed by the environment.<sup>38</sup> While civil society is situated in the sphere

<sup>35</sup> Habermas, *Three Normative Models of Democracy*, *supra* note 10, at 13.

<sup>36</sup> JEAN L. COHEN & ANDREW ARATO, *CIVIL SOCIETY AND POLITICAL THEORY* (1994). Cohen and Arato understand civil society as "a sphere of social interaction between economy and state, composed above all of the intimate sphere (especially the family), the sphere of associations (especially voluntary associations), social movements, and forms of public communication."

<sup>37</sup> *Id.* Both the lifeworld and the system consist of private and public subcategories. While the system consist of the (private) economy and the (public) administrative state, the informal institutions of the lifeworld consist of the (private) family and the public sphere. See BAYNES, *supra* note 32, at 174, 177-78.

<sup>38</sup> *Id.*

of meaning (society as lifeworld), the state and the economy are located in the sphere of action (the system).

Habermas's lifeworld/system distinction requires that social dialogue in civil society be sufficiently shielded from the "colonization" effects of the capitalist market and the administrative state.<sup>39</sup> Without this shield, the public sphere would merely reproduce the effects of money and power in the market and in the administrative state.<sup>40</sup>

Postmodern theorists reject this attempt to define a sphere of human actions that is separable from power. The system/lifeworld distinction, it is argued, functions as a kind of dualism which enables communication to be separated from power. "Ultimately, the distinction is based upon two theoretical fictions, namely, that an action system can occur independently of the normative building of consensus, and that a communicatively integrated action sphere, the lifeworld, can occur independently of domination by relations of power."<sup>41</sup> Power, however, resides not merely in readily-identifiable institutions (the state or the market), but in the play of opposing forces and actions.<sup>42</sup> For postmodern theorists, institutions always represent the dominant narrative which is internalized by all.<sup>43</sup> Foucault, for instance, describes how bureaucracy uses resources and knowledge to control and manipulate individual behavior. Its social agents internalize power and thereby become regimented, isolated, and self policing. Consequently, social dialogue cannot occur independently of domination by relations of power.<sup>44</sup>

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<sup>39</sup> The idea of "colonization" of the lifeworld under the Habermasian model requires further explanation. The system/lifeworld distinction is grounded in Habermas's theory of language which distinguishes between communicative actions and strategic actions, and maintains the primacy of the former over the latter. The colonization of the lifeworld is "the taking over of communicative imperatives by strategic imperatives." See DAVID M. RASMUSSEN, *READING HABERMAS* 35 (1990). In other words, the colonization of the lifeworld is the spill-over of attempts to meet the requirements of system maintenance into the domain of the lifeworld. See BAYNES, *supra* note 32, at 174.

<sup>40</sup> BAYNES, *supra* note 32, at 178.

Measures need to be implemented to insure that public opinion is not simply a commodity manufactured by advertising agencies for the capitalist economy, nor something that can be readily manipulated by campaign managers whose primary allegiance is to the party elite.

*Id.*

<sup>41</sup> See RASMUSSEN, *supra* note 39, at 51 (discussing the critique of Axel Honneth).

<sup>42</sup> See MICHAEL GARDINER, *THE DIALOGICS OF CRITIQUE, M.M. BAKHTIN AND THE THEORY OF IDEOLOGY* 156 (1992).

<sup>43</sup> See FOUCAULT, *POWER/KNOWLEDGE: SELECTED INTERVIEWS AND WRITINGS 1972-77* (C. Gordon ed., 1980); see also GARDINER, *supra* note 42, at 152-58.

<sup>44</sup> Foucault's power/knowledge matrix is based on a relational concept of power in which power resides not in readily-identifiable institutions (the state or the market), but in the play of opposing forces and actions. Power resides everywhere, that is, everything exists within a matrix of power/knowledge. See GARDINER, *supra* note 42, at 156.

The second assumption underlying the claims regarding indirect influence presumes that it is merely the diffusion of power from the system (*the market and administrative state*) into the public sphere that distorts social dialogue. A public sphere which is adequately shielded from the colonizing effect of the system would be based on consensus and rational reasoning.<sup>45</sup> Democratic processes should, therefore, prevent dominant social groups from manipulating these will formation processes so that these processes exclusively reflect their interests and preferences.

While it is likely that a political system that excludes some segments of the population will be biased, in that it may generate public values that strongly represent the interests of the dominant social groups, it does not necessarily follow that a political system that is inclusive would accurately reflect the will of the people. In fact, critical theorists attack the very possibility of reaching a consensus over the "common good."<sup>46</sup> What is a "common good" may only be determined by participants in the deliberative process, and would be affected by the power relations among the participants. A consensus reached under conditions of systematic social inequality is tainted by the effects of dominance and subordination.<sup>47</sup>

The critique of the system/lifeworld distinction should not, however, completely undermine the significance of this distinction as an analytic tool. Identifying a separate realm of human interactions that is distinct from the economy and the state may be significant even if those spheres overlap and are not entirely distinguishable in reality. First, the system/lifeworld distinction acknowledges the existence of another realm of human action and interaction which is relevant to the operation of modern democracies. This conceptual framework recognizes that the modern state cannot be fully understood either in terms of the market, or in terms of the relationship between the market and the administrative state. It therefore facilitates a discussion of actions that are independent of both the market and the state.

Furthermore, the system/lifeworld distinction focuses atten-

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<sup>45</sup> For Habermas the lifeworld has primacy over the system in that it allows reason and rationalization to occur uncorrupted by relations of domination. See RASMUSSEN, *supra* note 39, at 51. Therefore the colonization of the lifeworld by the system distorts the ability to reach a rational result. Consequently, if the "system" colonizes the public sphere then no rational outcome may be reached, and the outcome would be inconsistent with the public good.

<sup>46</sup> Fraser, *supra* note 10, at 131 ("[W]hen social arrangements operate to the systemic profit of some groups of people and to the systemic detriment of others, there are prima facie reasons for thinking that the postulation of a common good shared by exploiters and exploited may well be a mystification.")

<sup>47</sup> *Id.*

tion on the way power may flow between the spheres. From this perspective, the democratic project should be extended from merely securing the freedom of citizens from state intervention, to an attempt to shield participation in the public sphere from the effect of power accumulated in the market. The critique of critical theorists suggests, however, that it is necessary to adapt a more sophisticated analysis of power which looks beyond the effect of power that is inflicted by institutions. This would be particularly important for the analysis set forth in this paper, which focuses on the way technology may affect power relations in the public sphere.

## 2. Legitimacy

The deliberative model further claims that democratic practices in civil society would provide the democratic process with legitimacy. This potential of civil society to generate legitimacy makes it the primary locus for strengthening democracy and supplementing democratic institutions under the deliberative model. The legitimacy of formal democratic institutions stems from the presumption that all have equal power to effect the democratic result (one person one vote).<sup>48</sup> Consequently, if the participation in the political process of any communal member is coerced, dominated, excluded, or otherwise distorted by power, the outcome of the political process would lose its sense of legitimacy.<sup>49</sup>

Legitimacy under the deliberative model is decentered.<sup>50</sup> It requires that all those affected by general social norms have a say in the adoption of those norms. The set of prescriptive conditions that social dialogue needs to satisfy in order to generate legitimacy

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<sup>48</sup> Civic Republicans challenge the liberal model of democracy, for denying the effect of economic power and disparities of power, on the ability to equally participate in the public sphere. Economic power subverts democracy in two ways. First, economic power is translated into power in the public sphere in ways that undermine equality and participation. That was the rationale behind attempts to limit expenditures and contribution in campaigns. See, e.g., *Citizens Against Rent Control v. City of Berkeley*, 545 U.S. 290 (1981). Another way by which economic power subverts the equal opportunities for effective participation is psychological. Experiences of dependency in the private spheres of work and consumption preclude personal and political autonomy. For instance, the need of those who lack property to submit to the direction of those who have it in order to earn their living. See William H. Simon, *Social-Republican Property*, 38 UCLA L. REV. 1335 (1991).

<sup>49</sup> Feldman, *supra* note 11, at 2245.

<sup>50</sup> Under the liberal view, legitimate power is power used by the state and restricted by negative rights of citizens vis-a-vis the state and other citizens. These rights seek to guarantee freedom of external compulsion (governmental intervention). Legitimacy is based on the aggregation of will as reflected in election results. Under the deliberative model, power is decentered and arises from the power of autonomous individuals acting together.

Legitimacy under the liberal model is external to the political process. Legitimacy under the deliberative model stems from a decentered public sphere in which will-formation processes occur.

varies among theorists of deliberative democracy.<sup>51</sup> For Habermas, social dialogue would reflect consensus rather than coercion only if it satisfies the condition of an "ideal speech situation."<sup>52</sup> For Michelman, legitimacy depends on the idea that dialogue must be open to all within the community and be undistorted by the distribution and orientation of power.<sup>53</sup> The assumption accepted by all these theorists of deliberative democracy, however, is that it is the ability of all to equally participate in a meaningful way in generating social norms of action that makes these norms legitimate.

It is this attempt to legitimize the use of power by the state that postmodern theorists criticize. For these theorists, the idea that there is a set of prescriptive procedural conditions such that one's undergoing a dialogic modulation of one's understandings would not be considered coercive<sup>54</sup> is naive.<sup>55</sup> It overlooks the hegemonic ideological power embedded in institutions and culture. If citizens indeed internalize the dominant narrative in a way that prevents them from even recognizing that the so-called consensus does not adequately include them,<sup>56</sup> then even though it may seem that they have granted their consent, their consent is nonetheless coerced.<sup>57</sup>

<sup>51</sup> Legitimacy under the liberal model also is grounded in the notion of social dialogue. Yet, Habermasian dialogue, unlike liberal dialogue, is not subject to criteria of neutrality, but instead is evaluated by the model of "practical discourse."

<sup>52</sup> Legitimacy stems from the exercise of social dialogue that conforms with the model of "practical discourse." These procedural constraints of the "ideal speech situation" seek to guarantee that all those affected by general social norms would have a say in their adoption. Social dialogue would reflect consensus only if it meets the following conditions: 1) each participant must have an equal chance to initiate and to continue communication; 2) each must have an equal chance to make assertions, recommendations, explanations, and to challenge justifications; 3) all must have equal chances as actors to express their wishes, feelings, and intentions; and 4) the speakers must act as if in contexts of action there is an equal distribution of chances. See JURGEN HABERMAS, *THEORY OF COMMUNICATIVE ACTION* (Vol. 1, 1984; Vol. 2, 1987) [hereinafter HABERMAS, *THEORY OF COMMUNICATIVE ACTION*]; see also SEYLA BENHABIB, *CRITIQUE, NORM, AND UTOPIA, A STUDY OF THE FOUNDATION OF CRITICAL THEORY* 284 (1986) [hereinafter BENHABIB, *CRITIQUE OF CRITICAL THEORY*]. While the first three requirements may be expressed in terms of access and power, the fourth requirement looks at the type of arguments that may be legitimately made in such discourse.

<sup>53</sup> In *Law's Republic*, Michelman focuses on the legitimacy of American Constitutionalism, and asks what conditions are presupposed by the Constitution. See Michelman, *Law's Republic*, *supra* note 19.

<sup>54</sup> See HABERMAS, *THEORY OF COMMUNICATIVE ACTION*, *supra* note 52; see also Michelman, *Law's Republic*, *supra* note 19, at 1526-27.

<sup>55</sup> See Dana R. Villa, *Postmodernism and the Public Sphere*, 86 AM. POL. SCI. REV. 712, 715 (1992) (the severe limitations of the public realm theory in coming to grips with the nature of modern power are most apparent in its naive reliance upon conditions of symmetry, non-hierarchy, and reciprocity as adequate guarantees of a "coercion-free" space).

<sup>56</sup> Fraser, *supra* note 10, at 130. Indeed the Foucauldian idea is that subjects internalize the dominant power since it constitutes them. There is no external existence of the subject outside the matrix of power/knowledge relations, since subjects are being constituted by it. For a critical view of this Foucauldian approach, see GARDINER, *supra* note 42, at 158.

<sup>57</sup> Villa, *supra* note 55, at 715 ("The criterion of consensus is too blunt an instrument . . . since it leaves unexamined the self-surveillance of the civically virtuous citizen (who has

This Article does not seek to legitimize the use of power by the state. The critical view suggests that our ability to legitimize the use of power by the state is limited. The insight of critical theory (Foucauldian) is significant in that it broadens the notion of power beyond the explicit effect of coercive institutions or the simple reproduction of economic relations, to cover all levels of the social system.<sup>58</sup> It channels the analysis of power to look at the way the hegemonic ideologies are generated and internalized. Yet, this view in itself cannot provide a basis for public policy. It does not suggest how power can be resisted. Foucauldianism assumes that people are not self-directed autonomous agents, but instead are constituted by the matrix of power/knowledge relations. This assumption makes it difficult to conceive of how those agents could possibly engage in alternative forms of action.<sup>59</sup> It further fails to show how social institutions may be modified to decentralize the effect of power. If power resides at every conceivable level of social relations, then transcending one power system would only result in constituting a new one.<sup>60</sup>

Incorporating the insights of critical theory into the model of deliberative democracy formulates questions about power within a normative framework. This framework establishes a norm against which to evaluate the use of power, and therefore facilitates a discussion over the extent to which a particular use of power is consistent with democracy. The deliberative model establishes the link between democracy and will formation processes in civil society. The insights of postmodern theorists allow the deliberative model a mechanism through which to address the complexity of power relations. The deliberative model, modified by critical insight, may become the basis of social policy.

### 3. Extending the Reach of Democratic Principles

A third reading of the deliberative model suggests another way of understanding the significance of social dialogue within this model. The claim that political will formation is inseparable from the political process requires that will formation processes be governed by democratic principles. Recognizing that norms of action

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internalized the hegemonic conception of the public good) or communicatively rational agent (who has internalized the hegemonic conception of what constitutes 'the better argument.'").

<sup>58</sup> Foucault shares with Bakhtin the non-reductionist perception of society. Society is perceived not as a fixed structure but as a constellation or dispersed fields of opposed forces and strategies. See GARDINER, *supra* note 42, at 158-61.

<sup>59</sup> *Id.*

<sup>60</sup> *Id.* at 162.



are defined and affected by on-going meaning-making processes makes the public sphere an arena in which the democratic process takes place. In other words, when democracy is defined not merely by formal political institutions, but as a process of "discursive will formation," *participation is no longer confined to a narrowly defined political realm, but is instead perceived as an activity that can be realized in the social and cultural spheres as well.*<sup>61</sup>

Furthermore, if political will formation is not prior to, but rather part of the political process, it ought to be governed by democratic principles. To achieve democracy, it is necessary that all those who are affected by norms of action be able to participate in their creation. Social dialogue should be democratic since it is inseparable from politics.

There are two consequences for the concept of participation in democracy. First, it is necessary to guarantee participation at all levels of social dialogue in which political will is being formed. If norms of action are determined not merely by formal political procedures, but also through informal discourse in the public sphere, it is necessary to guarantee the ability of all affected to participate in such debate. Informal discourse in an overlapping and decentralized network of civil associations should be encouraged.<sup>62</sup>

Second, it is necessary to guarantee the *ability*, and not merely the *right*, to participate. In other words, to achieve democracy, it is not enough to focus merely on negative rights (neutrality and equality of representation procedures), but also to secure a positive right—an actual possibility of participation.

The ability to equally participate in the deliberative process depends on power. When power accumulates in the economic market, or by state administrators, and is used in the public sphere, it tends to distort equal participation and merely reproduce the effects of money and power in the market and the administrative state. "Measures need to be implemented to insure that public opinion is not simply a commodity manufactured by advertising agencies for the capitalist economy, nor something that can be readily manipulated by campaign managers whose primary allegiance is to the party elite."<sup>63</sup>

The ability to equally participate in social dialogue also de-

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<sup>61</sup> Benhabib, *Models of Public Space*, *supra* note 19, at 87 ("This conception of participation, which emphasizes the determination of norms of action through the practical debate of all affected by them, has the distinct advantage over the republican or civic virtue conception that it articulates a vision of the political true to the realities of complex modern societies.")

<sup>62</sup> BAYNES, *supra* note 32, at 179.

<sup>63</sup> *Id.* at 178.

pends on disparities of power among participants. One's ability to participate in the political process in a meaningful way depends on her position relative to other participants in this process.<sup>64</sup> In other words, participation depends on how much power one has over other people and institutions, and on the power she is subjected to. The political process should therefore guarantee that disparities of power do not distort the way people form their preferences. The challenge for democracy is to identify the impact of disparities of power on the ability to participate, and to minimize that effect. Finally, the ability to participate depends on the accessibility of social dialogue, accessibility of information, and control over resources.

The following discussion will, therefore, focus on the ability to participate in social dialogue in a meaningful way. Before discussing the technological context and the way it affects social dialogue, an introduction to the concept of social dialogue is required.

### C. *Social Dialogue as a Meaning-Making Process*

The discussion of social dialogue is distinct from the normative approach to political theory. Normative political theory asks what conditions should be satisfied by a political dialogue to legitimize the norms of action that it generates. I propose that social dialogue should be considered in the broad sense of the term. While normative political theory looks at the conditions under which public debate on public issues would generate authoritative bases for political action,<sup>65</sup> discursive will formation processes are not limited to political discourses. Neither are they aimed at agreement over norms of action. Instead, discursive will formation processes include any social interaction by which social agents engage in meaning-making processes. This understanding of social dialogue includes everything from arts and sciences, to writing and reading a book, interpreting old texts, exchanging ideas about

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<sup>64</sup> The concept of power I use here is positional in the sense that it examines disparity of power between agents in any given context, and accepts the idea that agents may enjoy different levels of power in different contexts. Power is understood as the capacity to impose one's will on others and to resist the same imposed by others. See Note, *Distributive Liberty: A Relational Model of Freedom, Coercion, and Property Law*, 107 HARV. L. REV. 859, 864 (1994).

<sup>65</sup> See Craig Calhoun, *Introduction*, in *HABERMAS AND THE PUBLIC SPHERE* (Craig Calhoun ed., 1993). Calhoun posits that democratic theory looks at the social conditions under which the rational-critical debate about public issues determines decisions. For instance, the normative approach would look at the type of arguments that would be legitimate in a social dialogue—should values and interests be excluded from social dialogue, or are they necessary to constitute the legitimacy of social dialogue?

family values, searching information on a database, and creating and consuming artifacts.

Political opinions depend on ideas and understandings about the world, values, and concepts of good. Such belief systems, as any other signifying practice, are generated in particular social contexts through dialogue.<sup>66</sup> Identities are also formed through dialogical interaction with others (family, community, associations), tradition, and shared cultural symbols. We form our views about what is socially appropriate, what is socially desirable, and what future we wish for ourselves based on interaction. Preferences are affected by information about what is available to us and to others. Priorities are affected by our information on the potential consequences of a certain course of action. The type of information we are able to access determines the available options. Therefore, our ability to access information (such as surveys, movies, and historical texts), and to communicate and interact with others, is crucial for the broad understanding of will formation processes.<sup>67</sup>

Social dialogue is understood here as a meaning-making process. This approach perceives all possible forms of human interaction and cultural artifacts as modes of symbolic communication; that is, as semiotic practices which display certain textual or quasi-textual properties that are read and responded to dialogically.<sup>68</sup> Texts, broadly understood as any expression or self-reflection of individuals through symbolic communication, contain no absolute fixed meaning.<sup>69</sup> Consequently, they are necessarily mediated by dialogic relations.<sup>70</sup>

Various social agents are engaged in an on-going process of constructing the meaning of symbols. Through this process, social agents give meaning to the objective world and define their own identity. The process of creating and communicating information

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<sup>66</sup> Bakhtin's perception of ideology as a signifying practice (a symbolic medium through which all social relations are necessarily constituted) makes it inherently dialogic (just like language). Gardiner notes that "[w]hen colonized (or 'monologized') by dominant cultural forms and institutional arrangements, particular ideological discourses can play a crucial role in the maintenance of asymmetrical power relations." GARDINER, *supra* note 42, at 7.

<sup>67</sup> In Bakhtin's words, the "world of the text . . . is a world which can play a vital role vis-à-vis our self-awareness and our moral and political choices in the here and now." *Id.* at 136.

<sup>68</sup> *Id.* at 106.

<sup>69</sup> *Id.* at 137.

<sup>70</sup> Bakhtin distinguishes between dialogic relations, which are subject-subject relations between living persons, and natural relations, which unlike dialogic relations can be understood in terms of causality and quantity. *Id.* at 105.

is a process of creating meaning.<sup>71</sup> The public sphere is thus perceived as an on-going process of meaning-making through communicative activities.<sup>72</sup> This sphere is both constituted by and constitutes the individuals engaged in it.<sup>73</sup> The politics of meaning-making aims at fixing and transforming meanings.<sup>74</sup> It reflects disparities of power among social agents depending on their ability to control access to sources of signification and dissemination.<sup>75</sup>

This perception of social dialogue rejects the idea that political deliberation occurs only in specific institutions, such as courts or parliaments, and perceives it as a network of social interactions that take place at endless levels and arenas. Social dialogue, as an on-going meaning-making process, takes place in overlapping networks.<sup>76</sup> It may occur simultaneously in a wide range of institutions, from informal movements and associations through the public mass media, to the more formal institutions of parliamentary debate and legal argumentation.<sup>77</sup> The underlying assump-

<sup>71</sup> Margaret Chon, *Postmodern "Progress": Reconsidering the Copyright and Patent Power*, 43 DEPAUL L. REV. 97, 122-24 (1993).

<sup>72</sup> Bakhtin, for instance, perceives fictional text as having a capacity to shape the contours of mass consciousness, and therefore as significant for the organization and the subversion of ideological hegemony.

<sup>73</sup> This concept of dialogism is based on Mikhail Bakhtin. See GARDINER, *supra* note 42; see also T. TODOROV, MIKHAIL BAKHTIN: THE DIALOGICAL PRINCIPLE ix (1984).

<sup>74</sup> Rosemary J. Coombe, *Objects of Property and Subject of Politics: Intellectual Property Law and Democratic Dialogue*, 69 TEX. L. REV. 1853, 1860-61 (1991).

<sup>75</sup> See GARDINER, *supra* note 42, at 7; Coombe, *supra* note 74, at 1860-61. Coombe argues that intellectual property laws suppress dialogic practices by "preventing us from using the most powerful, prevalent, and accessible cultural forms to express identity, community, and difference." *Id.* at 1855. I wouldn't go that far. I believe that some level of property rights in works is necessary to secure freedom. Yet, the scope of rights should be adjusted to accommodate free dialogue. For further discussion of this issue, see *infra* part III.

<sup>76</sup> Social dialogue under the deliberative model is understood as a network of overlapping discourses in which discursive will-formation occurs. The idea of an overlapping network is confusing. The public sphere is fragmented and decentralized, and does not treat the entire citizenry, at any single moment, as equal participants, as they are treated by institutions of the formal political system (such as elections). Participation is nevertheless realized through a network of ongoing overlapping discourse. "Although the idea of a practical discourse in which the entire citizenry participate as free and equal persons is not directly realized within any one of these forums, the entire network of institutions should be designed in such a way that this idea is appropriately mirrored in them." BAYNES, *supra* note 32, at 180. Furthermore,

[i]t is in this sense, too, that Habermas has spoken of a "proceduralization" of the Rousseauian conception of popular sovereignty in which the notion of a localized sovereign body is replaced with that of an anonymous network of communication processes comprised of autonomous associations, independent mass media, and other institutions of the public sphere. On this model, the "moment" of deliberation, so to speak, does not reside primarily with the judiciary (Sunstein) nor with the body of elected representatives (Madison), but is dispersed throughout a vast communicative network.

*Id.*

<sup>77</sup> See BAYNES, *supra* note 32, at 180. Political dialogue should occur in many forums. Civil society is thus conceived as "a pluralist public sphere in which citizens define the

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tion of part II is that these social interactions affect the way identities, interests, and values are being formed. Rather than focusing merely on the chance of actors to express themselves in a political dialogue, social dialogue looks at how their objectives, values, and views are constituted. From this perspective, social dialogue does not aim at reaching any binding decision.

The following discussion looks at actual social conditions in which discourse occurs and attempts to track the impact of power on the way meaning is generated. Social dialogue is perceived as a historical phenomenon that is affected by social, political, and technological changes.<sup>78</sup> This discussion is restricted to the way technological changes affect social dialogue, and the way the law may intervene to determine the direction of those effects.

## II. SOCIAL DIALOGUE IN CYBERSPACE

We have seen that an inclusive social dialogue is essential for democracy. Social dialogue in a democracy should promote participation of all members affected and should minimize the effects of coercion and power. This part looks at social dialogue and its implementation in digital networks. The question is whether the media, which facilitates dialogue, affects its nature and structure. I would argue that interactions on digital media, when compared with other forms of communication, may affect the disposition of social dialogue.

Since on-line services are facilitating an increasing portion of

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terms and conditions of their common life and in which debate and argument about collective norms, social policies, and political decisions take place." *Id.* at 178; see Michelman, *Law's Republic*, *supra* note 19, at 1531 (identifying many "arenas of potentially transformative dialogue").

<sup>78</sup> The Habermasian model of the public sphere is historical. In *The Structural Transformation of the Public Sphere*, Habermas describes an autonomous sphere that emerged in modernity. See JURGEN HABERMAS, *THE STRUCTURAL TRANSFORMATION OF THE PUBLIC SPHERE* (Thomas Burger trans., 1989) (1962). The emergence of the public sphere in the eighteenth century is described as part of the changes in sociocultural institutions. The bourgeois public sphere of the eighteenth century emerged in the form of private clubs, coffee houses, learned societies and literary associations, publishing houses, journals, and newspapers. Therefore, even though the Habermasian concept of the public sphere is analytic, and relates to a sphere (realm of human activities), rather than a place, and to a type of activities (reasoning private persons) rather than a specific institution, it relates to a quality of social institutions that may be affected by technological and social changes. The Habermasian model is particularly appealing in the context of the information superhighway not only because it is perceived as a historical phenomena, but also because of the focus on communication acts. Furthermore, Habermas's perception of overlapping discourses in civil society is reflected in the reality (and the metaphor) of the Internet. For the use of Habermasian ideas to develop a social theory of media see John B. Thompson, *Social Theory and the Media*, in *COMMUNICATION THEORY TODAY* 24 (David Crowley & David Mitchell eds., 1994).

our social interactions,<sup>79</sup> digital networks are displacing our cultural attention, and may transform the way we understand information and information exchanges.<sup>80</sup>

This discussion demonstrates how digitization may affect the capability of individuals to participate in social dialogue. First, I will explore several characteristics of digital media, such as flexibility and interactivity, which may decentralize the meaning-making process, and enhance the ability of individuals to effectively participate in social dialogue. Second, I will illustrate how digitization opens social dialogue for participation by enhancing accessibility to different means of creation and communication. Cyberspace may facilitate active, rather than passive participation in the deliberative process and enhance the ability of individuals to access relevant information that may be crucial for will formation processes.

#### A. *Decentralizing Control Over Meaning*

Digitization has the potential to redistribute meaning-making power by shifting that power over meaning from authors, and other producers of information, to users. This is due to several characteristics of digital media. One such characteristic is the flexibility of digital representation, which allows meaning to be created by various social agents at various times. Another aspect of digital media that supports decentralization is interactivity, which enables users to act upon works. Consequently, the meaning of works may reflect not only the author's meaning, but also mutual influences of authors and users.

##### 1. *Fixity and Flexibility*

Perhaps the most significant characteristic of digital media is that it stores information in electronic codes rather than in a physical form.<sup>81</sup> This flexible form of representation is easy to manipulate and modify. The costs of manipulation in a digitized form are

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<sup>79</sup> The visionaries of cyberspace anticipate that digital networks will replace all other methods of communication. For the current analysis however, it is not necessary to assume that digital networks would entirely replace all methods of communication. Even if digital networks merely offer an alternative for existing communication methods, they would still have the potential for transforming social dialogue. This is because introducing an alternative to the current structures of communication entrusts participants with an option, and thus subverts the hegemony of prevailing structures.

<sup>80</sup> See MICHAEL BENEDIKT, *CYBERSPACE: SOME PROPOSALS*, in *CYBERSPACE—FIRST STEPS* 124 (1991) ("[J]ust as printing did not replace but displaced writing, and writing did not replace but displaced storytelling, and just as movies did not replace theater nor television movies . . . cyberspace will not replace either objective reality or dreaming and thinking in their historical modes.").

<sup>81</sup> GEORGE P. LANDOW, *HYPertext, THE CONVERGENCE OF CONTEMPORARY CRITICAL THEORY AND TECHNOLOGY* 18 (1992).

relatively low, partly since manipulation may occur on the same media that carries the original message. Revisions of text in a physical medium, by contrast, often require the use of a new media, which, in turn, increases the cost of creating new versions.<sup>82</sup> Digital representation is nonetheless fixed, in the sense that it may be communicated to many receivers over time and distance in the form in which it was recorded. While the significance of writing and printing technologies is considered to be the ability to create and disseminate static fixed records,<sup>83</sup> the significance of digital representation is that it combines fixity and flexibility.

It is unnecessary to predetermine any aspect of a digitized work because it is easy and inexpensive to revise it, even after the creation of the work has been completed.<sup>84</sup> Physical media, by contrast, are static and require a choice regarding the final version of the work prior to its completion.<sup>85</sup> Consequently, digitized works tend to be indefinite and subject to change. David Bolter remarks that

[t]his restlessness is inherent in a technology that records information by collecting for fractions of a second evanescent electrons at tiny junctions of silicon and metal. All information, all data, in the computer world is a kind of controlled movement, and so the natural inclination of computer writing is to change.<sup>86</sup>

The flexibility of digitized media shifts power among social agents. Consider, for instance, the shift from retrieval methods based on physical media, such as card catalogs, printed indexes, tables of contents, pagination, or bibliographies, to computerized databases. Physical retrieval methods are based on a fixed, linear representation and tend to concentrate meaning-making power in

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<sup>82</sup> Consider for instance the routine activity of revising a printed text. Whereas such revisions used to require mechanical deletion (for example, covering with a whitener), or printing the text all over again, the same revisions on a wordprocessor may be performed in a matter of seconds.

<sup>83</sup> The invention of writing allowed the creation of fixed records—of data and ideas—to be shared by people in different places and at different times. The invention of the print by Gutenberg allowed the dissemination of such records in multiple copies. See ELIZABETH EISENSTEIN, *AGENT OF CHANGE* 229 (1976); LANDOW, *supra* note 81, at 18; ITHIEL DE SOLA POOL, *TECHNOLOGIES OF FREEDOM: ON FREE SPEECH IN AN ELECTRONIC AGE* (1983).

<sup>84</sup> One may change a work altogether by adjusting the size of a design, or altering the colors of a image or a digitized drawing.

<sup>85</sup> For instance, once a painting has been drawn on canvas, the colors and size may not be modified.

<sup>86</sup> DAVID BOLTER, *WRITING SPACE: THE COMPUTER IN THE HISTORY OF LITERACY* 31 (1990) ("Electronic text is the first text in which the elements of meaning, of structure, and of visual display are fundamentally unstable. Unlike the printing press or the medieval codex, the computer does not require that any aspect of writing be determined in advance for the whole life of a text.").

the hands of the few who construct them. Meaning is constructed through the selection and the organization of information. The way a piece of information is defined and categorized determines the path that will locate it, and enable people to access it.<sup>87</sup> Any information structure reflects specific assumptions by the compiler regarding the meaning of that information. For instance, the decision to classify a group that uses violence to achieve political goals as either a "terrorist group" or a "liberation organization" depends on one's political perspective.<sup>88</sup> The meaning defined by the classifier is imposed by controlling access to information. Unless the user's set of assumptions matches the set of assumptions used by the compiler, the user would fail to retrieve any relevant information. Retrieving information by following a constructed path requires accepting, or at the very least acknowledging, the underlying assumptions of the classifier.<sup>89</sup> Thus, physical retrieval methods serve to perpetuate meanings assumed by the compiler.<sup>90</sup>

Another source of control exercised by compilers of information in physical media is the power to determine which chunks of reality are to be categorized, and those which do not merit a special category. In this sense, compilers have the power of language creators. This power may significantly affect our perception of the world.<sup>91</sup> It follows that those who control the means of arranging

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<sup>87</sup> The rigidity of previous methods of information retrieval troubled one of the pioneers of hypertext—Vannevar Bush, who as early as 1946 wrote: "[Information] can be in only one place, unless duplicates are used; one has to have rules as to which path will locate it, and the rules are cumbersome. Having found one item, moreover, one has to emerge from the system and re-enter on a new path." VANNEVAR BUSH, *ENDLESS HORIZONS* 31 (1946).

<sup>88</sup> The construction of information is not reflected merely through classification, but also through the network of links that creates the path which leads to the information.

<sup>89</sup> "Some level of recognition" is used here to cover a whole range of different levels of recognizing the underlying assumptions in order to access information. This goes from internalizing or adapting the meanings assumed by the compiler, studying those meanings in a critical way, or completely rejecting them. Even if one does not fully accept the meaning attached to information through the way it is organized, the fact that the compiler's assumptions are being repetitively used, as the only path to the information, gives that specific meaning a dominant role.

<sup>90</sup> It is arguable that to some extent, in order to create an effective system of classification, a classifier must be responsive to existing common understandings and perceptions, and must reflect those in her classification. To that extent existing meanings are perpetuated.

<sup>91</sup> This may also be demonstrated in the context of legal research. Defining a problem as one of private or public law, as one of tort or contract law, may invoke different interests and considerations. Structuring the law by defining legal categories was part of an effort of late-nineteenth-century legal scholars to depoliticize legal thought. See MORTON HORWITZ, *THE TRANSFORMATION OF AMERICAN LAW 1870-1960, THE CRISIS OF LEGAL ORTHODOXY* 10 (1992). The content of legal categories, and the organizational structure of the law, had always been debated. Legal categories served not only functional but also political purposes. *Id.* at 10-27. The impact of on-line legal research, which increasingly dominates American legal education, on legal categories is yet to be seen. When students and practi-



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and tagging information possess the power to impose specific meanings. The more control one has over information resources, the more one is able to impose her meanings and force users to conform to those meanings.

Digitization of information retrieval methods decentralizes control over meaning in several ways. First, representation of information is flexible and neutral, and may be classified in endless ways. Whereas physical retrieval methods rely on rigid mechanisms, such as reference to text by page numbers, or reference to books by call numbers, digitized representation is not linked to any specific classification and organization. Consequently, it allows reference to information in various ways. The fact that digitized classifications may be constantly modified reduces the dependency on preexisting classifications and allows constant change of meanings.

Second, whereas manual research methods follow a single path defined by rigid categories,<sup>92</sup> computerized research allows the use of endless categories, or several categories simultaneously. It is, therefore, less dependent on familiarity and compliance with preexisting concepts. One may employ, for instance, a keyword search that would provide direct access to all the documents which contain a certain combination of words, even though such combination was never previously contemplated. Consequently, several meanings may be affixed to any single piece of information.<sup>93</sup> It thereby reduces the dependency of users on preexisting classifications and assumptions regarding the meaning of symbols, liberates researchers from conforming with prevailing methods of classification, and facilitates the creation of new meanings.<sup>94</sup>

Nevertheless, digitized data also reflects the programmer's set of assumptions.<sup>95</sup> Access to digitized information depends on retrieval programs that may limit the accessibility of information.

tioners are able to access cases directly, and no longer dependent on legal classification in books and manuals, the structure of the law may transform.

<sup>92</sup> "When data of any sort are placed in storage, they are filed alphabetically or numerically, and information is found (when it is) by tracing it down from subclass to subclass. It can be in only one place, unless duplicates are used; one has to have rules as to which path will locate it, and the rules are cumbersome. Having found one item, however, one has to emerge from the system and re-enter on a new path." BUSH, *supra* note 87, at 31.

<sup>93</sup> Compare, for instance, research using the West manual key system with research on LEXIS. Using the key system one has to conform to the existing categories, including different areas of law and existing legal doctrines. Classification of a case as one of private law or constitutional law may be crucial for the legal outcome. In a digitized environment one may look up a case by using words that assume (or eventually establish) a different meaning.

<sup>94</sup> Computerized legal research, for instance, may change the classic classification of legal fields such as contract law and criminal law. This may allow the creation of new fields of knowledge which combine previously distinct disciplines.

<sup>95</sup> See Muriel Zimmermann, *Reconstruction of a Profession: New Roles for Writers In the Com-*

The syntax used by a computer program does structure and define the information retrieved. However, retrieval programs may vary in the rigidity of their search strategies, and many would allow users to choose various search parameters. Furthermore, the flexible form of representation, and the ability to separate the recording of information and the retrieval mechanisms, allow access by different research programs simultaneously.<sup>96</sup> Many computer programs run on the same database, and thus allow different social agents to apply their meaning to that information. This may reduce the hegemony enjoyed by information compilers and may allow diversity in research strategies.<sup>97</sup>

Another feature of flexible representation is non-linearity. Digital information allows one to access a bit of information directly, without following any given sequence and without having to read any other information. One may use the automated "search" command of a word processor, for instance, to go directly to the desired paragraph. Books, by contrast, are linear and are commonly read from beginning to end.<sup>98</sup> Non-linearity transfers meaning-making power from authors to readers. If a user is able to enter the text at any point, she may disregard what the author considered to be the meaning of the text, and may use the fragmented material as she wishes.<sup>99</sup>

The overall effect of the flexible nature of digital representation tends to decentralize control over meaning-making processes,<sup>100</sup> and invites more individuals to participate.

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*puter Industry*, in *THE SOCIETY OF TEXT, HYPERTEXT, HYPERMEDIA, AND THE SOCIAL CONSTRUCTION OF INFORMATION* 244 (Edward Barrett ed., 1989).

<sup>96</sup> Physical retrieval methods, by contrast, require the classification of the information itself, such as by attaching a call number to books and physically placing them together in the library, or by organizing text in pages, and referring in an index to specific page numbers.

<sup>97</sup> From the perspective of copyright law, one question is whether users can adapt works to reflect their own meanings. I argue that new conditions created in the digitized environment suggest that the law should not prohibit this type of application.

<sup>98</sup> LANDOW, *supra* note 81, at 21 ("Whereas analogue recording of sound and visual information requires serial, linear processing, digital technology removes the need for sequence by permitting one to go directly to a particular bit of information.")

<sup>99</sup> From the perspective of copyright law this aspect of digital technology raises some interesting questions regarding the rights of a database owner to prevent the use of computer applications over its database. The question is whether, considering opportunities for participation in the digital era, copyright law should permit activities such as this. This question is discussed in part III, *infra*.

<sup>100</sup> See MICHAEL HEIM, *ELECTRIC LANGUAGE: A PHILOSOPHICAL STUDY OF WORD PROCESSING* 220 (1987).

Fragments, reused material, the trails and intricate pathways of "hypertext", as Ted Nelson terms it, all these advance the disintegration of the centering voice of contemplative thought. The arbitrariness and availability of database searching decreases the felt sense of an authorial control over what is written.

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2. Interactivity

Digitized systems tend to be more interactive than works in traditional forms. This is due to the fact that manipulation of digitized works is relatively easy and inexpensive, and therefore allows input of users to be integrated into works. Non-digital media, such as printed text, film or sound recording, carry only a single form of the work at any given time.<sup>101</sup>

The level of a user's involvement in the creation of the final work may vary. Some interactive systems allow users to select one way of reading (or experiencing) a work from among several options. Interactive films, for instance, allow the audience to choose the development of the plot. Other interactive systems allow one to incorporate one's own input into the work. Interactive TV, for instance, allows viewers to choose what they see and to manipulate it. Viewers can grab and manipulate photographs or sound samples, recolor a cartoon, or play an interactive film. Other interactive works are compilations of various materials, either crude (such as sound samples or colors) or highly processed (such as blocks of text). The user is invited to interact with the media and reflect her personal preferences by integrating several elements into a single presentation.

Interactivity decentralizes meaning-making power by shifting meaning-making power from authors to users. Compare, for instance, writing text on paper and writing with hypertext.<sup>102</sup> Hypertext is "text composed of blocks of words (or images) linked electronically by multiple paths, chains or trails in an open-ended, perpetually unfinished textuality described by the terms link, node, network, web and path."<sup>103</sup> In other words, those are blocks of text linked electronically that permit multiple readings. While authors

<sup>101</sup> ITHIEL DE SOLA POOL, TECHNOLOGIES WITHOUT BOUNDARIES, ON TELECOMMUNICATIONS IN A GLOBAL AGE 50 (1990).

<sup>102</sup> The significance of the hypertext example is twofold. First, interactive electronic linkage is not unique to hypertext. It is a feature shared by any electronic text. When text written on a wordprocessor is connected to the network, it functions in a hypertext environment, namely, it may be linked to other texts, converged with them, in whole or in pieces, and be placed in the "same psychic framework." See HEIM, *supra* note 100, at 160-61. Thus hypertext provides an appropriate context for studying the interactive linkage, as well as a context from which generalization may be drawn. Additionally, from the perspective of copyright law, it is interesting to examine the changes in writing (in the narrow sense of drafting text). The reason is that the print technology was central for adapting copyright laws, and it is therefore still central to fundamental concepts of copyright.

<sup>103</sup> LANDOW, *supra* note 81, at 3. The term "hypertext" was first defined in the 1960s by Theodore H. Nelson as "nonsequential writing—text that branches and allows choices to the reader, best read at an interactive screen. As popularly conceived, this is a series of text chunks connected by links which offer the reader different pathways." THEODOR H. NELSON, LITERARY MACHINES 0/2 (1981) (emphasis omitted).

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of printed text would organize their ideas in advance and put them into specific words and order, authors of hypertext do not control the organization of themes in the text. Instead, writing involves creating fragments of information or text which are then selected and organized by users in each reading of the text.<sup>104</sup> The open-endedness of text that allows readers to contribute their input is sometimes referred to as "un-authored," "authorless,"<sup>105</sup> or a "book that's sort of written as you read it, by your finger when you touch the screen."<sup>106</sup>

The Hypertext example illustrates the effect of interactivity on decentralizing meaning-making power. Authoring by the reader may take three forms: first, by creating meaningful text by linking specific blocks of text; second, by annotating text written by others; and third, by creating links between separate documents.<sup>107</sup> Each of these "reader created meanings" deserves further elaboration.

Authoring by linking occurs when the reader determines how to move through different texts. Thus, even though the reader may not change the text produced by another writer, she is constructing a meaningful text while reading it.

Annotating text permits readers to add their comments and make revisions in the text.<sup>108</sup> Such annotations are no longer external to the text, but may converge with it, and may be shared among readers.<sup>109</sup> This makes text more vulnerable, and reduces the power of writers to govern meaning.

Creating links between separate documents makes each text vulnerable to changes and convergence with others.<sup>110</sup> Here, readers may alter and change a text to create a new text, and a new

<sup>104</sup> Or, fragments of information or text are selected and organized by users in each and every running of the program. See EDWARD BARRETT, *TEXT, CONTEXT, AND HYPertext: WRITING WITH AND FOR THE COMPUTER* (1988).

<sup>105</sup> See Zimmermann, *supra* note 95, at 245. Zimmermann forecasts that in the next generation of computer documentation, using database methodologies, there will be no unique authors. Writers will contribute fragmented texts into a database in which it will be maintained and reused.

<sup>106</sup> See STEWART BRAND, *THE MEDIA LAB: INVENTING THE FUTURE AT M.I.T.* 141 (1987).

<sup>107</sup> See LANDOW, *supra* note 81, at 71.

<sup>108</sup> Landow perceives this to be a crucial liberating and empowering quality of hypertext: "[a]s long as any reader has the power to enter the system and leave his or her mark, neither the tyranny of the center nor that of the majority can impose itself." *Id.* at 178.

<sup>109</sup> Compare, for instance, annotating a book one owns in the privacy of one's house with annotating text on a hypertext system where the new version of that text may be instantly read and further revised by other users.

<sup>110</sup> See LANDOW, *supra* note 81, at 71-72. From a philosophical perspective, "[h]ypertext . . . narrow[s] the phenomenological distance that separates individual documents from one another in the worlds of print and manuscript." *Id.* at 71.

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meaning. As a result, authors may no longer control the meaning of their text.

It is arguable that the ability to change texts and place them in different contexts also exists in physical media. Critical theorists have long attributed meaning-making functions to readers of printed text.<sup>111</sup> Yet, digitization translates this abstract idea about the meaning of art into a concrete framework of activities. Whereas unilateral communication, such as broadcasting or the printing press, imposes an authoritative uniform meaning on its audience,<sup>112</sup> digital technology allows meaning to be created through dialogue. A plurality of meanings may be constructed by a variety of individual users who interact with the text.

By making readers more active, hypertext systems combine writing and reading, and transfer meaning-making power from authors to readers.<sup>113</sup> Meaning thus becomes multicentered.<sup>114</sup>

### 3. Participation and Empowerment

#### a. Expanding the Circle of Creators

For readers, interactivity is empowering. It transforms readers from relatively passive receivers of a message, into potential participants in the creation process.<sup>115</sup> Thus, interactive systems such as Hypertext empowers readers with creative powers and expands the number of people who may participate in the creation process.

Interactivity transforms the hierarchical nature of one-way communication. In a non-digitized environment, a message is put together by the originator (that is, a book publisher or a broadcaster) and is disseminated to passive receivers. Receivers may dispute the message and respond in a separate message of their own. For example, one may write "letters to the editor" in response to a disputed article, or respond instantly to a program on a television

<sup>111</sup> See RONALD BARTHES, *S/Z* (1974).

<sup>112</sup> See COLIN CHERRY, *THE AGE OF ACCESS: INFORMATION TECHNOLOGY AND SOCIAL REVOLUTION* 64 (1985).

[Broadcasting] . . . is essentially a unilateral system, sending out . . . its educational material, etc. from an authoritative center to the multitude, who cannot effectively respond as *individuals*; broadcasting has enormous responsibilities for this very reason, that it essentially extends and enhances the power of authority.

*Id.*

<sup>113</sup> LANDOW, *supra* note 81, at 71.

<sup>114</sup> Interactivity may break the monopolistic stranglehold of the mass media. This monopoly is maintained by separating consumers from producers, and turning viewers to passive receivers. Interactivity allows the audience to participate in choice and makes receiver's potential transmitters. See Peter Jukes, *The Work of Art*, *STATESMAN AND SOC'Y*, July 1992, at 40.

<sup>115</sup> *Id.*

talk show. Such responses may not, however, become part of the original message. Interactivity allows a convergence of the message with the adjustments made by the receiver/user. Thus, the ability to change the original message is empowering for individuals. It opens up actual ways for individuals to resist a message, redefine it, or create a mutual message. In this sense interactivity facilitates dialogue and participation.

Interactivity mitigates the need for professional training in order to participate in social dialogue. It allows amateurs to participate in creating works. Use of computers as artistic tools replaces some of the labor involved in the creation process and may expand the range of participants in creative activities. Computer music, for instance, allows people to compose music regardless of their proficiency in playing musical instruments.<sup>116</sup> Sound may be generated digitally or may be processed from pre-existing recordings of instruments through sampling. Interactive music composition lets users compose their own music out of pre-constructed parts, re-mix or re-arrange a composition, control the tempo and mood of the composition, or play as one of the band's members.<sup>117</sup> Other interactive systems introduce users to the process of writing music,<sup>118</sup> or offer an interactive experience which combines music art and games. Interactive systems break the link between instrument-playing techniques and sound creation, and change the roles and the significance of the traditional participants in the creation process. If technical skills are no longer necessary, then more people may be able to express themselves through computer assisted creation.<sup>119</sup>

Interactivity may transform the very meaning of authorship. Authors may focus increasingly on facilitating creativity of others, rather than devoting themselves to the generation of fixed and completed works. From a political perspective, the overall effect of interactivity is to empower individuals to take an active role when experiencing works of others. It creates opportunities for more individuals to express themselves and may democratize social

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<sup>116</sup> *No World Order*, is a system by Todd Rundgren, which runs on CD-I and Macintosh systems, and contains a database of more than 1500 musical segments and phrases from which users may create their own composition. See Fred Davis, *I Want My (Desktop) MTV!*, WIRE, July 1993, at 86.

<sup>117</sup> *Id.* at 85.

<sup>118</sup> See for instance Peter Gabriel's *Explora* CD-ROM, which is an interactive tour of the process of creating music. Gabriel's aspiration is to empower his audience. "I hope this technology will empower people who have a sense that they have as much right and ability for self-expression as anyone who goes under the officially approved category [of artist]." *Id.* at 84.

<sup>119</sup> See RAYMOND KURZWEIL, *THE AGE OF INTELLIGENT MACHINES* 368 (1990).

relations.<sup>120</sup>

#### b. Cut and Paste

Another aspect of digitization with the potential to expand the circle of creators is the capability of cut and paste. Creators in digital environments are gradually more occupied with processing signals, making decisions about selection and organization, and using computerized commands. Authorship in digital media involves processing fragmented works as building blocks. It takes the form of creating a meaningful text by selecting specific blocks of text, linking them and revising them. Reconstructing blocks of text redefines boundaries and provides a new meaning.

Consider, for instance, "Digital Sampling." Once an analog sound wave is converted into a digital code it may be reused, manipulated or combined with other digitized or recorded sounds using digital data processors.<sup>121</sup> Recording engineers can mix snippets of music from various sources. As in music, designers can incorporate actual shapes and textures, capture them on video or photograph, and then convert them to a digitized form. Such images may then be manipulated or combined with other pictures and images to create new computer-collages. The same cut and paste process is applicable for texts which incorporate preexisting texts. The challenge for the artist, however, remains the same—to create a meaningful text. The musician, for instance, must still choose the right timbres and melodies to express her musical ideas.<sup>122</sup>

The fact that cut and paste techniques occupy a large chunk of the creation process is significant for several reasons. If the essence of creation becomes the processing of signals and preexisting texts, then those become the building blocks of the creation process.

<sup>120</sup> See Brenda Laurel, *Immersive Technology*, WIRED, Dec. 1993, at 107 ("In the world of immersion, authorship is no longer the transmission of experience, but rather the construction of utterly personal experiences."). For further discussion of the effect of digitization on transforming the notion of authorship, see Niva Elkin-Koren, *Copyright Law and Social Dialogue on the Information Superhighway: The Case Against Copyright Liability of Bulletin Board Operators*, 13 CARDOZO ARTS & ENT. L.J. 345, 390-99 (1995).

<sup>121</sup> See Judith Greenberg Finell, *How a Musicologist Views Digital Sampling Issues*, N.Y.L.J., May 22, 1992, at 5.

<sup>122</sup> See KURZWEIL, *supra* note 119, at 355. The shift in the focus of the creation process to manipulation of signals is demonstrated not only by the use of the "cut" and "paste" commands, but also by new techniques used in computerized images. Drawings may be created by defining rules and providing information to a program. See Randall Davis, *Intellectual Property and Software: The Assumptions are Broken*, in WORLD INTELLECTUAL PROPERTY ORGANIZATION, WORLDWIDE SYMPOSIUM ON THE INTELLECTUAL PROPERTY ASPECTS OF ARTIFICIAL INTELLIGENCE (1991).

Identifying which are the building blocks of the creation process is significant for property rights. Building blocks are the resources of writers for further creation. Allowing one to exercise control over building blocks, and depriving everyone else of this resource, may inappropriately restrict creation.<sup>123</sup> The distinction between ideas and expressions draws the line between what is a resource for further creation and is, therefore, excluded from the reach of property right, and what is to be considered the final product of a creation process (expression) and is, therefore, an appropriate object of property rights. It is arguable, therefore, that the rules that allow property rights to reside in expressions may require adjustment.

c. Customizing the Creation Process<sup>124</sup>

Digitization allows works to be made according to individual needs or personal specifications. Two aspects of digital technology facilitate this transition: the availability of two-way communication, and the ease of manipulating digitized works.<sup>125</sup> The existence of a two-way channel between producers and users allows information about individual preferences and interests to be communicated and gathered more efficiently.<sup>126</sup> Consequently, users are increasingly involved in determining what they wish to watch, read, or otherwise consume.<sup>127</sup> The manipulability of digitized media al-

<sup>123</sup> See *supra* notes 86 & 100 and accompanying text.

<sup>124</sup> "Customization" is relevant both for the creation and the dissemination of works. The difficulty of classifying customization as either an aspect of creation or as an aspect of dissemination, reflects the difficulty of applying our concepts to digital environment. In a digital world the two activities—creation and dissemination—converge. Dissemination is concerned with communicating works to potential recipients. Yet, if works are customized then distribution no longer involves duplicating an identical work, but instead, distributing individualized works. Customization also means that works are being created while distributed, and not before—as used to be the case.

<sup>125</sup> The shift to customized products also occurs in manufacturing. Manufacturing shifts from mass production to the manufacturing of tailored-based products. See ITHIEL DE SOLA POOL, *supra* note 101, at 12, 251. Computerization allows flexibility in the production process, and the ability to constantly gather information regarding the consumer's changing needs. Computer aided design allows much more flexibility in the design process by enabling rapid changes, and by allowing designers to try a large number of models. Computerized systems that control the manufacturing process allow the adjustment of the assembly lines to respond to consumers' individualized demands. Consequently, assembly lines are able to produce based on individual orders rather than on speculations over future demand. This saves storage costs and makes production more efficient. On the other hand, it increases transaction costs of gathering information regarding the interests and desires of potential consumers. For the effect of computer technology on the production process see SHOSHANA ZUBOFF, *IN THE AGE OF THE SMART MACHINE: THE FUTURE OF WORK AND POWER* (1988).

<sup>126</sup> ITHIEL DE SOLA POOL, *supra* note 101, at 10.

<sup>127</sup> For example *First!* is a customized newspaper published by Individual, Inc. of Cambridge, Massachusetts. Individuals' software automatically generates a daily individualized newspaper filtered and compiled from the daily newspapers and news services, according



lows producers to attune to individuals' preferences.<sup>128</sup> Users may add their input and shape a digitized work to meet their individual preferences in a cost effective way. The passiveness of consuming mass products is replaced by constructing individualized experiences.<sup>129</sup> Consequently, works increasingly exist in multiple individualized versions.<sup>130</sup> Producing artistic works used to involve the creation of a single prototype ("the work"), and the subsequent duplication<sup>131</sup> of the work in copies.<sup>132</sup> Walter Benjamin perceived the trend towards reproduction of works of art as having a liberating effect on society. Benjamin saw the democratic potential of mass production in eroding the possessive fetishism of the art object, allowing works of art to become more accessible. Digitization may shift the focus of production from duplicating multiple *reproductions* of a work, to creating *personalized* or *customized* works. The process of creation may thus shift from mass duplication of a single prototype to the creation of tailored-made works.<sup>133</sup> This may further advance the democratizing trends observed by Benjamin. While mass duplication of works provided individuals with an unlimited access to works of art, digitization provides them with the power to act upon works. By allowing customization, digitization enables individuals to incorporate their personal expression into the cultural products they consume.

*Customization and interactivity modify the market in which the process of creation takes place. Mass consumption is gradually being replaced by customized consumption. The value of works rests in the works' ability to adjust to the specific preferences of*

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to the subscriber's profile. The customized newspaper is delivered to subscribers by fax or by e-mail. See Kathleen K. Wiegner, *All the News that Fits*, FORBES, Apr. 30, 1990, at 174-75.

<sup>128</sup> Digitized newspapers, for instance, allow users to define their interests, and compile for each customer an individualized newspaper which consists of only the news that falls within the scope of the client's interest. Pool discusses the transformation of the mass media—" [I]nstead of identical messages being disseminated to millions of people, electronic technology permits the adaptation of electronic messages to the specialized or unique needs of individuals." ITHIEL DE SOLA POOL, *supra* note 101, at 8.

<sup>129</sup> As described by one writer, "on our own again, after the long mediation of top-down authored experience, of broadcast culture and mass produced objects of desire." Brenda Laurel, *Immersive Technology*, WIRED, Dec. 1993, at 107.

<sup>130</sup> ITHIEL DE SOLA POOL, *supra* note 101, at 10.

<sup>131</sup> Duplication may take the form of a limited edition such as in the case of lithographs, or the form of mass reproduction such as printed books.

<sup>132</sup> See Walter Benjamin, *The Work of Art in the Age of Mechanical Reproduction*, in ILLUMINATIONS (Hannah Arendt ed., Schocken Books 1969) (1936).

<sup>133</sup> Pool discusses an example of computer-controlled composition that allowed newspapers to appear in local and specialized editions which contained different ideas and features. See ITHIEL DE SOLA POOL, *supra* note 101, at 12. For further discussion of the potential social impact of customization and the way it may be inhibited by copyright law, see *infra* notes 263-77 and accompanying text.

users.<sup>134</sup> Consequently, the creation process is gradually aiming at creating works that may be customized; in other words, works that may be individualized according to the choices and preferences of the users.<sup>135</sup>

The ability to customize works permits more individuals to incorporate their input into cultural products. Even where there is minimal ability to customize works, it may still empower individuals by providing them with choices. The individual's ability to choose one's cultural experiences allows individual expression through the consumption of commodities that are adapted to meet one's own agenda.<sup>136</sup> This, in turn, promotes diversity and individuality by voicing individuals' choices. The ability of individuals to choose their cultural experiences is crucial for participation, since it is the very process of choosing and adapting a work to one's own meaning which defines social dialogue. In other words, participation requires individuals to recognize themselves and their aspirations in the range of representations offered within the central communication sectors, and to contribute to the development of these sectors.<sup>137</sup> To the extent that users contribute their input into objects they consume, the power and significance of the dominant source of meaning and standards declines.<sup>138</sup>

Some argue that customization may weaken the sense of social experience. If people are exposed to more individualized messages, the significance of a common social experience declines. This has become a matter of concern for several scholars who point at the danger it poses for society's consolidation. The concern is

<sup>134</sup> A customized record may allow the music to be tailored to the listener's circumstances. Individuals may be able to program their CD-I to respond to their changing needs—for instance compiling music for a dance party.

<sup>135</sup> From an economic perspective the availability of customized works means that we may no longer talk about a single demand for copies of a single work, but about various demands for particular individualized goods. We may still, however, talk about a single demand for a work that is flexible enough to be adjusted to meet individualized needs.

<sup>136</sup> Consider, for instance, the ability of users to customize digitized stories and change the names and gender of the characters. This may be crucial for one's ability to relate to the arts and to popular culture, as demonstrated by the controversy over banning controversial books in libraries and schools. When a book is controversial, such as *Heather Has Two Mommies and Daddy's Roommate* (featuring illustrations of gay couples) it can either be banned or approved by public libraries and schools. See Michael Granberry, *Besieged by Book Banners*, L.A. TIMES, May 10, 1993, at A1. If, however, children and parents are able to change the characters and the plot, they are more likely to find the story consistent with their family perception. The controversy over what books should be included on the New York City public schools' list of suggested bibliography for teachers, further demonstrates the significance of decentralizing dissemination of information.

<sup>137</sup> See Graham Murdock, *Poverty and Political Inequality*, in CITIZENSHIP IN THE AGE OF PRIVATIZED COMMUNICATION: THE INFORMATION GAP 180 (Marsha Siefert et al. eds., 1989).

<sup>138</sup> It has been argued that digital technology encompasses more choices than one can or wishes to handle. Note also that some people may resent choice, or may wish to have less choice. See Davis, *supra* note 116.

that in the absence of a common cultural experience, social dialogue will weaken.<sup>139</sup> This critique assumes that it is necessary in social dialogue for all members of the community to have a shared set of concerns. It overlooks the possibility of establishing a dispersed social dialogue in a vast of overlapping discourses.

### B. *Expanding Access to Social Dialogue*

The transformative power of digital dissemination methods<sup>140</sup> may be clarified when contrasted with previous distribution technologies, namely, the printing press and electronic communication.<sup>141</sup> The printing press, which began with Gutenberg's metal typeface system over 550 years ago, allows delivery of a permanent version of a work in multiple copies over distance. It was heavily based on the idea that once a work was created, many copies could be reproduced on paper and distributed to the public. Digital technology differs from the printing press by shifting the focus of dissemination from the distribution of copies to access.

Electronic communication, which emerged during the twentieth century, expanded the distribution potential of print. It introduced the capacity of massive diffusion of information, using electric currents by radio and television broadcasting.<sup>142</sup> Digital communication combines electronic communication with digital technology. It departs from electronic communication by introducing two new features. First, it allows all forms of electronic communication to be transmitted through a single channel. Second, it permits the logical manipulation of the message.<sup>143</sup> Conse-

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<sup>139</sup> See ITHIEL DE SOLA POOL, *supra* note 101.

<sup>140</sup> Computer networks connect computer work stations through cables that carry digital signals. Networks differ from one another in their distribution structures. Computer conferences allow contributions of participants to be communicated to other participants. Systems differ from one another in their restrictions on participants—some are open to all, and some are exclusive to selective subscribers; they may involve various degrees of editing of the content; and they may be centralized, distributing all materials to and from a single center, or wide-spread, allowing redistributing materials among subscribers. For the most part they allow direct communication among computer users, and remote access to files and data bases.

<sup>141</sup> Information may be distributed digitally on a physical medium that records it, such as a diskette or a CD-ROM. This method of distribution resembles distribution in a non-digitized environment. It differs, however, from traditional distribution methods in the sense that it allows all types of text to be represented on the same media. Written texts, sounds and images are homogenized into a single digitized form, allowing the creation and distribution of mixtures of formats that used to be represented by different symbols and on different types of media.

<sup>142</sup> Electronic communication began in the twentieth century, although its roots can be traced back to the late eighteenth century with the invention of the telegraph by Samuel Morse in 1844. See ITHIEL DE SOLA POOL, *supra* note 101, at 8-9.

<sup>143</sup> A message in a digitized form may be manipulated and transformed while being transmitted. This elasticity of representation reverses the effect of the mass media revolu-

quently, the processes of creation and distribution are merged into a single process.

### 1. Dissemination by Access

Several services on the digital networks, such as e-mail and file transfer, allow users to distribute copies of works to single or multiple recipients.<sup>144</sup> Yet, although transferring files or sending messages by e-mail resembles distribution of copies, the two distribution methods differ substantially. Digitization undermines the very notion of a "copy." A "copy" reflects a distinction between a medium, such as a book or a record, and content, such as text or music. Whereas printed text is embodied on paper or another object, digitized text may be delivered through the network without any physical medium. Digitized copies of a work are electronic versions of the primary version that resides in the computer's memory.<sup>145</sup> The dematerialization of the medium allows the distribution of information in its abstract. Publishing is gradually becoming a matter of providing users with access to information in an abstract form, rather than distributing physical copies.<sup>146</sup>

The shift from physical distribution of copies to furnishing access has several implications for power relations. First, it decreases the significance of distance as a barrier to communication.<sup>147</sup> Whereas distribution costs in print (such as the costs of shipping or

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tion. Instead of disseminating an identical messages to millions of people, digital dissemination allows the adaptation of messages to meet individuals' needs.

<sup>144</sup> Copies of files may be transmitted to any user of a network and also to people who are subscribers of other networks, and in some cases even to people who are only connected to a fax machine. See, e.g., COMPU SERVE USERS MANUAL, QUICK START GUIDE 35 (1994).

<sup>145</sup> Landow calls this feature "Virtual Text." See LANDOW, *supra* note 81, at 19: Since electronic text processing is a matter of manipulating computer-manipulated codes, all texts that the reader-writer encounters on the screen are virtual texts . . . all texts the reader and the writer encounter on a computer screen exist as versions created specifically for them while an electronic primary version resides in the computer's memory. One therefore works on an electronic copy until the versions converge when one commands the computer to "save" one's own version of the text by placing it in memory. At this point the text on screen and in the computer's memory briefly coincide, but the reader always encounters a virtual image of the stored text and not the original version itself; in fact, in descriptions of electronic word processing, such terms and such distinctions do not make much sense.

<sup>146</sup> See *id.* at 23. For instance, digital networks provide remote access to large databases on mainframe computers. Information may be available to users by downloading from a bulletin board or a database. Another way of dissemination by access is by making files available on the network for the use of the general public. Anonymous FTP (File Transfer Protocol) is the posing of files for remote retrieval by the public, in a publicly accessible directory. Anyone is able to log in anonymously and retrieve the files in the public access directory.

<sup>147</sup> ITHIEL DE SOLA POOL, *supra* note 101, at 8.

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coordinating distribution) increase with distance, digital networks allow the transmission of information over distance at a very low cost. In fact, communication costs do not depend on the distance a message is going.<sup>148</sup> The distribution cost is primarily the costs of preparing the work for distribution and the cost of occupying the network, measured by the network's prices for connection time or volume. This may allow individuals to publish their works to multiple users in a wide range of places.

Digital communication may also effect the organization of human activity. The ability to communicate internationally may effect national boundaries by opening up communication channels across national borders. For instance, newsgroups on USENET facilitate discussion groups of general interest that range from recreational activities, arts, and social issues, to discussions of political questions.<sup>149</sup> The ability to exchange views and develop affiliations with other people beyond one's geographical place may change the relationship between individuals and their local communities.<sup>150</sup> Electronic communities may supplement affiliation on the basis of geographical boundaries (residency or workplace), with other affiliations that are based on mutual interest and deliberation, such as affiliations with professional groups, special interest groups, or groups deliberating on political issues.<sup>151</sup> From a political and legal perspective, the question is whether on-line communities should be recognized as independent jurisdictions and what their status should be vis-a vis traditional jurisdictions such as states and local governments.

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<sup>148</sup> Digital communication has an advantage over analog communication. Digital signals depend on an on-off pattern, which is less affected by long distance transmission. Analog signals, by contrast, weaken in long distance transmission, and it is difficult to recognize their its exact frequency or amplitude. *Id.* at 21-22.

<sup>149</sup> See ED KROL, *THE WHOLE INTERNET USER'S GUIDE* 153 (1994).

<sup>150</sup> It is arguable that this characteristic is definitive of any communication method. Digital networks, it is argued, are not any different from previous modes of communication (such as television or the telephone). Digital networks allow, however, more information, of all types, to be exchanged at a lower cost. Consequently, they are likely to take over a large portion of our everyday interactions. It may replace (and enhance) communication via telephone, television and newspapers. On-line interactions may therefore become more influential over individual's ideas and identities, and crucial to an individual's sense of belonging. Therefore, the quantitative difference between digital networks and other methods of communication may become a qualitative one.

<sup>151</sup> Pool is discussing the impact of electronic communication on the boundaries of nations. He argues that once the distance a message is going does not alter the costs of communication, there is no reason to restrict communication to the national boundaries: Therefore he predicts that cities and nations will be transformed. See ITHIEL DE SOLA POOL, *supra* note 101, at 13. Digital communication may also effect national boundaries indirectly by changing industry and production and consequently transforming the structure of national markets. For the legal implications, see David R. Johnson & David G. Post, *Law and Borders: The Rise of Law in Cyberspace*, 48 *STAN L. REV.* (forthcoming 1996).

An international network that is gradually becoming a major medium of interaction also challenges the law as an institution that operates on a territorial basis. The authority of laws is usually restricted to the territorial boundaries of the sovereign. But on-line communications take place beyond these boundaries. Consequently, international arrangements would have to receive an increased emphasis. In addition, past problems dealt with domestically would have to be addressed on a multinational level.<sup>152</sup> The issues raised by electronic communities are not limited to questions of enforcement. The erosion of geographic boundaries in electronic communities may complicate the use of legal rules that rely on the notion of a community.<sup>153</sup>

Network communication allows a variety of participants to directly communicate and disseminate each others ideas.<sup>154</sup> Direct

<sup>152</sup> For instance, cyberspace makes it very difficult, if not impossible, for governments to prevent citizens from accessing information. Laws of the sovereign are only enforceable within its jurisdiction, while cyberspace functions across national borders. Consequently, legislation of a European country that restrict access to specific information would not apply to an American citizen who wishes to post that information on her web home page, which is accessible to all. But see the controversial Communications Decency Act, passed as part of the Telecommunications Act of 1996, tit. V, §§ 501-512, Pub. L. No. 104-104, 110 Stat. 56 (1996) (to be codified at 47 U.S.C. § 223(a)-(h)) that seeks to regulate transmission of offensive materials on the Internet. Furthermore, the ability of individual users to transfer information from one state to another, without crossing any borders, may complicate the enforcement of intellectual property rights. In the absence of any of the previous bottlenecks (customs, detectable distribution mechanisms) infringements would be very difficult to detect and prevent. This would cause greater reliance on international treaties and collaborative efforts to harmonize and enforce intellectual property rights. For further discussion of the complexity of cyberspace in the context of international law, see John D. Faucher, *Let the Chips Fall Where They May: Choice of Law in Computer Bulletin Board Defamation Cases*, 26 U.C. DAVIS L. REV. 1045 (1993).

<sup>153</sup> For instance, the standard for determining whether materials describing or depicting sexual conduct are obscene, requires that the average person, applying a contemporary community standard, would find that the work, taken as a whole, appeals to the prurient interest. See *Miller v. California*, 413 U.S. 15 (1973). In *United States v. Thomas*, 74 F.3d 701 (6th Cir. 1996), a California couple ran a sexually explicit BBS in San Francisco, which was accessible to users from anywhere in the United States. The couple was charged and convicted in Memphis, Tennessee, after investigators downloaded selected image files to a computer in Tennessee. What community standard should be applied to a BBS that disseminates sexually explicit materials to its subscribers? At least three community standards are applicable: one is the standard of the prosecuting community; a second is the standard of the defendant's community; and a third is the standard of the community of users, in which the materials are actually distributed. The standard of the prosecuting community, in which the offense took place, makes sense in the print environment, that involves distribution in public. What reason is there, however, to impose the prosecutor's standard on a BBS operator who disseminates materials directly to users, without serving the community as a whole? The court of appeals concluded that a new definition of "community" should not be adopted for the purpose of BBS in regard to prosecutions related to obscene materials. For an excellent analysis of these questions, see Y. BENKLER, *RULES OF THE ROAD FOR THE INFORMATION SUPERHIGHWAY: ELECTRONIC MAIL AND THE LAW* (forthcoming 1996).

<sup>154</sup> From the perspective of access, network communication may allow employees to access information about their employer that was not accessible to employees at their level in the institution itself.

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communication between users opens channels of communication between participants in the social dialogue. It thereby transforms hierarchical structures of communication between originators of message and facilitators of dissemination: writers and publishers, performers and broadcasters. It may also weaken the power enjoyed by central generators of information to restrict the flow of information.

Network communication also eliminates visual clues regarding the participants' status, gender, race, national origin, or disabilities.<sup>155</sup> It allows direct communication with the network subscribers regardless of, among other things, their position, education, economic status. One may log-in to a list or a bulletin board and communicate their messages to others. The absence of visual clues levels differences between users and reduces disparities of power. It may open new channels of communication that bypass the inhibiting effects of institutions. This allows participants of all levels to input their contributions and establish an on-line dialogue in which all contributions are equally judged according to their content.<sup>156</sup>

Dissemination by access, however, may also enhance the power of information providers to monitor and restrict access to information. A carrier who runs the network may control and supervise the content being transferred.<sup>157</sup> Furthermore, if the essence of "publishing" becomes gaining access to the network, text which is excluded from the network may be marginalized. Networking makes text easy to access, locate and connect to other resources. As a result, digitized distribution is gradually becoming the dominant distribution method. Text which would not be available on the network is likely to be avoided.<sup>158</sup> The power to control access to the network becomes enormous<sup>159</sup> and this power will depend on the users' alternatives. The more users are able to

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<sup>155</sup> See Trotter Hardy, *Electronic Conferences: The Report of an Experiment*, 6 HARV. J.L. & TECH. 213, 222 (1993) ("You cannot see what the other participants are wearing, cannot hear their accents, cannot distinguish them by race, age, national origin, or disability.").

<sup>156</sup> It may also provide a channel for expressing complaints, or criticizing one's superiors anonymously. It may thereby create a forum in which management and employees, or government officials and citizens may communicate.

<sup>157</sup> For the use of power to terminate access, consider the controversy between Prodigy's management and the network's users over censorship policies employed by the network. See *Sex Talk Prompts Prodigy to Shutter Bulletin Board*, CHI. TRIB., Feb. 1, 1993, at B2.

<sup>158</sup> For instance, a law review article published in a law review that does not appear on LEXIS or Westlaw is unlikely to gain large audience. With on-line searches on LEXIS and Westlaw becoming the primary methods of legal research, the chances of finding out about an article that was published only in a hard copy are slim.

<sup>159</sup> See LANDOW, *supra* note 81, at 188 ("[G]aining access to a network permits a text to exist as a text in this new information world.").

switch between on-line providers and gain access to the network in multiple ways, the weaker the power of on-line providers to control access.

## 2. Self-Publishing and Redistribution

The print world allowed only the wealthy, who could afford the costs of publishing a book, or those who had established themselves in the market, to become published authors. The digital environment, by contrast, makes it possible for an increasing number of people to become self-published authors. Personal computers and laser printers provide writers with personal publishing capabilities, without the specialization and capital necessary for mechanical print.<sup>160</sup> They allow most of the editorial and formatting activities to be performed with high quality by the authors themselves.

Digitization also allows users to easily retransmit materials. Users may use scanners to digitize photos or texts that are published in a traditional form. A digitized copy that was delivered through the network may be downloaded by the user and retransmitted. Retransmission through digitized versions is both easy and inexpensive. Everything digitized may be reproduced in seconds and at low cost. Self-publishing is also available through network communication. While only a couple of years ago it was predicted that "continuing improvements in desktop publishing and laser printing will produce a late efflorescence of the text as a physical object,"<sup>161</sup> it now seems that network publishing will soon replace desktop publishing.

Cyberspace integrates the generation and distribution of information. Digital networks provide direct communication between authors and potential readers.<sup>162</sup> An author may transmit her text directly from the work-station on which it was created without any additional processing, aside from technical adjustments of the format. In most cases those technical adjustments are made on the same computer which generated the document. Consequently,

<sup>160</sup> See HEIM, *supra* note 100, at 219.

<sup>161</sup> See LANDOW, *supra* note 81, at 28.

<sup>162</sup> This already was anticipated by scholars in the early 1980s. See, e.g., Brian Aveney, *Post Industrial Publishing*, ELECTRONIC PUBLISHING AND BOOKSELLING, Jan. 1984, at 1. Distribution will become largely obsolete as a separate function in publishing with the eventual disappearance of the edition-printed products of industrial model publishing. Distribution will become a computer-controlled process of downloading text or video signals to the user's personal computer memory or directly to a printer or viewer. In a reversal of current realities distribution will occur before manufacturing in the on-demand environment.

*Id.*



everyone with access to a computer network may become a publisher. Network distribution creates a continuum that goes from personal writing on one hand, to publication on the other, with many degrees of connectivity and access permissions in between.<sup>163</sup>

The significance of self-publishing is in facilitating the distribution of works in print. The printed word conveys authority and tends to be taken more seriously.<sup>164</sup> Written statements provide authors with more control over their works. The print provides exact duplications of works (rather than a paraphrase). Even though readers may not adapt any specific position expressed in a printed text, its permanent nature affects the discourse by formulating the questions at stake, and determining the language being used. Accordingly, the ability of an increasing number of people to express their thoughts and feelings in print is important for social and political participation.

It is arguable that since more text becomes available in print, the authority of printed text will decrease. The ability to self-publish, it is argued, would undermine the quality of texts being published.<sup>165</sup> Under this theory, the authority of the printed text stems from the contribution and reputation of editors. So, even though more people may be able to get their word out in print, the printed word will lose its authoritative power.

I find this elitist argument difficult to accept. First, it assumes that the individuals who in the past had exclusive access to means of publication are worthy of being heard, while others are not.<sup>166</sup> It also assumes that there are social agents (editors, publishers)

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<sup>163</sup> Heim points at the dangers of making what he calls "the psychic framework" public. See HEIM, *supra* note 100, at 160-64. He also recognizes, however, the potential of connectivity for collaborative interaction and a new kind of community. For a further discussion of digital dissemination and the private/public distinction in the context of copyright law, see Elkin-Koren, *supra* note 120, at 390-99.

<sup>164</sup> See ITHIEL DE SOLA POOL, *supra* note 101, at 245 (noting that under the Judeo-Christian tradition, the written word is deemed sacred, regarded more seriously, and considered more definitive than oral statement).

<sup>165</sup> See HEIM, *supra* note 100, at 219.

[C]omputer-mediated communication creates a psychic framework in which more text will become easily available but the text will be probably less intelligent, less carefully formulated, less thoughtful text. Computers may boost productivity, according to this criticism, only to have a greater production of written stupidity, even decreasing the likelihood of finding worthwhile material.

*Id.*

<sup>166</sup> Another version of this argument is that "deliberation should be exercised by professionals (novelists, poets, ethnographers, journalists, and docudramatists), who can best express the pain and humiliation of other, unfamiliar sorts of people." RICHARD RORTY, CONTINGENCY, IRONY, AND SOLIDARITY xvi, 94 (1989). Rorty assumes that the oppressed groups cannot directly express themselves, and require others to adequately speak for them. *Id.*

that are able to determine which text is suitable for reaching the public. These assumptions are inconsistent with any concept of democracy and social dialogue. The fact that means of publication were opened only to a selective group of people in itself created disparities of power.<sup>167</sup> Some were able to communicate their ideas in an authoritative way, while others lacked the access and its attendant power. Making "publishing" more accessible may indeed transform the meaning of the printed word, and may weaken its authoritative power. Yet, it may also eliminate disparities of power. The hierarchical nature of dissemination will be transformed, and an increasing number of people will be able to participate in any social dialogue.

### 3. Intermediaries and Direct Communication

Another aspect of the shift to network distribution is the weakening role of intermediaries, such as publishers, broadcasters and distributors, in the distribution process.<sup>168</sup> Intermediaries currently play a central role in distributing non-digitized works because of the capital necessary to distribute works via physical media. These costs have an economy of scale, and are therefore lower if publishing is centrally executed. Intermediaries who specialize in distribution to the public are therefore necessary for disseminating information in a cost-effective way. Distribution by intermediaries centralizes social dialogue. It permits intermediaries to select the works and the messages to be published, when, and with what level of marketing support.

Distribution by intermediaries further centralizes social dialogue by making decisions about what to produce and disseminate

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<sup>167</sup> See J. DAVID BOLTER, *WRITING SPACE: THE COMPUTER IN THE HISTORY OF LITERACY* 148-49 (1990). Bolter argues that the printing press created an inequality of power that was not present in previous writing practices.

Because printing a book is a costly and laborious task, few readers have the opportunity to become published authors. An author is a person whose words are faithfully copied and sent around the literary world, whereas readers are merely the audience for those words. The distinction meant less in the age of manuscript, when "publication" was less of an event and when the reader's own notes and glosses had the same status as the text itself. Any reader could decide to cross over and become an author: one simply sat down and wrote a treatise or put one's notes in a form for others to read. Once the treatise was written, there was no difference between it and the works of other "published" writers, except that the more famous works existed in more copies.

*Id.*

Bolter's argument overlooks the fact that prior to Gutenberg's invention, only a limited number of individuals were able to read and write. Overall, the introduction of the printing press made writing and reading more popular and thereby initiated a major social transformation. See EISENSTEIN, *supra* note 83.

<sup>168</sup> See Elkin-Koren, *supra* note 120, at 401-07.

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tightly connected with economic considerations. Recovering investments by charging for copies of a work, collecting fees for its use, or selling commercials, create economic dependency. The need to guarantee success in the market increasingly dictates the content of works. Intermediaries thus tend to disseminate works that are likely to gain public approval.<sup>169</sup>

Network distribution may transform the information flow. The current centralized information flow of "one to many" may be replaced by a distribution pattern of "many to many." Network distribution allows direct communication among users and therefore weakens the role of intermediaries in the production and dissemination of information. It decentralizes the production of information by breaking the financial barriers to publication. By making means of expression more accessible, digitization transforms the hierarchical relations between authors and publishers.<sup>170</sup> By reducing dependency on commercial sponsorship, network distribution may increase diversity of information that is made available to the public.<sup>171</sup>

Network distribution also undermines the editorial role of publishers. Direct communication enables authors to become publishers. Consequently, authors are free from having to negotiate the content of a work before publishing.<sup>172</sup> Publishers and broadcasters in the non-digital environment currently play a dual role: selecting or screening information, and making it available to the public. Publishers of professional journals, for instance, provide editorial services such as selection and review, that are linked to their reputation. Potential readers would regularly read a publication of their choice, and would receive the editor's selection. From

<sup>169</sup> Publishers prefer products that may increase their potential markets. Advertisers encourage producers to create and disseminate content that would increase the media's potential reach. See EDWIN C. BAKER, *ADVERTISING AND A DEMOCRATIC PRESS* 62-66 (1994). For further discussion, see *infra* notes 200-07 and accompanying text.

<sup>170</sup> Even if network distribution ends up being merely a supplementary method of distribution, rather than fully replacing print, it may still have a liberating effect on the flow of information. The availability of videodiscs or CD-ROMs, for instance, opened up dissemination channels for photographers as an alternative to major magazines and books.

<sup>171</sup> Furthermore, the fact that more raw, unfiltered sources of information would reach people, is an advantage not only from the perspective of democracy and participation. Kapur argues that "noise is just the price we pay for signal. In fact, without junk, there is less of a chance for real quality to emerge. Let the marketplace of ideas rule." See Mitchell Kapur, *Where Is the Digital Highway Really Heading? The Case for a Jeffersonian Information Policy*, *WIRED*, Jul./Aug. 1993, at 53, 94.

<sup>172</sup> See HEIM, *supra* note 100, at 219.

The individual with a laser printer can create virtually typeset manuscripts, with the user controlling more of the final product. Self-publishing in this sense is more direct: no editor intervenes; the author has hands on the final look and wording of documents without having to answer to copy editors.

*Id.*

the author's perspective, the publisher's reputation would determine the chances of reaching a large audience.

In cyberspace, however, intermediaries are no longer necessary for providing access to information.<sup>173</sup> First, digital dissemination disintegrates journals, books, or other publications as stand alone, independent products. Once on-line, articles become part of a pile of text.<sup>174</sup> Also, there is no longer any compelling reason for publishing a single copy of a journal.<sup>175</sup> A journal may be transformed into a series of articles delivered to the subscribers upon completion.<sup>176</sup> Second, due to the nonlinear nature of digital representation, users are able to directly access specific articles or excerpts that interest them. Users have direct and immediate access to the entire database and may make their selection by using technical devices.<sup>177</sup> Consequently, the authority of the publisher and the significance of its reputation decline. The development of powerful browsers that facilitate access to information in a non-structured way, further weakens the role of intermediaries.<sup>178</sup> Other technological efforts are made in the direction of developing electronic agents, which would allow users to define a general interest or a specific question, and execute searches on their behalf.<sup>179</sup>

<sup>173</sup> When publishers are not only selectors but also providers, one cannot access the information unless one purchases the book, journal, or a particular channel on cable television. In digital networks, one may use a screening agent to gather the information, or access it directly using retrieval programs.

<sup>174</sup> Take the context of legal publications as an example. In a print world it was likely that an article published in the *Harvard Law Review* would reach a larger audience than an article that was published in a nameless publication. *Harvard Law Review's* reputation increased the likelihood that libraries would carry it, students and scholars would browse through it, and authors would refer to it.

<sup>175</sup> Journals serve the economic necessities created by print technology in that they organize several articles to be distributed together and thereby reduce the distribution cost. The economic circumstances of cyberspace render the continued value of journals unclear.

<sup>176</sup> See Jacques Leslie, *Good-bye, Gutenberg, Pixelating Peer Review is Revolutionizing Scholarly Journals*, *WIRED*, Oct. 1994, at 68-71.

<sup>177</sup> In a world of computer legal research services (LEXIS and Westlaw), it has become crucial to be on-line. The hard copy of a publication becomes less significant.

<sup>178</sup> Internet browsers are becoming more user-friendly and allow users to easily access on-line information. One example is the World Wide Web ("WWW"), which is a hypertext based system for finding and accessing Internet resources. The WWW defines a standard for data which allows users to turn almost any document (text, image, sound, video) into hypertext. The WWW is supported by several browsers that allow users to move between documents. See KROL, *supra* note 149, at 515. Mosaic, for instance, is a computer program with a graphical user-friendly interface, that retrieves and interprets documents on the WWW and allows users to navigate through on-line information. Gary Wolf, *The (Second Phase of the) Revolution Has Begun*, *WIRED*, Oct. 1994, at 116.

<sup>179</sup> For example, a program allowing individualized news research already exists. See Wiegner, *supra* note 127. The idea of electronic agents also begins to be implemented in the context of commercial on-line transactions. See David Kline, *I Want Marc Porat and His Agents of Change*, *WIRED*, Jan. 1995, at 108.

Digital networks introduce, however, a new type of intermediaries, namely, the network itself. Every network has its own policy on the type of services that are permitted. Distribution of some materials may be restricted.<sup>180</sup> The question is whether author-network relationships are different from author-publisher relationships. It seems that publishers would be more involved in the content of a work, while network operators would merely transmit the information. In the past, communication companies merely carried signals and did not generate information.<sup>181</sup> Yet, digitization is modifying the role of the carriers. Digitization allows carriers to effect the content they deliver and blurs the distinctions between carriers and publishers. To the extent the networks function like publishers, they enjoy more power over users than publishers in a non-digitized world.

#### 4. Accessibility of Information

Accessibility of information introduces another context in which digitization effects participation in social dialogue.<sup>182</sup> At the most obvious level, participation requires community access to information necessary to establish views about political issues, and the means to pursue rights effectively. Accordingly, it is necessary that communities have access to diverse information and debates<sup>183</sup> which are in the public interest. At another level, the accessible information affects self-perception and views about the world, defines the horizon of expectations and determines the per-

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<sup>180</sup> For instance, Bitnet's policies were revised in November 1990 to permit fee-based services in support of academic research. See generally KROL, *supra* note 149, at 35-47, 495-96.

<sup>181</sup> The distinction between information carriers and information generators is significant in determining the appropriate level of government control over the operation of communication companies. Under the traditional paradigm of government intervention in communication activities, the more involved networks get in the content they transmit, the less they are allowed to maintain a monopoly and restrict First Amendment rights. Yet, as producers of content communication, companies are less regulated and the government has limited power to monitor their operation and restrict their First Amendment rights.

<sup>182</sup> The market approach to communication and information products addresses people primarily through their identity as consumers, both from the information products they consume and from the products promoted in the expanded advertising system that finances some communicative services. This marginalizes or displaces other identities, particularly the identity of citizen. See Graham Murdock & Peter Golding, *Information Poverty and Political Inequality: Citizenship in the Age of Privatized Communication*, in *THE INFORMATION GAP: HOW COMPUTERS AND OTHER NEW COMMUNICATION TECHNOLOGIES AFFECT THE SOCIAL DISTRIBUTION OF POWER* 180 (Marsha Siefert et al. eds., 1990).

<sup>183</sup> Lasch argues that democracy depends on public debate and not on information, and therefore concludes that the press should provide access to political debates, and should not pretend to report facts objectively. See Christopher Lasch, *Journalism, Publicity and the Last Art of Argument*, GANNETT CTR. J., Spring 1990, at 1.

ceived choices.<sup>184</sup> Accessibility of information also affects the relative power of participants in social dialogue. The ability of people to access information translates into power.

Accessibility may be measured by the number of people for which information becomes accessible, the type of information that becomes accessible—in terms of volume and content, and the quality of access.<sup>185</sup> Digitization has the potential to enhance access in all three respects. More access to information expands opportunities for participation in social and political life.<sup>186</sup>

Distribution in a digitized form makes information more accessible by allowing more information to be distributed to more

<sup>184</sup> One's information about what is available (such as job opportunities or medical care) would determine what she perceives to be her options. For instance, pregnant women whose physicians fail to provide them with information about abortions may not consider abortion as an option. At another level, internalizing information that is available determines what individuals perceive as their choices. Consider, for instance, access to information about the law. The law may be perceived as a mechanism for regulating behavior by communicating to people information about what is expected, what is forbidden, and what are the consequences of taking a certain course of action. See Marc Galanter, *The Legal Malaise; Or, Justice Observed*, 19 *LAW & SOC'Y REV.* 537, 545 (1985). Galanter argues that the law should be perceived as information transfer, rather than the exercise of force.

For example, when we speak of deterrence, we are talking about the effect of information about what the law is and how it is administered. Similarly, when we describe "bargaining in the shadow of the law," we refer to regulation accomplished by the flow of information rather than directly by authoritative decision. Again, "legal socialization" is accomplished by the transmission of information. In a vast number of instances the application of law is, so to speak, self administered—people regulate their conduct (and judge the conduct of others) on the basis of their knowledge about legal standards, possibilities and constraints.

*Id.*

<sup>185</sup> Quality of access looks at the way people are able to approach information: Are they able to choose what information they wish to see? Are they able to affect the information to which they are exposed? The special characteristics of digital media that affect quality of access were demonstrated in the previous discussion of interactivity and customization.

<sup>186</sup> Accessibility of information was recently recognized by Congress as a goal to be achieved under the National Information Infrastructure Act of 1993. Congress found that high-performance computing and high-speed networks have become powerful tools for, among other things, the "mak[ing] a wide array of information available for a variety of applications." NATIONAL INFORMATION INFRASTRUCTURE ACT OF 1993, H.R. DOC. NO. 1757, 103d Cong., 1st Sess. § 2(1) (1993). The finding focused on the potential empowerment of underprivileged groups such as people with disabilities. Thus, the status refers to the ability of networks "to expand opportunities for participation for Americans who have disabilities and to improve equality of opportunity, full participation, independent living, and economic self-sufficiency for Americans with disabilities." *Id.* § 2(4). This reference to disabled people is typical of the language often used to introduce new technologies. It is interesting that those applications become the focus of the discussion of new technologies. One plausible explanation may be an attempt to shift attention from other social implications that may be more controversial (for example, class issues). See High-Performance Computing Act, Pub. L. No. 102-194, 105 Stat. 1594 (1991), which discusses the relationship between technology and accessibility and participation. Both laws also emphasize the need to develop means of protection for copyright in the digital environment. The question discussed in this Article is whether the digitized environment requires some changes in the property schemes—not merely an adjustment of the administration of rights but an adjustment of the rights themselves.

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people at less costs. One reason is that digitized reproduction is less expensive than mechanical reproduction.<sup>187</sup> Furthermore, digitized reproduction does not cause any decrease in quality.<sup>188</sup> Copies are identical to the original, and there is no generational loss.<sup>189</sup>

Network distribution reduces the cost of disseminating information because digitized information is communicated in its abstract. From an economic perspective, information, whether digitized or not, is considered a public good.<sup>190</sup> Its use by one person does not diminish its usefulness to another. A book, for instance, once written, can never be used up. It may be read and reproduced over and over again without ever exhausting it or depriving anyone else of its use. Since additional use does not reduce the utility to other users,<sup>191</sup> the marginal cost of any additional use is zero. Consequently, transferring information carries a very low marginal cost.<sup>192</sup> Scarcity, however, does apply to the tangible in-

<sup>187</sup> In text, for instance, it would be less expensive to copy one thousand pages onto a disk than to print or reproduce it on paper. There is also no need for special equipment. The same computer that was used to generate the text may be used in its reproduction.

<sup>188</sup> Digital audio tapes ("DAT"), for instance, allow consumers to make copies of an audio CD-ROM, preserving its original characteristics. Stephen E. Arnold, *Storage Technology: A Review of Options and Their Implications for Electronic Publishing*, ON-LINE INC., July 1991, at 39.

<sup>189</sup> Data is represented in unit pulses rather than continuous variation of some characteristics of the flow. Data transmitted digitally will therefore be identical to both the sender and the receiver, even though it may have been manipulated during the digital transmission or in the process of receiving it (saving it, for instance, in the computer's memory). This characteristic provides optimal conditions for delivering and processing digital signals under changing circumstances.

<sup>190</sup> A public good has two distinguishing characteristics. One is non-excludability, namely, the difficulty of excluding non-payers. Given a good for which the marginal cost of exclusion is greater than the marginal cost of provision, it is inefficient to expend resources to exclude non-purchasers. The second characteristic is non-rivalrous competition, namely, that any use of the good does not reduce the supply of the good available to others. One person's consumption of a good does not diminish another person's consumption of the same good. Non-excludability facilitates "free-riding," and consequently makes it difficult to recapture the investment on the creation of the good. This reduces the supply of information below the optimal level or inhibits the extent to which it is shared. See William M. Landes & Richard A. Posner, *An Economic Analysis of Copyright Law*, 18 J. LEGAL STUD. 325 (1989).

<sup>191</sup> Moreover, the use of information by additional users may increase the utility to others due to the existence of network externalities. Network externalities exist in markets of products for which the utility or satisfaction that a consumer derives from the product increases with the increase in the number of other consumers of the product. For instance, increased use of operating systems for computers facilitates the interchangeability of data and programs among the machines of different manufacturers and allows the user to combine equipment of different suppliers. It may also lower the search costs of finding a compatible application program that runs on their operating system and reduces the costs from adapting and learning a new system. See Peter S. Menell, *An Analysis of the Scope of Copyright Protection for Application Programs*, 41 STAN. L. REV. 1045 (1989); see also Brock, *Competition, Standard and Self-Regulation in the Computer Industry, in REGULATING THE PRODUCT: QUALITY AND VARIETY* 75 (R. Caves & M. Roberts eds., 1975).

<sup>192</sup> This is also true for maintaining and upgrading information. Updating software, for

corporation of information. If one holds a book, for instance, she may deprive everyone else of reading that copy of the book.<sup>193</sup> Since digitized information is represented abstractly, it is no longer governed by scarcity. Consequently, providing access to digitized information is less costly than doing so for printed information.<sup>194</sup> Furthermore, when a message is communicated through the network, "the 'sender' doesn't lose the message—he retains it, either in memory, or even as a duplicated copy. The two people then both have it—shared."<sup>195</sup> This may open up an opportunity for a more cooperative environment in which information can be shared, and may make intellectual products more accessible to users.<sup>196</sup> Another feature of network distribution that reduces dissemination costs is narrowcast, namely, selective, rather than broad, transmission of works. This allows publishers to disseminate works only to interested subscribers, rather than spending resources on covering the whole market.<sup>197</sup>

Reducing distribution costs affects access to information in several ways. Obviously, it allows more volume to be disseminated at the same cost.<sup>198</sup> This allows more information to be accessible without decreasing the level of compensation for authors. When

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instance, used to involve distributing diskettes. Now, however, users may update their software on the Internet by logging onto a server and following simple instructions. Maintenance may be done automatically by a server that informs all users of a bug and installs a repair program. Avoiding the high cost of distributing diskettes permits more frequent updates at a lower price.

<sup>193</sup> Tangible goods are scarce and only may be used by a single social agent at a time. If one is working land, for instance, she deprives everyone else from doing so at the same time. This loss to others represents the social cost of her working the land.

<sup>194</sup> Note that furnishing access still carries some cost of transmission through the network.

<sup>195</sup> See CHERRY, *supra* note 112, at 43. For that reason Cherry argues that messages can never be exchanged but only shared. Yet, this feature of digital communication is perceived as the main threat to intellectual property laws. See *infra* notes 240-41 and accompanying text.

<sup>196</sup> Digital technology is often described as technology that promotes collaboration. It transforms authorship from an individualistic undertaking into a process of sharing and interacting with others. See PAMELA MCCORDUCK, *THE UNIVERSAL MACHINE: CONFESSION OF A TECHNOLOGICAL OPTIMIST* 65 (1985) ("One salient fact of computing, and one of the most important world-wide effects of computing might be computing's introduction of a new ethos of cooperation.").

<sup>197</sup> Although narrowcasting may reduce the costs of disseminating information, it also reduces the potential market of any given work. Broadcasting exposes all consumers to all works, and thus allows consumers to expand and modify their interests. Narrowcasting, by contrast, requires users to define their interests in advance and be exposed to specific types of materials. This creates a new intellectual environment.

<sup>198</sup> The question of who is going to benefit from this cost reduction is a distributive question and is affected by social and legal arrangements. It is possible that publishers will grab the surplus by charging the same for works disseminated over the network, depriving users of the cost savings. The surplus may be used to reduce prices for works and consequently for distributing information to more people. However, the surplus may be used to provide the same circle of users with more information.



communication is inexpensive, information may be accessible to a larger number of users at distant places.<sup>199</sup> Furthermore, digital networks may allow equal access to information regardless of one's area of residence.

But the reduction in distribution costs is also significant to access in a less obvious way. It may contribute to the diversity of content being produced and communicated. As noted earlier, the large financial investment involved in distribution mechanisms affects decisions about which works are distributed. Consequently, publishers and broadcasters tend to disseminate information that they believe adheres to the public taste.

The expenses involved in creating and distributing works are often paid by advertisers. Advertisers play a central role in creation and distribution of works through the mass media. The market structure of advertising by the media is fairly simple. Advertisers seek to capture maximum consumer attention to their products and are therefore willing to pay the costs of creating and distributing works which could captivate consumers' attention.<sup>200</sup> The mass media is therefore often described as an industry that sells audiences to advertisers.

Advertising affects social dialogue via the media both directly, through advertisements, and indirectly, by shaping the content created and distributed by the mass media. Advertisements constitute a large portion of the content that is delivered by the media,<sup>201</sup> and this content creates a symbolic structure that not only affects our consumption habits, but also shapes our sense of values<sup>202</sup> and concept of the world. In addition, advertising affects the content created and disseminated by the mass media in a way that is more relevant to the current discussion. It encourages producers to create and disseminate content that would induce a buying mood among readers and viewers,<sup>203</sup> increase the media's potential reach

<sup>199</sup> See ITHIEL DE SOLA POOL, *supra* note 101, at 260 (asserting the democratic power of network communication).

<sup>200</sup> While radio and television sponsorship by advertisers constitutes the main income of the networks, the economics of newspapers is slightly different. Here, consumers are also charged a price for the newspaper, though lower than the actual cost of producing it. See BAKER, *supra* note 169, at 62-66.

<sup>201</sup> Baker cites studies that show that advertisements constitute about sixty-five percent of newspaper space and twenty-two percent of television time. *Id.* at 45.

<sup>202</sup> *Id.*

<sup>203</sup> *Id.* at 62-66. Baker describes the way advertisers encourage the creation of light, noncontroversial, and simple content that they believe makes the audience responsive to their commercial messages. He concludes that:

[t]o the extent that the media respond to advertisers' concern with program packaging, they are guided by neither what the viewers want nor what media professional think the public needs. Instead, advertisers pay the media to pro-

by reducing partisanship, and select content that is particularly targeted towards higher-income audiences.<sup>204</sup> The effect of the advertising industry on the media may be the most cynical way in which power accumulated in the market is being used in the public sphere. What is often described as a "free market of ideas" is in fact vulnerable to manipulation by corporations which use their financial power to affect social dialogue. It is often argued that advertising increases access to information by reducing the price of information to users (such as by subsidizing the price of newspapers) or diminishing it altogether (such as in the case of radio and television). Advertisers are thus said to have a democratizing effect on social dialogue by making information available for larger portions of the population. However, advertising is often aimed at the wealthier segments of the population, and may therefore further marginalize the poor.<sup>205</sup>

Cyberspace transforms the role of advertisers in the dissemination of information. Commercial sponsorship may no longer be necessary in network distribution, where subscribers may be charged directly and individually for their specific uses. The reduced costs would allow more individuals to avoid subsidy by advertisers.<sup>206</sup> Reduction in distribution costs may also free dissemination from commercial sponsorship and consequently may increase diversity and promote individualism.<sup>207</sup>

However, digitization may also inhibit access to information and may cause disparities in accessibility of information to individuals that do not exist in print. To some extent, what seems to be a reduction of the distribution cost is only a reallocation of that cost by transferring it from publishers to end-users. The availability of digitized information to users depends on access to equipment.

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vide content the advertisers believes will leave the audience emotionally and intellectually most vulnerable to commercial messages.

*Id.* at 63.

<sup>204</sup> *Id.* at 44.

<sup>205</sup> *Id.* at 66.

<sup>206</sup> Yet, the reason for advertising sponsorship is not only the failure to collect fees, but also an attempt to lower the price paid for the information. Newspapers, for instance, are subsidized by advertisements, and thus advertisers and consumers share the costs of publishing. Nevertheless, it has been suggested that advertising in its current form may no longer exist in the digital world, since interactive television will allow individuals to filter out commercials. Consequently, it is argued, advertisers will have to pay viewers to watch their advertisements. This also shifts power between advertisers and viewers. For a discussion of the future of advertising in the digital era, see Michael Schrage, *Is Advertising Dead?*, WIRED, Feb. 1994, at 71.

<sup>207</sup> It has been argued that such diversity may facilitate the growth of specialized intellectual subcultures, and thereby may divide society and endanger the sense of social cohesion. This notion of social cohesion is based on common themes of interests and attention. See ITHIEL DE SOLA POOL, *supra* note 101, at 261.

Digitized access to information requires some use of a computer, a modem, a telephone or a data line, special software, storage capacity, processing power, graphics capabilities, and so on. The costs of publication through the network therefore shift to the end-users in that they must pay for communication equipment. Ownership, or other opportunity to use even basic end-user equipment, such as a telephone, a computer, or a VCR, is extremely limited among lower income groups.<sup>208</sup> Consequently, many people that were unprivileged by the current system would not be able to improve their opportunities via digital technology.

Furthermore, the dependency on end-users' equipment creates disparities between individuals. Initial purchasing power not only allows access to information, but also determines the type of services available on the network to users. If, for instance, a computer program is placed in a FTP for remote retrieval, the ability of a user to download the file would depend on the storage capacity and processing capabilities of her computer. Furthermore, end-users' equipment may create a large disparity between users' abilities to utilize the network. For instance, a user working on an on-line service with a 28,000 bps modem is likely to be able to download more information for less money than a user who is working with a 14,400 modem.<sup>209</sup> The effectiveness and efficiency of end-users' equipment would, in turn, increase relative to its cost.

Consequently, it is arguable that digital distribution may increase socioeconomic inequalities in society. Murdock discusses the relationship between market based communication technologies and inequality. He argues that "[w]henver access to the communications and information resources required for full citizenship depends upon purchasing power (as expressed directly through customer payments or indirectly through the unequal distribution of advertising subsidies to production), substantial inequalities are generated that undermine the nominal universality of citizenship."<sup>210</sup>

The fact that access to information increasingly depends on end-users' equipment inhibits accessibility of information in a digitized world in a way that print technology does not. However, end-users' equipment continually becomes cheaper and more available. There has been a dramatic change in the availability of this digital

<sup>208</sup> See Murdock, *supra* note 137, at 190.

<sup>209</sup> This depends on the pricing method used by the network, which may vary from charging for on-line time, volume, services, or any combination of those factors.

<sup>210</sup> Murdock, *supra* note 137, at 184. On the relationship between citizenship and disparities of power among citizens, see *supra* note 64 and accompanying text.

technology in the past several years.<sup>211</sup> Besides, even the simplest equipment performs the basic functions of reproduction and redistribution of information. Furthermore, the quality of access changes—digital access allows users to actively participate in choosing and formulating the information they receive. It therefore seems that the overall effect of digitization is to enhance access to information, and it is the responsibility of the law to outweigh the inhibiting affects it may have on accessibility.

Networking may provide publishers with more control over the usage of disseminated works. When one acquires a book, for instance, one is entitled to use the information it contains as she pleases, subject, of course, to some general restrictions, such as copyrights. On the other hand, on-line access to information may be restricted at any point. Whereas acquiring a book is a one time purchase that provides the purchaser with a perpetual license to use,<sup>212</sup> accessing information on-line requires an on-going relationship between users and publishers. This may strengthen the power that publishers exercise over users.<sup>213</sup> While, in the print world, the expiration of a contractual relationship would effect the supply of future information, it would have left the information already supplied intact. Terminating a contractual relationship with an on-line provider may deny users any access to information altogether.<sup>214</sup>

The weakening power of users is also apparent in the changing nature of libraries. Libraries are public depositories of information that provide the public with relatively free access to that

<sup>211</sup> This is due to several reasons. First, the dramatic change in price and performance made computers more affordable. Second, computers are physically more accessible since they became more mobile and connected through communication lines. See John Sculley, *Computer Communications and Content*, CCI, 1992, at 15.

<sup>212</sup> The purchaser acquires property rights in the copy of the work. These rights are protected notwithstanding the copyright in the book itself. Thus, under the first sale doctrine, copyright owners may not prevent any disposition of a book sold to a consumer. For further discussion see *infra* notes 246-48 and accompanying text.

<sup>213</sup> Such on-going relationships between publishers and users may undermine the justification for copyright protection, since such relationships will allow authors to establish contractual relationships with users and rely on technological means of exclusion monitoring of use. See *supra* notes 168-73 and accompanying text.

<sup>214</sup> An example of the new power balance introduced in the context of dissemination by digital access, is the previously discussed conflict between Prodigy and its subscribers. Dissemination by digital access allows providers of on-line information to monitor and restrict access and exclude certain types of users or certain types of uses of information. Prodigy, for instance, decided to cut off service for users who used the network to protest the company's pricing policy. Whereas Prodigy was able to deprive users of any access to the network due to usage it did not approve, an owner of a book in the print world was never under the threat of having to surrender her copy due to her behavior. Dissemination by digital access thus alters the balance of power between users and publishers. For a discussion of the Prodigy case, see *Sex Talk Prompts Prodigy to Shutter Bulletin Board*, *supra* note 157, at B2.

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information. Such access is, however, limited, and subject to various restrictions. Libraries are gradually being converted to electronic form, first by changing their card catalogs to electronic inventories accessible from remote terminals,<sup>215</sup> and ultimately by storing full texts in electronic form.<sup>216</sup> This will make libraries equivalent to databases and will make information accessible instantly at any time and from anywhere over the networks. Electronic libraries may no longer provide free access to information they own, but instead provide gateways to information owned by others. The flip side of this is that in many cases libraries would not own the physical medium that carries the information, as they did in the past, and therefore would be more dependent on information suppliers. While current policies secure the right of people to access information through institutions such as libraries, the ability to monitor and restrict access through the network may require the administration of those institutions in a fresh way.

### III. COPYRIGHT IN CYBERSPACE AND THE FUTURE OF SOCIAL DIALOGUE

Parts I and II of this Article discussed in great detail the potential of digital technology in general, and of digital networks in particular, for participatory democracy. While cyberspace enables individuals to access, manipulate and distribute information, and thereby to participate in political deliberation, it also enhances capabilities of restricting and monitoring access to information. Thus cyberspace may either centralize or decentralize social dialogue. The following discussion demonstrates how copyright law may affect the way social dialogue will be constructed in cyberspace.

Copyright law has an inherent centralizing effect. It allows the commodification of information, and thereby facilitates a market in which control over the use of information could be accumulated.<sup>217</sup> Copyright law restricts access to information and reduces

<sup>215</sup> This transformation created multimedia libraries: most materials are stored in print form or other format, but cataloging and other library systems are now electronic.

<sup>216</sup> Project Mercury at Carnegie Mellon University, for instance, is aimed at building a pilot electronic library. It is one of the efforts that will transform research libraries from print to electronic entities. See Lauren H. Seiler, *The Concept of Book in the Age of the Digital Electronic Medium*, LIB. SOFTWARE REV., Jan. 1992, at 19.

<sup>217</sup> See Chon, *supra* note 71, at 129; Kapor, *supra* note 171, at 53; see also BEN H. BAGDIKIAN, *THE MEDIA MONOPOLY* ix-xix (1992) (few private corporations control most of the U.S. media); FINAL REPORT OF THE NATIONAL COMMISSION ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS 36 (1979) (Hersey, Comm'r., dissenting) ("The country has lately seen an alarming trend toward the concentration of economic power in all the communications industries.").

the use of information by allowing copyright owners to resort to the power of the state to enforce their exclusive rights. Yet, the purpose of such a temporary restriction is to allow access of more individuals to more information.<sup>218</sup>

Employing copyright principles in cyberspace, without any adaptation to the change of circumstances, may increase the social cost involved. First, it may jeopardize the new opportunities introduced by cyberspace for decentralizing social dialogue. Second, when combined with new technological means of controlling and monitoring use, it may enhance the power of copyright owners in an unprecedented way.

Cyberspace is arguably different from previous technologies that were traditionally covered by copyright law in many respects. It is different in the way information is represented (digits). It is also different in speed, in the resources it consumes, and in its capabilities. The issue of *relevant difference* is complicated. The argument that two things are different or alike is relative to a governing principle of relevancy. It is one thing to show that digital technology differs from other technologies in terms of the way the information is represented, in the speed of processing information, and in the shape and costs of processors. It is quite another thing to determine which of these differences is relevant for the assignment of rights in digitized products. A report that was released in the U.S. by the Information Infrastructure Task Force (the IITF Report) focussed only on the differences that are relevant to the interests of the stakeholders under current copyright law.<sup>219</sup> Instead, this Article suggests that one should focus on the differences that are *relevant* to the promotion of the constitutional goals of copyright law. The relevant changes created by digital technology are those that affect the balance of power between copyright owners and users. To understand the implications of digital technology one must understand how digital technology changes that balance of power, and how that change affects the function of copyright law in the pursuit of knowledge and learning.

Cyberspace does not merely bring about a quantitative change, by making reproduction easier, less costly, and by expediting information delivery. As the discussion in part II demon-

<sup>218</sup> See Niva Elkin-Koren, *The Challenges of Technological Change to Copyright Law*, 17 *SCI. COMM.* 186, 194 (1995). This stems from the constitutional purpose of copyright law "to promote the progress of science and the useful arts." U.S. CONST. art. I, § 8, cl. 8. Alternatively, one may argue that progress would be best served by providing more information to a limited number of people who can best promote it. See RORTY, *supra* note 166, at xvi.

<sup>219</sup> IITF WHITE PAPER, *supra* note 2, at 5.

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strated,<sup>220</sup> cyberspace has the potential of decentralizing the structure of creation and dissemination of information, which may radically affect social structures.<sup>221</sup> This potential may be crucial for democracy.

The following discussion examines copyright law from the perspective of social dialogue. It demonstrates how copyright principles may be used in cyberspace to expand the rights and privileges of parties who currently benefit from the copyright regime. It challenges the justification for granting these broad rights in cyberspace. This discussion further highlights the social cost involved in applying copyright law in cyberspace, and suggests that this cost should be considered when defining the scope of copyright law in cyberspace.

#### A. *From Reproduction to Use*

Section 106(1) of the 1976 Copyright Act provides owners with an exclusive right to "reproduce the copyrighted work in copies or phonorecords." The right to reproduce was understood by the IITF Report to cover any placement of a work into a computer's memory, since the work may be "perceived, reproduced, or communicated . . . with the aid of a machine or device."<sup>222</sup> This was also the court's approach in several cases which held that digital copies that were merely "fixed" in RAM constituted infringing copies.<sup>223</sup> These controversial rulings were criticized, however, for be-

<sup>220</sup> See *supra* notes 79-216 and accompanying text.

<sup>221</sup> For example, Pool points at five aspects of electronic communication that are likely to change society: overcoming the barrier of distance in communication, convergence of speech text and pictures in a single form of representation, the growing share of information handling in all of human activities, the convergence of computing and communicating, and the reversal of the media revolution. See ITHIEL DE SOLA POOL, *supra* note 101, at 8.

<sup>222</sup> IITF WHITE PAPER, *supra* note 2, at 25-26 (citing 17 U.S.C. § 101 (1994)).

<sup>223</sup> *MAI Sys. Corp. v. Peak Computer, Inc.*, 991 F.2d 511, 519 (9th Cir. 1993), *cert. denied*, 114 S. Ct. 671 (1994). This decision has been recently sustained by the Court of Appeals for the Seventh Circuit, in a way, however, that restricts its application. *NLFC, Inc. v. Devcom Mid-America, Inc.*, 45 F.3d 231 (7th Cir. 1995), involved a suit against a computer service company that directly accessed and serviced its customers' computers via leased or dedicated phone lines and dumb terminals. The court believed the service company's assertions that it did not download the software onto its own computers in order to perform work, and found no support for the inference that a printed copy of the source code was produced by the service company's computer. The court found no violations of the Copyright Act, holding that the service company did not illegally copy software in the process of servicing that software. The court's analysis ignored reproduction on the RAM. Once the court found that no copy was downloaded onto the defendant's computer, it concluded that there was no copying.

Devcom did not, during its course of business with either lab, download the software onto its computers in order to work on it. Instead, Devcom directly accessed the laboratory computers, via leased or dedicated phone lines and the use of dumb terminals. . . . Devcom accessed the memory or hard drive of one

ing inconsistent with the language of the statute and the legislative history, which indicates a Congressional intention to limit the scope of the reproduction right to sufficiently permanent or stable copies.<sup>224</sup>

This broad interpretation of the right to reproduce prohibits any unauthorized digitization of a work by scanning it into a digitized file, and any uploading or downloading of works from or onto a server. It further prohibits creating any incidental copy in the course of using a file. Every digital transmission involves a reproduction, since copies are made during the transmission and when the transmission arrives at its destination. Furthermore, potential infringement of the reproduction rights occurs whenever someone browses a document on-line,<sup>225</sup> or loads a work into a computer's RAM. Indeed, the IITF Report concluded that the reproduction right "appears to be a right that will be implicated in most NII transactions."<sup>226</sup>

The exclusive right to reproduce—as interpreted by the IITF Report and by courts—provides copyright owners with a broad monopoly compared with their rights in non-digitized works. Works in a digitized form must be reproduced in one way or another to allow any access to them. Digitized works are represented ab-

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of the laboratory computers directly through a dedicated phone line, and that the source codes were printed directly from that source. There is no support here for the inference that this information originated from one of Devcom's computers.

*Id.* at 12-13. Thus, even though the court explicitly cited *MAI*, the fact that it did not distinguish between reproduction on the RAM and reproduction on a hard drive, and the fact that it did not consider copying on the RAM to be infringement, departs from the *MAI* decision and restricts the meaning of reproduction to the creation of a permanent copy.

<sup>224</sup> See H.R. REP. NO. 1476, 94th Cong., 2d Sess. 62 (1976).

"Reproduction" under clause (1) of section 106 is to be distinguished from "display" under clause (5). For a work to be "reproduced", its fixation in tangible form must be "sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration." Thus, the showing of images on a screen or tube would not be a violation of clause (1), although it might come within the scope of clause (5).

*Id.*; see Samuelson, *Digital Media*, *supra* note 1, at 323 (arguing that the same logic that underlies the view that RAM copies infringe copyrights, would find infringement in holding a mirror up to a book, because the book's image could be perceived there for more than a transitory duration); Jessica Litman, *The Exclusive Right to Read*, 13 CARDOZO ARTS & ENT. L.J. 29, 42-43 (1994).

<sup>225</sup> IITF WHITE PAPER, *supra* note 2, at 64 ("[W]hen a computer user simply 'browses' a document resident on another computer, the image on the user's screen exists—under contemporary technology—only by virtue of the copy that has been reproduced in the user's computer memory."). The court in *Religious Technology Ctr. v. Netcom On-line Communication Servs.*, 907 F. Supp. 1361, 1378 (N.D. Cal. 1995) concluded that "[a]bsent a commercial or profit-depriving use, digital browsing is probably a fair use . . ." The court emphasized that browsing will not have much market effect. *Id.*

<sup>226</sup> IITF WHITE PAPER, *supra* note 2, at 64. As a result, the Report concluded that there is no reason to change the definition of the exclusive right to reproduce. *Id.*

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strictly in ones and zeros, and require the use of a processor to access them. Such processing always involves the creation of a copy. Consequently, every access to digitized works falls under the copyright monopoly.

In the print world, the notion of copying was used to distinguish between legitimate and infringing uses. The use of this same concept—copying—in a digitized environment would be too inclusive.<sup>227</sup> Copyright owners were never able to prevent the use of their works.<sup>228</sup> Under the current copyright regime, owners are granted only limited rights over the use of their works. These rights are strictly defined by section 106, and do not undertake to grant owners control over all conceivable uses of their works. The rights are subject to further restrictions under sections 107 to 118 of the 1976 Copyright Act.<sup>229</sup> There is a wide range of permissible uses of works that is not at all regulated by copyright law.<sup>230</sup> Those uses that are not explicitly subject to owners' control under copyright law remain in the public domain.

Consider browsing through a document on the computer, for instance. Every act of reading a text on-line, examining it, flipping through it, or even glancing at its titles, involves its reproduction by the machine that displays it. Consequently, all acts like reading e-mail, surfing the Internet, or following links of Hypertext files<sup>231</sup> may constitute copyright infringement. A law that perceives all

<sup>227</sup> See Litman, *supra* note 224, at 43 (arguing that the Report's characterization of current law allows copyright owners to claim exclusive "reading," "listening," and "viewing" rights).

<sup>228</sup> The bundle of rights granted to copyright owners under section 106 does not allow owners to control the use of their copyrighted works. In fact, this is one of the main differences between copyright law and patent law. See Ralph S. Brown, *Eligibility for Copyright Protection: A Search for Principled Standards*, 70 MINN. L. REV. 579, 588-89 (1985).

The right to control the use of a work, although granted to inventors, has never been part of copyright except as performance may be considered "use." Indeed, the absence of a "use right" helps justify the relatively casual approach to granting copyright as opposed to the more searching tests for patentability.

*Id.* (footnotes omitted).

<sup>229</sup> 17 U.S.C. §§ 107-118 (1994). It does not follow, however, that all unauthorized uses of a work are prohibited unless they fall under the exceptions.

<sup>230</sup> For a description of copyright law as a regime that is regulated, rather than defined in terms of property, see L. RAY PATTERSON & STANLEY W. LINDBERG, *THE NATURE OF COPYRIGHT, A LAW OF USERS' RIGHTS* 193 (1991).

<sup>231</sup> Does a link between documents on the World Wide Web constitute copyright infringement under the broad interpretation of the Working Group? The World Wide Web is a hypertext based system that allows access to Internet resources in the form of Hypertext documents. KROL, *supra* note 149, at 515. "Hypertext documents are documents that contain links to other documents; selecting a link automatically displays the second document." *Id.* at 508. It is arguable that a link is very similar to a bibliography entry. It refers users of one document to other documents that may be relevant. It also provides the location of further information. A locator, however, is codified digitally and operates automatically when a user clicks on the screen. This connects the user to the host Web site, which responds by sending a copy of the linked document to the user's screen.

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such incidental reproductions as falling within the scope of the copyright monopoly, makes browsing illegal.<sup>232</sup>

Browsing, however, is crucial for any notion of progress. Any creation of knowledge depends on exposure to new information. We refine our ideas about the world through interaction with others' ideas, feelings, beliefs and discoveries. A law that allows owners to charge money for any such interaction is detrimental to any vision of learning and growth.

If copyright owners are able to charge for all browsing, fewer people will be able to gain even limited access to information. While, under the current regime users are able to freely browse through books in the bookstore or through different sections of a newspaper, a regime that makes browsing an infringement would restrict such behavior.

Furthermore, making browsing a copyright infringement inherently limits opportunities for progress and change by restricting random access to information. Random access to information is essential for individuals' ability to shape their interests, preferences, and positions. If browsing involved a fee, users would be required to choose in advance whether they wish to engage in such a transaction. They must be able to determine *a priori* what kind of information they are interested in. But how would people know what they are interested in before they even know what is available? How can their expectations be shaped in the absence of random observation of what is available to them? The need to choose in advance one's areas of interest may narrow individuals' experience of the world and of themselves. It may also limit the ability of people to change.<sup>233</sup>

Perceiving browsing as part of the copyright monopoly is also significant for social dialogue. A right to control browsing re-

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Under the IITF White Paper, selecting a linked document would appear to create an infringing copy. IITF WHITE PAPER, *supra* note 2, at 64.

<sup>232</sup> See Litman, *supra* note 224.

<sup>233</sup> For instance, when we read a newspaper, we carefully read the sections we are the most interested in (book review, front page, business section), and we flip through the others. This is the underlying assumption of the whole industry of advertisements in newspapers. See BAKER, *supra* note 169, at 64. Once in a while browsing will lead to a news item which we couldn't expect we would be interested in reading. This new information may challenge our previous views. A monopoly over browsing limits those opportunities.

This same problem exists with screening agents that are selecting information that fits one's interests and needs. Consider for instance, a system that creates individualized newspapers according to one's profile. Such systems also require defining one's interests in advance. Yet, intelligent agents may include a component of random selection, which would provide the user with several arbitrarily chosen items. Such random selection would be limited, however, in a regime that perceives browsing as covered within the rights of copyright owners.

cates a privilege enjoyed by the public, within the scope of the private monopoly of copyright owners. It therefore enhances the ability of owners to exclude access to cultural forms. It may therefore limit access to information on the basis of economic power.

Browsing is part of our everyday behavior. For example, we flip through books at the bookstore, read books in the library, glance at a photograph or a drawing in a store or a museum. If cyberspace is to become the main channel for distributing information, all this information will become available on-line. In the absence of any alternative to current practices of browsing, we would be deprived of a large portion of our current capacity to access information at low cost.

It thus becomes apparent that even though digital technology may make works more accessible, broad copyright in a digital environment may limit access to works in an unprecedented way. The expansive use of the notion of "copying" in a digitized environment would fail to take advantage of the full potential of the technology.

If the right to reproduce is to be used in the digitized context, it should preserve the fundamental trade off between granting the public perpetual use of the work in exchange for a monopoly over the initial distribution of a work. Accordingly, the reproduction right should be confined to its original meaning in a pre-digitized world, namely the right to control the preparation of fixed copies which allow repeated, unrestricted use of the work. It should explicitly exclude any behaviors which do not aim at the preparation of such copies, such as browsing or linking documents.

The significance of the incomprehensible nature of digitized representation—that it is codified in a machine readable form and must be re-presented in a human readable form in order to become accessible to users—has been most directly discussed in the context of fair use. It has been argued, for example, that it is necessary to copy a computer program in order to study it.<sup>234</sup> Disassembly, namely, the process that transforms the object code into a comprehensible form, is required in order to read a program, study and analyze it, to understand the ideas and functions it contains. In *Sega v. Accolade*, the court held that disassembling of copyrighted object code is a fair use of the copyrighted work if such

<sup>234</sup> This argument was raised in the *Sega* case, regarding the copying of the *Sega Genesis* software by *Accolade*. In an *amicus curiae* brief filed in Court of Appeals for the Ninth Circuit in support of *Accolade's* position, the *amici* argued that, contrary to other works protected by copyright, object code is incomprehensible. *Sega Enters. Ltd. v. Accolade, Inc.*, 977 F.2d 1510 (9th Cir. 1992).

disassembly provides the only means of access to those elements of the code that are not protected by copyright.<sup>235</sup> This suggests that in cyberspace, where the right to reproduce may cover any access to works, the scope of this right should be limited.

### B. *Distribution, Transmission and Access*

Section 106(3) of the 1976 Copyright Act provides copyright owners with the exclusive right to "distribute copies . . . of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending."<sup>236</sup> Several courts have concluded that on-line dissemination constitutes public distribution.<sup>237</sup> The IITF Report argued that on-line dissemination differs from previous methods of distribution because it involves "proliferation of copies." The dissemination of works does not involve the distribution of copies, but the creation of new copies, and therefore falls under the exclusive right to reproduce.<sup>238</sup> The Working Group noted that even though no material objects are involved, the transmission of a copy of the work from one location to several others results in the distribution of additional copies of the work. Therefore, the Report recommended expanding the meaning of "distribution" to cover dissemination by transmission.<sup>239</sup>

On-line dissemination of works changes the balance between copyright owners and users. The expansion of copyright monopoly, to cover not only distribution of copies, but also on-line dissemination, poses a threat to copyright policies.<sup>240</sup> Transmission and distribution are essentially different.<sup>241</sup> "Distribution" requires dis-

<sup>235</sup> *Id.*

<sup>236</sup> 17 U.S.C. § 106(3) (1994).

<sup>237</sup> See, e.g., *Playboy Enters., Inc. v. Frena*, 839 F. Supp. 1552 (M.D. Fla. 1993) (a bulletin board operator was found liable for infringing the plaintiff's exclusive rights to publicly distribute Playboy's copyrighted photographs).

<sup>238</sup> Every agent in the dissemination chain may both disseminate the work and retain her own copy. IITF WHITE PAPER, *supra* note 2, at 213.

<sup>239</sup> Under copyright law owners retain the exclusive right to "distribute copies . . . of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending." The Report recommended to add "or by transmission" after "lending" in the statute. See IITF WHITE PAPER, *supra* note 2, at 213, 217, & 219.

<sup>240</sup> See PATTERSON & LINDBERG, *supra* note 230, at 99-100. Even though Patterson & Lindberg discuss television broadcasts, the concerns they raise also are applicable to cyberspace. The underlying assumption of the public performance clause is that performance is equivalent to publication, and thereby supposedly satisfies the promotion of learning condition required by copyright. Patterson & Lindberg argue that the protection of a live broadcast on television (under what they call "electronic copyright") reflects three fictions: the corporate copyright fiction which perceives the employer as an author, the fiction of fixation which perceives a broadcast as being fixed even if it is being transmitted, and the fiction that performance is equivalent to publication. *Id.*

<sup>241</sup> The IITF White Paper argued that digital dissemination differs from previous methods of distribution in that it involves "proliferation of copies." The dissemination of works

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semination of copies to the public for profit. Consequently, it guarantees public access to the work. The existence of a copy of the work, that is not controlled by the copyright laws, guarantees that the work will eventually fall into the public domain.

The economic structure of on-line dissemination is, however, entirely different. It requires only the communication of a work over the network to obtain both copyright protection and a profit. A work that is disseminated on-line does not become available to the general public for subsequent use. Copyright owners maintain control over any further access to their works.<sup>242</sup> Publishers may restrict access to information and control uses that are not protected under copyright law. Consequently, users become more dependent on publishers for access. While copies allow repetitive use of the copyrighted work, on-line dissemination does not guarantee such access.<sup>243</sup>

Copyright law traditionally served to protect copyright interests when the publisher lost the physical control over the copies. Mass distribution of works required a substitute for contractual or physical restraints over the use. The context of cyberspace is en-

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does not involve the distribution of copies, but the creation of new copies. Every agent in the dissemination chain may both disseminate the work and retain her own copy. Therefore, the Working Group concluded, "under the current law, the reproduction right, rather than the distribution right, may be both more logically applicable and more legally appropriate (by virtue of its more limited exceptions). IITF WHITE PAPER, *supra* note 2, at 216. The IITF White Paper further noted that the reproduction right would be more appropriate for the NII since it is subject to less exceptions. Justifying the preference of the reproduction right over the distribution right, by the fact that it is subject to more limited exceptions, is peculiar. The Working Group was entrusted with the task of recommending the amendments necessary in copyright law to meet the new circumstances created by the NII. Therefore, the Report should have critically examined which exceptions of the reproduction rights and distribution rights would be appropriate in the context of the NII, instead of treating the current right and limitations as a package deal.

<sup>242</sup> *Id.* at 216; see Jerome H. Reichman, *Electronic Information Tools—The Outer Edge of World Intellectual Property Law*, 17 DAYTON L. REV. 797, 823 (1992).

For example, to the extent that publishers supply on-line information to a network of licensed subscribers from computerized and constantly updated data bases kept on their own premises, they avoid the kind of dissemination in hard copies that made intellectual creations vulnerable to third-party appropriation in the past.

*Id.*

<sup>243</sup> The lack of physical medium alters the balance of power between users and publishers. On-line services may exercise continuous control over the use of works. When one acquires a book for instance, one gains unrestricted access to the information it contains. On the other hand, access to information on an on-line service may be restricted or cut off all together at any time. Its use may also be continuously restricted by the on-line provider. While acquiring a book is a one time purchase that provides the buyer with property rights over the book, accessing information on-line requires an ongoing relationship between users and providers of on-line services. In the absence of rights analogous to the power exercised by users of tangible copies, users' freedom to access and use information becomes more vulnerable. This creates a sweeping right at the hands of the copyright owner in a digitized environment that she has never had in the past.

tirely different. On-line dissemination allows publishers to control the use of disseminated information even in cases of mass distribution. The use of works may be subject to contractual restraints,<sup>244</sup> supplemented by technical means of monitoring and enforcing license restrictions. On-line dissemination increases the feasibility of monitoring and restricting the use of copyrighted works. Networking allows more control over the type of use (browsing, downloading, annotating) the number of uses, and the identity of users. It allows applying different price policies to different users and charging different prices for different uses. This gives the copyright owner an absolute power over the licensing of her work. This ability of copyright owners to monitor and control the use of their works on-line, weakens the case for copyright protection in cyberspace.

Furthermore, distribution rights under copyright law seek to guarantee the ability of copyright owners to commodify their works in the market by selling copies or exclusive licenses.<sup>245</sup> The exclusive right to distribute is granted to copyright owners against competitors in the market. A right to control on-line dissemination expands the power of owners to control not only uses by competitors but also any transmission by individual users.

The overall impact of on-line dissemination is to deny users any unrestricted perpetual right to use the information. Access to works increasingly depends on a relationship with the copyright owner. Copyright law should serve to supplement the otherwise limited ability of copyright owners to protect their interests in the market place. Yet, if on-line dissemination turns out to enhance the power of copyright owners to control the use of their works, the role of copyright law should be reconsidered.

Network distribution shifts the essence of dissemination from

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<sup>244</sup> Reichman, *supra* note 242, at 823. Yet, the status of on-line contracts and the circumstances that would constitute an on-line agreement are unclear.

<sup>245</sup> *Id.* at 820-21.

In effect, copyright law established a surrogate form of ownership by instituting a system of portable fences, valid against the world and backed by the power of the state, that accompany an author's creation on its journey from mind to mind. Even though third parties legitimately exercise dominion over artifacts that embody original intellectual creations, these fictitious portable fences neutralize essential attributes of property that possession would ordinarily confer. The exclusive right to reproduce thus mandates a consensual relation between creator and would-be exploiters that prevents the latter from using the former's contribution in specified ways without paying for the privilege. This right constitutes the essential element of intellectual property law, and it gives intellectual creations the quality of "goods" in both the legal and economic sense of the term.

*Id.*

distribution of copies to *access* and *use*. This weakens the dependency of users on a tangible copy, but increases their need for information in a form that is constantly updated, manipulated, and combined with other sources. The common characteristics of a sale transaction may not be applicable to network distribution. Therefore, it is necessary to develop a new typology to describe the legal relationships that are established in network distribution. It is also necessary to come up with an alternative mechanism that would allow users to do the same things they are able to do in a non-digitized environment. Purchasers of books, for instance, are entitled to share their book with a friend or a colleague, and also to dispose of it. The first sale doctrine restricts the power of distributors to control secondary markets for their works. Under section 109(a) of the 1976 Copyright Act,<sup>246</sup> the exclusive right to distribute copies to the public is limited to the right to make an initial distribution of a particular copy. The first sale doctrine allows the owner of a copy to dispose of her possession of that copy at her will. The freedom of individuals to share information with others, and the power of secondary players in the marketplace to redistribute and disseminate already distributed works, stimulates dissemination of information.<sup>247</sup> Furthermore, alternative channels of distribution have the effect of decentralizing dissemination. Since the first sale doctrine applies to distribution of physical copies, it remains unclear whether the doctrine applies to on-line transmission. The IITF Report recommended explicitly to exclude transmission from the reach of the first sale doctrine.<sup>248</sup> Abolishing the first sale doctrine would further enhance owners' power to control secondary markets of their works and would further centralize the dissemination of information, rather than supporting the decentralizing opportunities created by digital networks.

### C. *Derivative Rights*

The 1976 Copyright Act provides copyright holders with an exclusive right to prepare, and authorize others to prepare, a derivative work.<sup>249</sup> A derivative work is defined by the 1976 Copyright Act as "a work based upon one or more preexisting works . . ."<sup>250</sup>

<sup>246</sup> 17 U.S.C. § 109(a) (1994).

<sup>247</sup> See PAUL GOLDSTEIN, COPYRIGHT: PRINCIPLES, LAW AND PRACTICE § 5.6.1 (1994) ("The intent behind section 109(a) was to provide that, once the copyright owner parts with ownership of a copy or phonorecord, everyone in the succeeding chain of title—owners and nonowners alike—will enjoy the privilege.").

<sup>248</sup> IITF WHITE PAPER, *supra* note 2, at 91.

<sup>249</sup> 17 U.S.C. § 106(2) (1994).

<sup>250</sup> 17 U.S.C. § 101.

This right allows copyright owners to exploit additional markets beyond the original market for the work.<sup>251</sup> It thus enlarges the prospective market for the copyrighted work, and increases incentives to invest in the development of works.<sup>252</sup> This guarantees proper levels of investment in creating works and also encourages early publication of works. The concern is that without an exclusive right to create derivative works, authors will withhold publication of the original works until they are ready to exploit other potential markets, without losing their head start.<sup>253</sup> Derivative rights also enable owners to divide their property interest and enhance to value of their bundle of rights.<sup>254</sup>

The question is to what extent copyright owners of digitized works should be able to control the preparation of enhancements and modifications of their works. The ability to manipulate works in cyberspace is substantially different from the manipulability of non-digitized works. The potential for manipulation is different in quality in that it allows transforming the entire work. The ability to manipulate works in a digitized form makes it substantially easier to create transformative uses of works. This difference introduces a new set of interests to be considered.

The primary difference between annotating printed text and annotating a downloaded file is that text in a digitized form is flexi-

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A "derivative work" is a work based upon one or more preexisting works, such as a translation, musical arrangement, dramatization . . . abridgment, condensation, or any other form in which a work may be recast, transformed, or adapted. A work consisting of editorial revisions, annotations, elaborations, or other modifications which, as a whole, represent an original work of authorship, is a "derivative work."

*Id.*

<sup>251</sup> See Reichman, *supra* note 242, at 813 ("This right enables an author to recoup revenues generated from different uses of his or her work on each of the market segments where its expressive features are commercially exploited either in original or adapted form."). Thus, an author enjoys the exclusive right to make a movie based on her novel and Disney has the exclusive right to make posters, T-shirts, and toys in the image of its movie characters. The idea that the interest of copyright owners includes a legitimate expectation of future markets is also significant to fair use analysis. The fourth fair use factor is "the effect of the use upon the potential market for or value of the copyrighted work." 17 U.S.C. § 107(4) (1994). In *Campbell v. Acuff-Rose Music, Inc.*, 114 S. Ct. 1164 (1994), the Supreme Court held that the fourth factor of the fair use analysis requires the courts to consider not only the harm to the market of the original work, but also the potential market for derivative works. Any substantial harm to the market for derivative works "would weigh against a finding of fair use, because the licensing of derivatives is an important economic incentive to the creation of originals." *Id.* at 114 (footnotes omitted).

<sup>252</sup> GOLDSTEIN, *supra* note 247, at 571 ("Derivative rights enable prospective copyright owners to proportion their investment to the returns they hope to receive not only from the market in which their work will first be published, but from other, derivative, markets as well.")

<sup>253</sup> For economic analysis of the adaptation right, see Landes & Posner, *supra* note 190, at 354-55.

<sup>254</sup> See GOLDSTEIN, *supra* note 252, at 575.



ble and manipulable and allows users to integrate their comments into the original work itself. This aspect of digitization was downplayed by the Working Group. Physical modes of representation stand alone.<sup>255</sup> Therefore, annotating printed text creates a distinct work, consisting of the original work and the comments as separate features. Annotating text in a digitized form transforms the text itself.<sup>256</sup> The disappearance of the physical boundaries between original and derivative components, and the ease of manipulation are significant both for users and for authors.

From the perspective of authors, the physical boundaries help define and protect the integrity of the work. When the original work is fixed in a certain form, and may be preserved in the form in which it was created by the author, it is feasible to sustain its completeness, original meanings and qualities. It is also easier to protect a work from being distorted. The existence of a fixed format of the work provides a baseline to which all modifications may be compared, and thus makes detection of distortions easier.<sup>257</sup> The physical boundaries also communicate a clear signal to users as to the scope of the work. In the absence of a clear division between works of different sources, they may all become part of a single web.<sup>258</sup> Finally, the flexible nature of digital representation makes it easy and inexpensive to modify the original work.

Although derivative rights under United States copyright law protect an economic interest of copyright owners in potential related markets, it has been suggested that they may also serve to protect the integrity of copyrighted works.<sup>259</sup> The monopoly over derivative works may allow authors to prevent any distortion, misrepresentation, misuse, or transformation of her work without proper authority.<sup>260</sup> In many cases, however, copyright owners are

<sup>255</sup> If one is writing comments on a book, she creates a separate text that accompanies the printed text. If she wishes to print her comments and physically incorporate them into the original, she must retype the entire book. In a digitized text, one may simply add her comments with or without marking them, and may also directly modify the original text.

<sup>256</sup> See BOLTER, *supra* note 167, at 29.

<sup>257</sup> Consider, for instance, handwritten comments on a book, or changes of color on a painting or a photograph.

<sup>258</sup> Consider, for instance, the experience of following pointers to web sites or reading responses to messages posted on a bulletin board.

<sup>259</sup> Thus, derivative rights allowed the United States to join the Berne convention without having to explicitly add moral rights to the bundle of rights provided to authors, and consequently, without having to compromise the "utilitarian ethos" that underlies its copyright law. See GOLDSTEIN, *supra* note 252, §§ 5.2.3, 7.1.2, 7.3.2; Reichman, *supra* note 242, at 813; Neil Netanel, *Alienability Restrictions and the Enhancement of Author Autonomy in United States and Continental Copyright Law*, 12 CARDOZO ARTS & ENT. L.J. 1, 42-43 (1994).

<sup>260</sup> See Netanel, *supra* note 259, at 43 ("The derivative right, therefore, is essentially co-terminous with at least the negative aspect of the integrity right. Like their Continental counterparts, U.S. authors who hold the derivative right may prevent modifications to their

not the authors of the original works; this is the case when copyright is transferred to others, such as movie producers or book publishers. This is also the case when the work is considered a work-made-for-hire, in which the employer is classified as the first author of the work.<sup>261</sup> The vast majority of copyrighted materials that are on the market are not owned by the actual author. Corporate copyright weakens the case for protecting the integrity of the work, or other moral rights, under derivative rights.

From the user's perspective, the ability to interact, change and modify works is empowering. It is this vulnerability of digitized works to modification and manipulation that makes them so valuable for social dialogue. It allows users to participate in creating the meaning of cultural artifacts. Users may incorporate their input into works of others, customize it to serve their preferences and reflect their choices, or create new meaning by linking texts to one another, or integrating fragments of text together.<sup>262</sup> No special equipment training or skills are necessary for changing a downloaded file. Usually the same equipment that allows access to a work would allow its manipulation.<sup>263</sup>

Cyberspace allows individual users to add their input and shape digitized works to meet their individual preferences in a cost-effective way. Users may be increasingly involved in determining what they watch, read, or otherwise consume. The technological ability to customize allows users to recognize their personal expressions in the works they consume.<sup>264</sup> The passivity of consuming mass products may thus be replaced with actively constructing indi-

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work that run contrary to their artistic sensibilities, without any need to show consumer deception or harm to reputation." Another legal arrangement that allows copyright owners to protect the integrity of a work is section 115(a)(2) of the Copyright Act. Under section 115, a musical composition that was previously licensed by the copyright owner to be recorded and distributed is subject to a compulsory license for further recordings. Under section 115(a)(2) licensees are free to make changes in the musical arrangement of the work where necessary to conform with the style or manner of interpretation or performance, so long as no change is made in the basic melody or fundamental character of the work. 17 U.S.C. § 115(a)(2) (1994). The House Report notes that this qualification intended to prevent the original compositions from being perverted, distorted or travestied. See H.R. REP. NO. 1476, 94th Cong., 2d Sess. (1976).

<sup>261</sup> 17 U.S.C § 201(b) (1994); Netanel, *supra* note 259, at 43-44.

<sup>262</sup> For further discussion of the potential of digitization for decentralizing meaning-making process, see part IIA & note 100.

<sup>263</sup> The shift of emphasis to personal use shakes the fundamental scheme of copyright law. The ultimate goal of granting copyright protection is to allow authors to share their works in public, and at the same time protect their economic interests in the market.

<sup>264</sup> The ability of users to customize digitized stories, for instance, may be crucial to their sense of affiliation with a community, and to their ability to relate to the culture they consume. The controversy over what books should be included on the New York City public schools' suggested bibliography for teachers further demonstrates the significance of decentralizing dissemination of information. See *supra* note 136.

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individualized experiences. This may facilitate the constitutional purpose underlying copyright law of promoting progress. Moreover, if works may exist in multiple individualized versions, then diversity of works and expressions would be enhanced. The opportunities for more individuals to add their input and take part in creating cultural artifacts serves the primary goal of copyright law—promoting progress.

If annotating a downloaded file infringes the adaptation rights, copyright owners will be entitled to restrict, or entirely prohibit any such use of their works. Alternatively, copyright owners may license such use for a fee. The overall effect of granting owners the right to control any annotation of their works is to reduce such activity.<sup>265</sup> In other words, while digital technology opens up opportunities for grass roots participation in the creation of cultural forms, granting broad derivative rights inhibits that potential. While manipulability of digitized works creates an opportunity for decentralizing meaning-making processes, an opportunity that is significant both from the perspective of copyright principles and of democratic theory, it also threatens the boundaries of the work's integrity.<sup>266</sup> The interest in the integrity of works is limited to human authors, however, and does not present itself as clearly in the case of corporate copyright.

What should be the appropriate scope of derivative rights in a digitized context? To what extent should copyright holders in cyberspace be able to control the preparation of enhancements and modifications of their works? Should copyright law facilitate a regime in which users are encouraged to adapt works to reflect their own meanings?

Very broad derivative rights may unduly impede opportunities for participation in meaning-making processes. It would severely limit the ability of users to customize works, interact and respond to them, or use them as building blocks of their own creation. Broad derivative rights may serve to block the potential for decentralizing meaning. In other words, the technological advantages of cyberspace may be outlawed. Thus copyright law may be used to

<sup>265</sup> This is either because copyright owners would not license it or because users would not value it enough to pay the fee set by the owner. Copyright owners would have an incentive to set the price for licensing derivative works higher in order to maintain their monopoly. In any event, any charges for derivative use would decrease the level of such use, and would allow a more limited group of users, who can afford paying for the derivative rights, to make derivative uses of works.

<sup>266</sup> In the context of industrial property, the competing interests are slightly different: very broad derivative work rights can unduly impede competition in the general products marketplace. On the other hand, lack of appropriate means to control derivative uses of a technical innovation may cause under-investment in creation or delay publication.

create and maintain power over meaning-making processes. It may be used to preserve the centralized structure of social dialogue.

How should we resolve the tension between the threat to integrity and the potential for empowering users? How should we resolve the tension between the threat to the owner's market posed by individual users and the social benefit generated by such use? Copyright policy should promote public access to means of distribution not only as passive recipients but also as originators.<sup>267</sup> In *Campbell v. Acuff-Rose Music, Inc.*,<sup>268</sup> the Supreme Court found the transformative use of works to be the single most important factor under fair use analysis.<sup>269</sup> This was because "the goal of copyright, to promote science and the arts, is generally furthered by the creation of transformative works."<sup>270</sup>

Broad derivative rights may also jeopardize the efficient use of works in digital form by limiting the ability of individuals to customize copyrighted works.<sup>271</sup> This would impair one of the most significant contributions of digitization to social dialogue: the ability of users to integrate their contribution to works and to adapt them to their own meaning.

Digitized works are distinct from conventional works in that they allow access, use and manipulation by various functional applications. Broad derivative rights may allow the copyright owners to control the distribution of functional applications such as computer programs that create new options of selection, change the speed or color of works, or allow the work to be combined with other sources of information.<sup>272</sup>

Copyright reform should focus on encouraging and not impeding the creation of transformative works. The enhanced op-

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<sup>267</sup> See *Sega Enters. Ltd. v. Accolade, Inc.*, 977 F.2d 1510 (9th Cir. 1992). The court held that "the immediate effect of our copyright law is to secure a fair return for an 'author's' creative labor. But the ultimate aim is, by this incentive, to stimulate artistic creativity for the general public good." *Id.* at 1527 (quoting *Sony*, 464 U.S. at 432).

<sup>268</sup> 114 S. Ct. 1164. The Court discussed the extent to which a commercial derivative work (parody) should be exempted under fair use doctrine.

<sup>269</sup> *Id.* The Court noted that "[t]he more transformative the new work, the less will be the significance of other factors, like commercialism, that may weigh against a finding of fair use." *Id.* at 1166.

<sup>270</sup> *Id.* at 1171. Transformative works, the Court held, "lie at the heart of the fair use doctrine's guarantee of breathing space within the confines of copyright." *Id.*

<sup>271</sup> For further discussion see *supra* notes 124-39 and accompanying text.

<sup>272</sup> What rights do copyright holders have against competitors that are marketing compatible devices? Does an enhancing product constitute a derivative work, and does the output created through the use of such products amount to a derivative work? This second question may be of great importance. Even if the compatible device does not, by itself, infringe the exclusive right to adapt, the distributor of such a device may still be liable for copyright infringement. For instance, if an output of a program that runs on a multimedia system is considered to be a derivative work, then an unauthorized publisher of such a program may be liable for contributory infringement.

portunities for modifying, customizing, or otherwise manipulating digitized works may promote this purpose of copyright law. A broad derivative right may, however, impede this potential. It is therefore necessary to reexamine the appropriateness of the adaptation right to the digitized context.

It is arguable that the appropriate balance between the owner's monopoly over derivative uses of her work and users' freedom to manipulate, should be resolved under the fair use doctrine. The scheme of providing a broad right to control derivative use, subject to fair use exemption, puts users at a disadvantage. Under fair use, users' rights are less stable. Rights would depend on judicial determination. Users would have to act under the threat that their acts would be found infringing. The prospects of potential litigation may have an inhibiting effect on users. Users are more likely to be risk averse than copyright owners, and therefore less likely to engage in acts that may be found infringing, subjecting liability to pay compensations.<sup>273</sup>

Copyright reform should incorporate these principles into the statute. The exclusive right to create derivative works should explicitly exclude transformative uses. Explicitly providing that transformative use is not infringing would communicate a clear message to owners and users. It may encourage transformative uses in cyberspace and allow the technology to serve the purpose of copyright law.

#### D. Fair Use

Fair use doctrine had been one of the most important means of promoting public access to works under copyright law. Fair use reflects a fundamental principle of copyright law, namely, that rights of copyright owners are limited.<sup>274</sup> When a use is considered "fair," the user is exempted from copyright liability. The following discussion looks at two aspects of cyberspace that are relevant to fair use doctrine. One is the on-going controversy over whether personal use should be considered fair use. A second issue relevant to fair use analysis in cyberspace is the effect of the availability of licensing arrangements and monitoring measures.

##### 1. Is Personal Use a Fair Use?

One of the most controversial issues in fair use is whether per-

<sup>273</sup> Furthermore, fair use is a defense, and therefore imposes the burden of proof on defendants, namely, potential users.

<sup>274</sup> See Reichman, *supra* note 242, at 821.

sonal use should be considered fair use. Personal use is "the private use of a work for one's own learning, enjoyment, or sharing with a colleague or friend—without any motive for profit."<sup>275</sup> The advocates of the personal use exemption maintain that widespread use of information by individuals is the ultimate purpose of copyright law, and that the law should only protect copyright owners against commercial competitors in the market place.<sup>276</sup> Opponents claim, however, that even private noncommercial copying provides users with the benefit of a copy for which they haven't paid, and therefore reduces the expected return of copyright owners.<sup>277</sup>

This controversy takes on new meaning in a digitized context. Part II demonstrated how users become major players in the dissemination of information over digital networks. This change in the role of users from passive consumers to potentially active participants upsets the balance previously drawn between the public right of access and the need to secure the economic interests of copyright owners.

On the one hand, cyberspace makes personal use of copyrighted works for noncommercial purposes feasible for more people. Increasing direct access of individuals to works is one of the most significant advantages of digital technology. Traditionally, the process of communicating a message to an audience required economic resources. The large investment involved in publishing a book or producing a record, imposed a centralized mechanism of selection and allowed only the few who could afford the necessary investment or who had established themselves in the market, to become published.<sup>278</sup> Networking, by contrast, allows individual

<sup>275</sup> PATTERSON & LINDBERG, *supra* note 230, at 11-12.

<sup>276</sup> In *Sony*, for instance, the Supreme Court presumed that private noncommercial copying is fair use. *Sony*, 464 U.S. at 455. ("Copying for commercial gain has a much weaker claim to fair use than copying for personal enrichment."); see *Williams & Wilkins Co. v. United States*, 487 F.2d 1345 (Cl. Cl. 1973), *aff'd per curiam*, 420 U.S. 376 (1975) (holding that personal individual photocopying is non-infringing). The status of photocopying for personal use is less clear under *Basic Books, Inc. v. Kinko's Graphics Corp.*, 785 F. Supp. 1522 (S.D.N.Y. 1991). Personal use is protected under some European laws—section VI of the German Act entitles users to copy or disseminate a work without the author's consent. See Netanel, *supra* note 259, at 43.

<sup>277</sup> Justice Blackmun's dissent in *Sony* noted: "[t]he making of even a single videotape recording at home falls within this definition; the VTR user produces a material object from which the copyrighted work later can be perceived. Unless Congress intended a special exemption for the making of a single copy for personal use, I must conclude that VTR recording is contrary to the exclusive rights granted by section 106(1)." *Sony*, 464 U.S. at 464 (Blackmun, J., dissenting). And further, "[n]either the statute nor its legislative history suggests any intent to create a general exemption for a single copy made for personal or private use." *Id.*

<sup>278</sup> See *supra* notes 169-81 and accompanying text on intermediaries and direct communication.

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users to directly communicate their works to others and liberates authors from dependency on intermediators. It makes it possible for an increasing number of people to become self-published authors. Information may thus increasingly be originated by individual users, and continuously updated, revised and reused by other users. Users are able to share information in high quality with a large number of people. Thus, cyberspace enhances the opportunities of a wide range of users to effectively participate in exchanging information. The promotion of learning in society no longer depends solely on appropriate incentives for publishers, but also on direct exchanges among users.

On the other hand, personal use by individuals may threaten the commercial interests of copyright owners in an unprecedented way. The ability of individual users to cause a substantial commercial harm to copyright owners by sporadic non-commercial uses is typical of a digitized context.<sup>279</sup> No special equipment training or skills are necessary for downloading a file, changing it or redistributing it. Usually the same equipment that allows access to a work would permit its redistribution. Individual users are not competing with the copyright owner in the market place, and in many cases they would not receive any financial advantage from disseminating works over cyberspace. Yet, they may still effect this market. There is an accumulative effect of a large number of users, each using the work individually for personal purposes and displacing the market of the copyrighted work.

The ability of individual users to cause harm to copyright owners by personal use is a fundamental feature of cyberspace. Consequently, in a digitized context users are increasingly becoming the target of copyright owners. In this sense, cyberspace diverts substantially from traditional copyright environments. Even though copyright owners have always insisted that the scope of copyright covers private or non-commercial use, these rights are rarely enforced.<sup>280</sup> Digital networks, however, establish direct communication among users and distributors, and creates greater capabilities for monitoring the use of works. Therefore, the likelihood of ac-

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<sup>279</sup> For instance, the ability of individual users to threaten the market for CD's by producing perfect copies of recorded music by using DAT (Digital Audio Tape) led to the enactment of the Audio Home Recording Act of 1992, Pub. L. No. 102-563, § 1, 106 Stat. 4248; see MELVILLE B. NIMMER, NIMMER ON COPYRIGHT §§ 8B.01[A], 8B.6-7.

<sup>280</sup> See Litman, *supra* note 224, at 35 ("If copyright owners insisted, as sometimes they did, that copyright gave them broad rights to control their works in any manner and in all forms, the practical costs of enforcing those rights against individual consumers dissuaded them from testing their claims in court."); see also *Audio Home Recording Act of 1991: Hearing on H.R. 3204 before the Subcomm. on Intellectual Property and Judicial Administration of the House Comm. on the Judiciary*, 102d Cong., 2d Sess. (1993).

tual infringement suits against private users increases.<sup>281</sup> Furthermore, achieving consensus over the claim of copyright owners to control private uses may effect their rights, even in the absence of enforcement efforts. This is because many users may wish to avoid potential liability for copyright infringement, even if the odds of being sued are low. Such expensive definition of owners' rights becomes the underlying assumption of the current debate over the future of copyright in cyberspace.<sup>282</sup>

The change of circumstances in cyberspace also means, however, that granting owners a right to control personal use would involve different considerations. The shift to personal use shakes the fundamental scheme of copyright law. The ultimate goal of granting copyright protection is to allow authors to share works in public, and at the same time to protect their economic interests in the market. Striking a balance between users' rights of personal use, and owners' economic interests involves the following issues.

First, enhancing the ability of individual users to access, use, and transform preexisting works is the ultimate purpose of copyright law.<sup>283</sup> Users are playing an active role in both disseminating and retrieving information.<sup>284</sup> The power of copyright owners to

<sup>281</sup> The reason is that for copyright owners to have an incentive to sue for copyright infringements by private users, they must perceive their expected damages (namely, the actual harm multiplied by the odds of winning in litigation) as higher than the cost of detecting infringement and bringing a suit to court. Since in a non-digitized environment detecting infringements by private users was extraordinarily expensive, the likelihood of suit was very low. In cyberspace, however, with direct communication between users and distributors, and the greater capabilities of technical control, the likelihood of actual suits by private users for copyright infringements would increase.

<sup>282</sup> See PATTERSON & LINDBERG, *supra* note 230, at 7-11 (arguing that the ultimate reason for the misconception of copyright law is due to copyright owner's effort to promote an industry-oriented view of copyright, and warning that "[i]f such fallacies go unchallenged long enough, they are likely to become a substitute for the truth"); see also Litman, *supra* note 224, at 36 ("[B]y asserting that what members of the public think of as ordinary use of copyrighted works was, in fact, flagrant piracy, and that, as such, it undermined the national economy, copyright owners may well have won a rhetorical battle the rest of the country never realized was being fought").

<sup>283</sup> *Sony*, 464 U.S. at 431-32.

The limited scope of the copyright holder's statutory monopoly, like the limited copyright duration required by the Constitution, reflects a balance of competing claims upon the public interest: Creative work is to be encouraged and rewarded, but private motivation must ultimately serve the cause of promoting broad public availability of literature, music, and the other arts. The immediate effect of our copyright law is to secure a fair return for an "author's" creative labor. But the ultimate aim is, by this incentive, to stimulate artistic creativity for the general public good. "The sole interest of the United States and the primary object in conferring the monopoly," this Court has said, "lie in the general benefits derived by the public from the labors of authors."

*Id.* (citations omitted).

<sup>284</sup> The potentially interactive nature of the use of digitized works may also support finding of fair use. Thus, in *Acuff-Rose*, 114 S. Ct. 1164, the Supreme Court held that the central purpose of fair use analysis is to allow transformative uses of works, namely, a use

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control and limit personal use would increase the social costs involved in applying copyright law to cyberspace. The potential public benefit in facilitating personal use and decentralization should be weighed against the prospective loss of private gain.<sup>285</sup>

Second, copyright law has always reflected a trade-off between the cost of restricting the availability of the work against the benefits of providing incentives to create the work in the first place. Finding the correct balance between access and incentives is the central issue in any copyright case.<sup>286</sup> The legal powers granted under copyright law seek to guarantee incentives to create. They allow copyright owners to prevent competitors from distributing their works at a lower price, thus decreasing the incentives to create.<sup>287</sup> Copyright law is thus equipped to balance the rights of copyright owners against competitors in the market place.<sup>288</sup> A monopoly over personal use levies a tax on *every* use, not just uses for commercial gains. It may further reduce competition and consequently the use of copyrighted works.<sup>289</sup>

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which supplants the original, adds something new, or alters the first with new expression, meaning, or message.

Although such transformative use is not absolutely necessary for a finding of fair use, . . . the goal of copyright, to promote science and the arts, is generally furthered by the creation of transformative works. Such works thus lie at the heart of the fair use doctrine's guarantee of breathing space within the confines of copyright, . . . and the more transformative the new work, the less will be the significance of other factors, like commercialism, that may weigh against a finding of fair use.

*Id.* at 1171.

<sup>285</sup> See GOLDSTEIN, *supra* note 248, at 821 (arguing that fair use doctrine would exempt certain unauthorized uses because the resulting public benefit is thought to outweigh the loss of private gain).

<sup>286</sup> S.J. Liebowitz, *Copyright Law, Photocopying, and Price Discrimination*, 8 RESEARCH IN L. & ECON. 181, 184 (1986); see Landes & Posner, *supra* note 190, at 326.

<sup>287</sup> The underlying assumption of the copyright model is that to guarantee an optimal level of investment in the creation of new works, it is necessary to allow creators to reap that investment. Publishers need to cover cost of development plus cost of distribution. Competitors, however, may copy the work and only pay the cost of distribution. Consequently, competitors are able to charge a lower price for works, and impair the ability of publishers to reap the rewards of their initial investment. If copies made by the creator are priced close to marginal cost, others may be discouraged from making copies. However, creator's total revenues may not be sufficient to cover the cost of creating the work. If the creator cannot reap the marginal value of his efforts, he will undersupply the works. Copyright law seeks to correct this market failure by granting owners with the legal power to prevent such exploitation of their works. See Landes & Posner, *supra* note 190, at 326.

<sup>288</sup> PATTERSON & LINDBERG, *supra* note 230, at 192 ("The only protection that copyright owners need is protection against the piracy of their works by competitors in the marketplace.")

<sup>289</sup> *Id.* Patterson & Lindberg argue that protection against consumers rather than against competitors, means securing profits from monopoly rather than a market.

The greater the protection they can obtain, of course, the less their competition - and the higher the price they can charge. The less their protection, the more competitive their prices must be. The ultimate goal of such copyright owners, it appears, is to transmute copyright from a device to protect the work for a market (a limited monopoly) into a device for guaranteeing a profit (an

Furthermore, the right of the public to access copyrighted works is partly secured under the 1976 Copyright Act by special privileges of libraries under section 108.<sup>290</sup> The transition from distribution of copies to dissemination by access suggests that libraries would either cease to exist, or transform their role and function. Libraries may no longer facilitate users' access to physical copies of works. In an entirely networked environment it is no longer necessary to administer large warehouses of books, which involve large expenses of space and maintenance and lack the advantages of on-line information such as connectivity with other information, manipulability and accessibility.<sup>291</sup> Libraries would be transformed from depositories of books into access providers. The weakening role of libraries requires, however, expanding the privileges of individual users to use copyrighted works. This is because the public interest in providing free access to information may no longer be satisfied through the privileges of libraries.

Fair use analysis, however, should also allow consideration of personal use that has the effect of a "competitive use." The Supreme Court in *Sony* had recognized this potential harming effect of personal use:

A challenge to a noncommercial use of a copyrighted work requires proof either that the particular use is harmful, or that *if it should become widespread, it would adversely affect the potential market for the copyrighted work.*<sup>292</sup>

Applying this standard in cyberspace, however, involves a high cost. The enhanced opportunities of personal use are of great value both for the constitutional purpose of promoting learning, and from the democratic perspective of decentralizing meaning-making processes and facilitating effective participation. Any restric-

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absolute monopoly). In other words, they want copyright to protect the work not only against the competitor but also against the customer.

*Id.* at 192.

<sup>290</sup> 17 U.S.C. § 108.

<sup>291</sup> See Lauren H. Seiler, *The Concept of Book In the Age of the Digital Electronic Medium*, 11 LIB. SOFTWARE REV. 19 (1992) (predicting that libraries will not remain as warehouses for stored information, but will be transformed into on-line databases.); see also RICHARD LANHAM, *THE ELECTRONIC WORD, DEMOCRACY, TECHNOLOGY AND THE ARTS* 134 (1993).

The library world feels depayse today, and rightly so. Both of its physical entities, the buildings and the books they contain, can no longer form the basis for planing. And the curatorial function has metamorphosed, to borrow a phrase from an archivist acquaintance, "from curatorial to interpretive." Librarian of electronic information find their job now a radically rhetorical one—they must consciously construct human attention-structures rather than assemble a collection of books according to commonly accepted rules.

*Id.*

<sup>292</sup> *Sony*, 464 U.S. at 451.

tion on personal use would repress, rather than promote, the opportunities for individuals' participation in exchanging information.

It may be useful, instead, to distinguish between the accumulative effect of reproduction by individual users for personal use, and personal use that mimics the effect of a competitor. Thus, a use that merely reduces the market for the original work, denying the owner compensation for a particular use, may still be considered fair use. On the other hand, a use that assumes the role of a competitor should be excluded from fair use. That includes any act that satisfies a large demand for a copyrighted work by directly competing with the copyright owner, such as mass distribution of copies of the work.

## 2. The Ability to Control and License the Use

In most transactions that involve tangible goods, the owner is able to physically exclude others from utilizing the good without a license.<sup>293</sup> Excluding non-payers from the use of intangibles had always been a problem.<sup>294</sup> Copyright law seeks to substitute the physical ability to exclude non-payers with the legal right to use the power of the state to exclude certain exploitations of copyrighted works.<sup>295</sup> The more excludable a work is, however, the less justification there is for copyright protection.<sup>296</sup>

The shift from distribution of copies to electronic dissemination might give distributors more control over the use of their works. Distribution by access allows copyright owners to rely on technological means to monitor the use<sup>297</sup> and charge different

<sup>293</sup> Thus, a landlord may either fence her parcel, or hire guards to protect the property against trespasses. Property interest in tangible goods and intangibles had always been distinguished on the ground that intangibles are non-excludable, and therefore require the intervention of the state to allow their distribution. The reality of rights in tangibles, however, challenges this distinction. Property laws and the police may play a role in excluding trespasses by defining the boundaries of rights one exercises over one's property and deterring unauthorized use of property. It is therefore inaccurate, and even misleading, to argue that property rights in tangibles rely entirely on the ability to physically exclude non-payers.

<sup>294</sup> See Landes & Posner, *supra* note 190, at 327.

<sup>295</sup> Reichman, *supra* note 242, at 820-21.

<sup>296</sup> Landes & Posner, *supra* note 190, at 326.

<sup>297</sup> Reichman, *supra* note 242, at 823.

Because subscribers entering any given data base must log in and out, the proprietors' physical control over the data may enable them to charge for each and every use of electronically processed information, even though the copyright law itself grants no exclusive right to control either end use in general or the use of disparate facts in particular. Even when dissemination occurs in hard copy form, such as a CD[-]ROM, digital technology facilitates the control of end use by enabling intermediate providers, such as libraries, to monitor actual

prices for different uses and/or users.<sup>298</sup> Thus, it gives copyright owners the power to prevent *any* unauthorized use and not just uses that are protected under copyright law.<sup>299</sup> Consequently, copyright owners may exercise more control over the use of their works.

Furthermore, dissemination in cyberspace substantially enhances the capabilities of licensing. Networking establishes direct communication between publishers and users. It provides the means for negotiating and entering licensing agreements for different uses of works. Since on-line providers control the physical access to their works, they may make access contingent upon accepting the terms of their license.<sup>300</sup> How should the feasibility of licensing effect the fair use analysis?

The market approach to fair use maintains that a use should be considered fair if, among other things, the user could not have

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usage and by permitting originators to charge, directly or indirectly, for all uses.

*Id.*

<sup>298</sup> For instance, copyright owners could distribute encrypted works that could only be read by paying users.

<sup>299</sup> Reichman, *supra* note 242, at 823-24.

<sup>300</sup> America On-line, for instance, subjects any use of its services to the following license:

(a) Proprietary Rights. All content is copyrighted as a collective work under the U.S. Copyright laws, and AOL Inc. owns a copyright in the selection, coordination, arrangement and enhancement of such content. Members may not modify, publish, transmit, participate in the transfer or sale, create derivative works, or in any way exploit any of the content, in whole or in part. If no specific restrictions are displayed, members may make copies of portions of content, including copyrighted material, trademarks, or other proprietary materials, provided that the copies are made only for member's personal use.

*America On-Line Terms of Service.* The validity of such license restrictions may be challenged under both contract law and copyright law. From a contractual perspective, it is necessary to determine whether a contract was formed, namely whether there was adequate acceptance, whether the formalities of forming a contract were satisfied and, and also whether the license's provisions are enforceable under the unconscionability doctrine. From a copyright perspective it is then necessary to examine whether the license provisions are consistent with copyright doctrines, and whether the laws that hold them valid are preempted by copyright law. Courts may also refuse to enforce license provisions that restrict the user's rights under copyright law by declaring them contrary to public policy. Thus, it was held that there is no obligation to pay royalties pursuant to a copyright license after the expiration of the underlying copyright. *April Prods. v. G. Schirmer, Inc.*, 126 N.E.2d 283 (N.Y. 1955). Technological means also provide the means for monitoring and enforcing contractual provisions. The overall effect of dissemination on the NII is to enhance the capability of copyright owners to collect compensations for the use of their works. See Reichman, *supra* note 242, at 824-25.

Indeed, by facilitating implementation of the pay-per-use principle on a scale hitherto unthinkable, computerization tends to reduce the need for the blanket licenses and collection agencies that other copyright industries employ. In effect, the electronic information publisher becomes increasingly capable of serving as his own collection society, subject to no consent decrees, no membership controls, and no external regulation other than the threat of litigation for abuse of copyright.

*Id.*

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purchased the use through the market.<sup>301</sup> An uncompensated use is justifiable, under this approach, when it is impossible to reach consensual bargain.<sup>302</sup> For instance, high transaction costs would traditionally create such a market failure. If the costs of receiving a license are higher than the anticipated profits from the transaction, users will be reluctant to make such use, even though it may be socially desirable.<sup>303</sup>

Yet, considering the ability to license as the basis of fair use analysis creates a circular argument.<sup>304</sup> This way of posing the question of fair use assumes the answer. Rather than defining what *should* be the scope of copyright monopoly, and therefore what uses are to be considered beyond its reach, the license standard assumes that every use which copyright owners would offer to license should be covered by copyright.<sup>305</sup>

This issue was the focus of the court in *American Geophysical Union v. Texaco, Inc.*<sup>306</sup> The court examined the applicability of the fair use doctrine to photocopying done by a researcher in a commercial corporation for personal archival purposes.<sup>307</sup> The court

<sup>301</sup> See GOLDSTEIN, *supra* note 247, at 821 (describing the Private Benefit Approach).

<sup>302</sup> The underlying assumption of this principle is that in the absence of any market barriers, the parties would achieve the most efficient allocation of resources. See Wendy Gordon, *Fair Use as Market Failure: A Structural and Economic Analysis of the Betamax Case and its Predecessors*, 82 COLUM. L. REV. 1600 (1982). This argument, however, takes property rights of the copyright owner as its baseline, and defines exceptions for this absolute right under market conditions which create inefficiencies. Alternatively, one may identify the situations in which property rights are justifiable in the first place. From this perspective, the inability to contract serves to justify copyright law, and the ability to contract may undermine the justification for copyright protection altogether.

<sup>303</sup> *Id.* at 1628-29.

<sup>304</sup> See *Williams & Wilkins*, 487 F.2d at 1357.

It is wrong to measure the detriment to plaintiff by loss of presumed royalty income—a standard which necessarily assumed that plaintiff had a right to issue licenses. That would be true, of course, only if it were first decided that the defendant's practices did not constitute "fair use". In determining whether the company has been sufficiently hurt to cause these practices to become "unfair," one cannot assume at the start the merit of the plaintiff's position.

*Id.*

<sup>305</sup> This view was reflected in the dissenting opinion in *American Geophysical Union v. Texaco, Inc.*, 97 F.3d 881, 904 (2d. Cir. 1994).

There is a circularity to the problem: the market will not crystallize unless courts reject the fair use argument that Texaco presents; but, under the statutory test, we cannot declare a use to be an infringement unless (assuming other factors also weigh in favor of the secondary user) there is a market to be harmed.

*Id.*

<sup>306</sup> *Id.* at 881.

<sup>307</sup> The availability of licenses for the allegedly infringing use is considered under the fourth statutory fair use factor, namely, "the effect of the use upon the potential market for or value of the copyrighted work." 17 U.S.C. § 107(4). In analyzing this fourth factor, which the Supreme Court and commentators recognize as "the single most important element of fair use," courts would assess, among other things, the availability of license. See *Harper & Row*, 471 U.S. at 566.

held that the impact on potential licensing revenues should be considered in assessing the fourth factor, namely, "the effect upon the potential market for or value of the copyrighted work."<sup>308</sup> The court recognized, however, that not every effect on potential licensing revenues should enter the fair use analysis. It is only licensing of "traditional, reasonable, or likely to be developed markets" that is appropriate for consideration under the fourth factor.<sup>309</sup>

The court's reasoning, however, fails to distinguish between the right of copyright owners to *license their copyright* and their power to *license the use of the work*. Copyright law provides owners with control over the *use of the copyright*, namely, the uses that fall within the scope of their exclusive rights. It does not empower owners to control *any use of their works*.<sup>310</sup> The copyright interest that is protected is a limited one. It lasts only a limited period and is restricted under the statutory provisions of sections 107-120.<sup>311</sup> Fair use itself is defined as a limitation on the copyright owner's exclusive rights.<sup>312</sup> As the Supreme Court in *Acuff-Rose* had recently stated, fair use doctrine is a necessary exception to authors' monopoly privileges needed in order to fulfill copyright's purpose to promote the arts and sciences.<sup>313</sup> Therefore, the question of what would be considered a use that the copyright owner may be license, depends on the extent to which the use is necessary under considerations of public policy.<sup>314</sup> It does not depend on the

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<sup>308</sup> *American Geophysical Union*, 37 F.3d at 897 ("It is indisputable that, as a general matter, a copyright holder is entitled to demand a royalty for licensing others to use its copyrighted work . . . and that the impact on potential licensing revenues is a proper subject for consideration in assessing the fourth factor."); see *Acuff-Rose*, 114 S. Ct. at 1178; *Harper & Row*, 471 U.S. at 568-69.

<sup>309</sup> *American Geophysical Union*, 37 F.3d at 898. This standard allowed the court to distinguish *Williams & Wilkins* from the circumstances at hand. The Second Circuit quoted the District Court: "To the extent the copying practice was 'reasonable' in 1973 [when *Williams & Wilkins* was decided], it has ceased to be 'reasonable' as the reasons that justified it before [photocopying licensing] have ceased to exist." *Id.* at 892 (quoting 802 F. Supp. at 25).

<sup>310</sup> For a discussion of this distinction, see PATTERSON & LINDBERG, *supra* note 230, at 181-86. Publishers however, seek to expand their power by "acting on a belief that any use of the work is the use of the copyright and vice versa." *Id.* Patterson & Lindberg demonstrate their argument by analyzing the provisions of common copyright licenses and copyright notices, including the license of the Copyright Clearance Center ("CCC"). The CCC license purports to license any use of published works notwithstanding the provisions of section 107 ("Fair Use"), or section 108 ("Limitations on Exclusive Rights: Reproduction by Libraries and Archives"), which specifically exclude certain uses from the monopoly of the copyright owner. *Id.* at 183-84.

<sup>311</sup> 17 U.S.C. §§ 107-120.

<sup>312</sup> 17 U.S.C. § 107 ("Limitation on exclusive rights: Fair Use").

<sup>313</sup> See *Acuff-Rose*, 114 S. Ct. at 1169 ("From the infancy of copyright protection, some opportunity for fair use of copyrighted materials has been thought necessary to fulfill copyright's very purpose, 'to promote the Progress of Science and useful Arts . . .'" (quoting U.S. CONST. art. I, § 8, cl. 8)).

<sup>314</sup> For a discussion of the public benefit approach to fair use see generally GOLDSTEIN,

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owner's willingness to license a certain use.<sup>315</sup>

The interpretation of fair use doctrine should be consistent with the constitutional provisions.<sup>316</sup> The feasibility of licensing arrangements should only be an affirmative criterion. In other words, when it is impossible to license a certain use, or prohibitively expensive to do so due to high transaction costs, the fourth factor would support the finding of fair use. Yet, the fact that a license is available does not weigh the fourth factor against fair use. This is supported by the cases cited by the Supreme Court in *Acuff-Rose*. In all of those cases, the availability of a license was considered only as a negative standard, namely, as a factor that limits the right of the copyright holder and supports the finding of fair use.<sup>317</sup>

The availability of licenses becomes even more critical in the context of digital networks. In digital dissemination all uses become potentially infringing. The availability of contractual arrangements between distributors and users introduces a threat to "the public's ability to foster certain socially beneficial uses of that same information at acceptable costs."<sup>318</sup> An approach that limits fair use doctrine to incidents where a license is unavailable expands the control enjoyed by publishers over uses of their works. In such a case copyright law would serve to supplement an already expanded power of copyright owners to control the use of their works. This is complemented by the physical ability to monitor the

*supra* note 247 (public benefit approach to fair use will excuse uses if the social benefit of the use outweighs the loss to the copyright owner).

<sup>315</sup> The defendant in *American Geophysical Union*, made a similar argument. Texaco argued that considering the impact on potential licensing revenues assumes that publishers are entitled to demand and receive licensing royalties and fees for photocopying. The question of whether publishers are entitled to demand fees for permission to make photocopies, however, is the very question that the fair use analysis is supposed to answer. See 37 F.3d at 897.

<sup>316</sup> 464 U.S. at 432 ("When technological change has rendered its literal terms ambiguous, the Copyright Act must be construed in light of this basic purpose.") (citations omitted).

<sup>317</sup> In other words, the absence of a market or an ability to license favored the finding of fair use. None of the cases cited by the court supported the conclusion that the availability of licenses negates the finding of fair use. In *Acuff-Rose*, the Supreme Court found support for the finding of fair use in the "unlikelihood that creators of imaginative works will license critical reviews or lampoons of their works." 114 S. Ct. at 1178. The Court cited other courts that found the fourth factor to support the finding of fair use when the allegedly infringing use effects only "a potential market or value that the copyright holder has not typically sought to, or reasonably been able to, obtain or capture." *American Geophysical Union*, 37 F.3d at 898 (quoting *Twin Peaks*, 996 F.2d at 1377 and noting that fourth factor will favor secondary user when use "filled a market niche that the [copyright owner] simply had no interest in occupying"); *Pacific and S. Co. v. Duncan*, 744 F.2d 1490, 1496 (11th Cir. 1984), *cert. denied*, 471 U.S. 1004 (1985) (noting that the fourth factor may not favor copyright owner when the secondary user "profits from an activity that the owner could not possibly take advantage of").

<sup>318</sup> Reichman, *supra* note 242, at 824.

use of the work and would lead to an abolishment of fair use defense.

From the perspective of social dialogue and political participation, the inability of users to use and act upon copyrighted works, along with their absolute dependency on licensing by the copyright owner is dangerous. "For if the copyright owner has the power to grant a license to use the work, the copyright owner would then also have the power to deny the license completely."<sup>319</sup> It is widely recognized that some uses, such as parodies, would usually not be licensed by copyright owners.<sup>320</sup> Less attention, however, was granted to the power of copyright owners to refuse to license certain uses in order to maintain their economic and or political power.<sup>321</sup> The ability of copyright owners to license a use and thus to establish an additional market and prospective profits, does not call for copyright protection of that power. It is conceivable that in some cases the law should not allow copyright owners to exercise both their monopoly under copyright law and under licenses.

The content of the fair use doctrine would define the future of the public domain; namely, the works and uses that are free for all to use. The public domain is no less essential to copyright than the rights of copyright owners. Enriching the public domain is the ultimate purpose of copyright law. Cyberspace poses a direct threat to the public domain that is no less valid than the threats it poses to current interests of copyright owners. These considerations should enter the fair use calculus in specific cases of infringement in cyberspace.

#### CONCLUSION

In the introduction to his book *Copyright Highway*, Paul Goldstein redefines the challenges presented to copyright law by digital networks:

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<sup>319</sup> PATTERSON & LINDBERG, *supra* note 230, at 185-86. Patterson & Lindberg describe this as "a matter of censorship in both instances, although for profit motives rather than political reason." *Id.*

<sup>320</sup> See GOLDSTEIN, *supra* note 247, at 238. Goldstein suggests that "there are two types of uses that copyright owners will usually be reluctant to license: crude parodies or advertisements quoting from the copyrighted work." *Id.* In those cases, he argues, the use should be protected as fair under the fourth factor; the copyright owners should seek relief under other regimes (such as reputational torts, passing off and misrepresentation).

<sup>321</sup> This concern links considerations of property and democracy, allocation of resources and free speech. Copyright owners may use their power to restrict licenses in order to maintain their monopoly power. The centralized structure of the information flow which draws a clear line between producers and paying consumers is beneficial for copyright owners, and they are most likely to maintain it. What incentive would a copyright owner have to license users to create their own customized version of a movie?



This book does not ask, as would some legal specialists, whether copyright will survive the new technologies. That question is about as bootless as asking whether politics will survive democracy. The real question is what steps it will take to ensure that the promised new era of information and entertainment survives copyright.<sup>322</sup>

This Article suggested that the promise of cyberspace lies first and foremost in its potential for decentralizing and democratizing social dialogue. Cyberspace has the potential of transforming the production and dissemination of knowledge. It has the potential of transforming our social and cultural structures.

This paper demonstrated how copyright law, when combined with new technological means of controlling and monitoring use, may enhance the power of copyright owners to restrict access to information in an unprecedented way. The overall effect of enforcing copyright law in cyberspace is to limit the public domain. The combination of physical control over the use of information, on the one hand, with property rights, on the other hand, may give copyright owners absolute control over the use of their works. Owners get both the physical control over any access to their works, and legal control provided by copyright law.

The important advantage of cyberspace is its potential for enhancing wide participation of individuals in social dialogue. Participation, from a democratic perspective, has a value in and of itself. Expensive copyright suppresses such participation by allowing copyright owners to limit the use of information. At a minimum, expensive copyrights allow owners to repress competition with their works and thus secure their economic interests at a price of restricting diversity of information and cultural forms. At the extreme, expensive copyright may also be used to suppress the use of information for purposes that are inconsistent with the long term political and economic goals of copyright owners.

"Universal Service" became one of the prevalent slogans of the public debate over the future of cyberspace. The public debate over universal access had so far focussed on issues such as who controls the wires and to what extent access to cyberspace should be regulated. But universal access is also about the ability to access content in cyberspace, and to take part in its creation. If copyright law does not evolve to take those considerations into account, the benefits of cyberspace will be denied to the public and distributed among a limited group of stakeholders.

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<sup>322</sup> GOLDSTEIN, *supra* note 1, at 36.