

Accommodating Technological Innovation: Identity, Genetic Testing and the Internet

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* Associate Professor of Law, Seton Hall University School of Law. I am deeply indebted to Yochai Benkler for his insightful guidance and continued support. I am also grateful to Jerome Bruner, Peggy Davis, Rochelle Dreyfuss, Thomas Dreier, Niva Elkin-Koren, Dorothy Nelkin, Helen Nissenbaum, David Richards, and Rebecca Tushnet for their comments. In addition, I would like to thank Amit Solomon and the participants of the J.S.D. colloquium at the New York University School of Law for their comments, generous support and for sharing their stories, in particular I owe thanks to: Or Baron, Piibe Jogi, Nico Krisch, Sagit Mor, Yair Sagy, Gila Stopler, Tal Tirosh, and Zvi Triger. Finally, I would like to thank the Engelberg Center on Innovation Law & Policy at the New York University School of Law for its financial support. All errors are mine alone.

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I. INTRODUCTION

History demonstrates the ability of technological innovation to bring about legal change. It shows that technological innovation can both create and bring to the forefront legal values that for years lurked in the shadows of legal discourse. The creation of privacy and its long trail of expansion is a prime example of the force technological innovations have in shaping legal values. In a sense, privacy protection is the offspring of photography and the progeny of wiretapping.¹

Yet, it is well known that the law lags behind technology.² Legal failure to accommodate technological innovation is traditionally related to the nature of the common law legal system. Specifically, such failures are tied to the difficulty of transforming legal doctrine due to the need to rely on precedent and analogy.³ Consequently, the

1. See Louis D. Brandeis & Samuel D. Warren, *The Right to Privacy*, 4 HARV. L. REV. 193, 195 (1890); see also *Katz v. United States*, 389 U.S. 347 (1967); *Berger v. New York*, 388 U.S. 41 (1967); *Olmstead v. United States*, 277 U.S. 438, 476-85 (1928) (Brandeis, J., dissenting). The right to privacy was further expanded through the pressure exerted by a broad spectrum of technological innovations, including the birth control pill and computerized databanks. See, e.g., *Whalen v. Roe*, 429 U.S. 589 (1977); *Griswold v. Connecticut*, 381 U.S. 479 (1965).

2. See, e.g., *Rosen v. Ciba-Geigy Corp.*, 78 F.3d 316, 319 (7th Cir. 1996) ("Law lags science; it does not lead it."), quoted in *Rider v. Sandoz Pharm. Corp.*, 295 F.3d 1194, 1202 (11th Cir. 2002); *Technology Chasm Should Be Closed*, SHREVEPORT TIMES, Feb. 18, 2003, at 7; Jamie Beckett & Jon Swartz, *Clicking for Contraband: The Law Can't Catch up to the Internet, Where Any Desire Can Be Satisfied for a Price*, S.F. CHRON., Mar. 1, 1999, at A1.

3. See *Gallagher v. Duke Univ.*, 638 F. Supp. 979, 981 (M.D.N.C. 1986); Michael Meyerson, *Virtual Constitution: The Creation of Rules for Governing Private Networks*, 8 HARV. J. L. & TECH. 129, 129 (1994).

need for legal change is evaluated in a fragmented manner within the framework of specific rules. Legal analysis focuses on whether an existing law can be used to govern a new technology. For example, a typical judicial inquiry would analyze how the Electronics Communications Privacy Act, which was created to govern communication modes that preceded the Internet, can be applied to Internet technology.⁴ Our assessment of the need for legal change is hence fragmented into doctrinal categories.

Although major technological innovations often create the need and the conditions for transforming the legal landscape, the potential for legal change is impeded by doctrinal fragmentation. Fragmentation obstructs our ability to fully understand the social impact of a technological innovation. It limits our capacity to correctly evaluate the need for legal change, consequently affecting our ability to provide the appropriate legal resolutions. Furthermore, the fragmentation of our viewpoint causes us to underestimate the full social impact of a new technology—further reducing the likelihood of legal change.

To remedy the drawbacks of the current approach, I propose looking beyond doctrinal partitions and the traditional focus on the adjustment of specific rules to accommodate new technologies. Instead, I suggest a socially oriented approach that focuses on the impact of technological innovation on social structures, institutions, and values and on our ability to mold these social influences by restructuring uses of new technologies.⁵ Furthermore, I look beyond

4. See, e.g., *In re DoubleClick, Inc. Privacy Litig.*, 154 F. Supp. 2d 497, 507-11 (S.D.N.Y. 2001). One court commenting on the nature of the techno-legal inquiry remarked: “Not surprisingly, much of the legal analysis of Internet related issues has focused on seeking a familiar analogy for the unfamiliar.” *Am. Libraries Ass’n v. Pataki*, 969 F. Supp. 160, 161 (S.D.N.Y. 1997). For a discussion of medium-specific compartmentalization in the telecommunications arena, see generally Monroe E. Price & John F. Duffy, *Technological Change and Doctrinal Persistence: Telecommunications Reform in Congress and the Court*, 97 COLUM. L. REV. 976 (1997).

5. I have written about the reciprocal interaction between the technological, social, and legal spheres elsewhere. Gaia Bernstein, *The Socio-legal Acceptance of New Technologies: A Close Look at Artificial Insemination*, 77 WASH. L. REV. 1035, 1039-40 (2002). My approach is influenced by a movement of theoreticians and engineers in the field of computer design addressing the need to “design for values.” These writers explain that since value-laden choices are inevitably part of the design process, designing for values is necessary to ensure that ethical issues related to human values are considered in the early stages of the design process. For literature focusing on the need to “design for values,” see Batya Friedman & Peter H. Kahn, Jr., *Human Agency and Responsible Computing: Implications for Computer System Design*, in HUMAN VALUES AND THE DESIGN OF COMPUTER TECHNOLOGY 221 (Batya Friedman ed., 1997); Batya Friedman & Helen Nissenbaum, *Bias in Computer Systems*, in HUMAN VALUES AND THE DESIGN OF COMPUTER TECHNOLOGY, *supra*, at 21; Ben Shneiderman & Anne Rose, *Social Impact Statements: Engaging Public Participation in Information Technology Design*, in HUMAN VALUES AND THE DESIGN OF COMPUTER TECHNOLOGY, *supra*, at 117; Helen Nissenbaum, *How Computer*

technological partitions by examining together two technological innovations—genetic testing and the Internet—and their common impact on our normative conceptions of identity. In this Article, I study an instance in which the social tensions created by the two new technologies create the need to elevate a legal interest from the margins of legal discourse into the mainstream of legal debate.

First, I show that a host of seemingly unrelated social and legal controversies emanating from these technologies can be traced to a common origin. Genetic testing and the Internet continuously alter the social structures through which we perceive our identity, thereby causing social transformations. These transformations apply to controversies as diverse as the physician's duty to warn relatives of a patient's genetic condition, commercial profiling on the Internet, and the flourishing of "anorexia as lifestyle" Internet groups. It becomes apparent that the study of identity tensions is important to achieving a full understanding of the social change brought about by the aforementioned technologies. By obtaining a comprehensive picture of the degree and nature of the pressures on our normative conceptions of identity we will be able to improve our evaluation of the need for legal change and to tailor the appropriate legal resolutions.

Secondly, I show that despite the role of identity tensions in controversies implicating genetic testing and the Internet, these tensions are not addressed in the legal debate. Furthermore, our legal tools often fail to even indirectly protect identity interests.

Third, I demonstrate that legal failure to resolve identity tensions often stems from incompatibility between the informational scenarios created by the new technologies and the ones governed by our doctrinal tools. Where a technological innovation alters the traditional scheme of information flows between parties, our doctrinal tools are unlikely to attain an appropriate resolution.

Drawing on the failures of existing legal discourse, I argue for a needed legal change through the incorporation of identity protections into the legal discourse governing genetic testing and the Internet. Specifically, I argue that the incorporation of identity interests is necessary not only in order to provide for their protection but also in order to ensure that the full range of identity interests is considered even when they would be inevitably compromised. My argument for the incorporation of identity interests does not suggest that identity interests should necessarily trump other interests. The argument is

limited to the need to consider identity interests alongside traditional legal considerations.

I also do not argue for differential legal treatment of controversies involving genetics and Internet technologies.⁶ Identity tensions are everywhere. A growing body of literature points out that identity lurks behind legal doctrines as diverse as those concerning equality, product liability, privacy, and the family, yet the law does not provide adequate identity protections.⁷ I argue, however, that incorporation of identity protections in the context of genetic testing and the Internet is highly warranted. It is warranted, first, because the technologies amplify existing pressures on our normative conceptions of identity. But, it is warranted secondly and most significantly because at this stage—where the technologies are in the midst of their diffusion process—our ability to make choices regarding the use of the technologies is expanded.⁸ Consequently, I suggest that the need created by these technological innovations does not call for exceptional treatment but provides an opportunity for initializing legal change that could open the door to similar transformations in other areas of the law.

I propose two ways for improving the accommodation of Internet and genetic testing technologies through the resolution of identity tensions: (i) direct incorporation of an independent identity interest; and (ii) indirect incorporation of identity protections through the readjustment of existing doctrinal tools. I suggest that although the impact of identity tensions and consequently the potential role of identity interests in our legal discourse differ from case to case, the pressures applied by the new technologies make both options viable. The technological pressures create an overall need and consequently the conditions for inducing changes in our traditionally conservative legal discourse.

6. See Sonia M. Suter, *The Allure and Peril of Genetic Exceptionalism: Do We Need Special Genetics Legislation?*, 79 WASH. U. L.Q. 669 (2001) (arguing against genetic exceptionalism).

7. See generally MARTHA L. MINOW, NOT ONLY FOR MYSELF: IDENTITY, POLITICS AND THE LAW (1997); Devon W. Carbado & Mitu Gulati, *Working Identity*, 85 CORNELL L. REV. 1259 (2000); Nan D. Hunter, *Expressive Identity: Recuperating Dissent for Equality*, 35 HARV. C.R.-C.L. L. REV. 1 (2000); Jonathan Kahn, *Privacy as a Legal Principle of Identity Maintenance*, 33 SETON HALL L. REV. 371 (2003) [hereinafter Kahn, *Privacy*]; Jonathan Kahn, *Product Liability and the Politics of Corporate Presence: Identity and Accountability in Macpherson v. Buick*, 35 LOY. L. REV. 3 (2001) [hereinafter Kahn, *Product Liability*]; Kenji Yoshino, *Covering*, 111 YALE L.J. 769 (2002).

8. See WIEBE E. BIJKER, OF BICYCLES, BAKELITES AND BULBS 84-85(1995) (discussing the concept of closure—the stage at which the scientific controversy surrounding an innovation is terminated and scientific facts are created. From that moment on only one interpretation about the meaning of an innovation can be accepted by all.).

The Article proceeds as follows. Part II describes several legal controversies concerning genetic testing and the Internet. Part III examines the conception of identity as a life-narrative. Part IV presents a number of social scenarios that illustrate the way that social accommodation of the aforementioned technologies implicates identity tensions. Part V conceptualizes identity as a zone of normative concern. Part VI examines the identity pressures at the basis of a series of legal controversies involving genetic testing and the Internet and reveals that legal outcomes often fail to protect identity interests. Part VII analyzes the sources of these legal failures to protect identity interests and proposes two alternative approaches for the incorporation of identity protection into the techno-legal discourse.

II. SOME CONTROVERSIES INVOLVING PEOPLE AND TECHNOLOGIES

This Part will present a number of legal controversies that illustrate tensions related to the social accommodation of Internet and genetic testing technologies. The controversies include: (i) a daughter suing her father's physician for failing to warn her of the genetic nature of her father's disease; (ii) a prisoner on the eve of his release refusing to submit his DNA sample to a governmental DNA databank; (iii) a football coach who is his daughter's primary caretaker and is perceived as a woman on the Internet; (iv) a Navy officer whose gay cyberspace identity is forcefully lifted to reveal his real life identity; and (v) a teenager whose effort to explore her lesbian identity is blocked by filtering software installed on a public library computer.

Donna Safer's father, Robert Batkin, died of colorectal cancer when she was ten years old. At thirty-six years of age and newly married, Donna began experiencing abdominal pain, and was soon diagnosed with colon cancer. Due to the stage at which the disease was diagnosed, Donna had to undergo a complete surgical removal of her colon and left ovary. She sued her father's physician for negligently failing to warn her of the genetic nature of her father's disease. Had he warned her, she could have undergone testing for early detection of the disease.⁹

Melvin Taylor Gaines was convicted of several offenses: unlawfully using coins in a gaming machine, attempting to cash

9. Safer v. Estate of Pack, 677 A.2d 1188, 1189-90 (N.J. Super. Ct. App. Div. 1996).

forged travelers checks at a Las Vegas casino, and check forgery.¹⁰ Under Nevada law, felons convicted of a broad range of offenses, including those for which Gaines was convicted, are required to submit their DNA sample.¹¹ The requirement to submit a DNA sample does not relate to the individual's crimes but to the State's interest in resolving future crimes.¹² DNA specimens are often left at the scene of violent crimes and these can be compared to the specimens in the databank in order to locate a match. Gaines—who was convicted for nonviolent crimes—refused to submit to genetic testing, unwilling to let his personal genetic information be extracted and used for any purpose.¹³ The Nevada statute does not limit the use of the samples to criminal identification purposes nor does it expressly prohibit use of the DNA sample to reveal medical or trait information about the individual.¹⁴ Gaines sued the State claiming that the requirement to submit a DNA specimen is an unreasonable search and seizure under the Fourth Amendment.¹⁵

Ted played football in college and later became a high school football coach. He is married to Janet, a partner at a large New York law firm. Three months ago, Janet gave birth to their daughter. With more time on his hands, Ted prepared the baby's room, using the Internet to shop. He enjoyed decorating the baby's room and after the baby was born became her primary caretaker. Yet, shortly after his baby's birth, Ted's Internet universe started changing. He began receiving emails addressed to "Mom" featuring the developmental progress of his baby. Soon thereafter, a large Internet retailer from which he purchased some newborn gear started featuring arts and hobbies books in his recommended book list. The advertisement banners that used to flicker dating services now suggest "lose ten pounds in twenty days before the start of bikini season." Finally, Ted began receiving unsolicited emails from fashion vendors addressing him as "Madam." Ted realizes that on the Internet he is now considered a woman. Although initially happy with his child-rearing choice, Ted is beginning to feel uncomfortable. Internet profiling does not make him doubt his masculinity. Yet, he experiences misgivings with regard to his decision to act as his daughter's primary caretaker, wondering to what extent his choice is so socially unacceptable as to

10. *Gaines v. Nevada*, 998 P.2d 166, 168 (2000).

11. NEV. REV. STAT. 176.0913 (2003).

12. *Gaines*, 998 P.2d at 172.

13. *See id.* at 168, 173.

14. *See* NEV. REV. STAT. 176.0913.

15. *Gaines*, 998 P.2d at 171-73.

render him a woman on the Internet. Eventually, Ted became a plaintiff in a class action suit against the profiling company that transformed his Internet universe.¹⁶

Timothy McVeigh (a different individual from the Oklahoma City bomber) enlisted when he was nineteen. Seventeen years later he was a highly decorated veteran of the United States Navy. He was gay, but kept his sexual orientation secret from the military base where he was a senior officer aboard the nuclear submarine U.S.S. Chicago. At the same time, he felt free to interact in cyberspace using the pseudonym “boysrch.” His gay identity was revealed after McVeigh used his cyberspace pseudonym on an email he wrote regarding a toy search. A civilian Navy volunteer happened to receive the email. The volunteer searched the America Online (AOL) member directory for the member profile of the sender and discovered that “boysrch” was named Tim, lived in Hawaii, was in the military, and his marital status was “gay.” This information eventually found its way to John Mickey, the captain of McVeigh’s ship, who initiated an inquiry. The ship’s legal advisor contacted AOL’s customer service, which disclosed that “boysrch” is in fact Timothy McVeigh.¹⁷ Following this disclosure, McVeigh was discharged from the Navy for engaging in homosexual conduct.¹⁸ The controversy evolved into a lawsuit filed in a federal district court.¹⁹

Emmalyn Rood was thirteen when—feeling confused about her sexual identity—she decided to explore lesbian sources on the Internet using a public library computer. She did not want to use her home or school computer because she was afraid that a family member, a classmate, or the school authorities would learn of her research. Yet, filtering software required under the Children’s Internet Protection Act (“CIPA”) as a condition for receipt of federal funding by public libraries impeded her research. The filtering software was designed to prevent access to Internet material that constitutes child

16. Although Ted’s case is hypothetical, it was inspired by several stories of a similar nature. See Jeffrey Zaslow, *TiVo Thinks You Are Gay, Here’s How To Set It Straight; Amazon.com Knows You Too, Based on What You Buy; Why All the Cartoons?*, WALL ST. J., Nov. 26, 2002, at A1. Plaintiffs with concerns similar to Ted’s cooperated in several class actions against profiling companies. See, e.g., *In re Toys R Us, Inc. Privacy Litig.*, MDL No. M-00-1381, 2001 U.S. Dist. LEXIS 16947 (N.D. Cal. Oct. 9, 2001); *Chance v. Avenue A, Inc.*, 165 F. Supp. 2d 1153 (W.D. Wash. 2001); *In re DoubleClick Inc. Privacy Litig.*, 154 F. Supp. 2d 497 (S.D.N.Y. 2001).

17. *McVeigh v. Cohen*, 983 F. Supp. 215, 217 (D.D.C. 1998).

18. *Id.* at 218.

19. See generally *McVeigh*, 983 F. Supp. 215.

pornography, is obscene, or is harmful to minors.²⁰ However, the software proved inaccurate and tended to broadly overblock sites, including gay and lesbian resources, that did not contain subject matter prohibited under the Statute.²¹ Rood became one of the plaintiffs in *American Library*, which eventually reached the Supreme Court.²²

The legal controversies described in this Part underscore the tensions accompanying the social accommodation of genetic testing and Internet technologies. Despite the seemingly diverse nature of the described controversies, all of the controversies involve tensions stemming from pressures on normative conceptions of identity. Before I turn to analyzing the nature of the tensions underlying these legal controversies in detail, it is necessary to lay the theoretical groundwork for defining the relevant normative conceptions of identity and to position these controversies within the broader social context.

III. EXAMINING IDENTITY

Identity is a protean concept. It is multi-faceted and elusive. Its constitution has been subject to various interpretations.²³ This Article will focus on the concept of identity as a life-narrative. I do not argue that identity, as a life-narrative, is the only viable conception of identity. I believe, however, that this conception of identity is both

20. *Am. Library Ass'n v. United States*, 201 F. Supp. 2d 401, 412-15 (E.D. Pa. 2002), *rev'd*, 539 U.S. 194 (2003).

21. The court gave examples of several gay and lesbian sites that were erroneously blocked. One was "The Gay and Lesbian Havurah of the Long Beach Community Center," which was blocked under the adult only, pornography, and sex categories. *Id.* at 446. The second was "The Gay and Lesbian Chamber of Southern Nevada," a forum for the business community to develop relationships within the Las Vegas lesbian, gay, transsexual, and bisexual community, which was blocked under the adult only category. *Id.* at 447. And, a third example was "Odysseus Gay Travel," a travel company serving gay men, which was blocked under the adult only and pornography categories. *Id.*; see also Richard J. Peltz, *Use "The Filter You Were Born With": The Unconstitutionality of Mandatory Internet Filtering for the Adult Patrons of Public Libraries*, 77 WASH L. REV. 397, 410-16 (describing Internet filters' lack of efficacy).

22. *Am. Library Ass'n*, 539 U.S. 194.

23. For examples of differing conceptions of identity, see HAROLD W. NOONAN, *PERSONAL IDENTITY* 2-7 (1989) (identity as comprised of bodily continuity); John Locke, *Of Identity and Diversity*, in *PERSONAL IDENTITY* 37 (John Perry ed., 1975) (identity as psychological continuity); Anthony Quinton, *The Soul*, in *PERSONAL IDENTITY*, *supra*, at 53 (identity as psychological continuity); ERVING GOFFMAN, *THE PRESENTATION OF SELF IN EVERYDAY LIFE* (1959) (the self as a collection of societal roles); David Hume, *Second Thoughts*, in *PERSONAL IDENTITY*, *supra*, at 173 (the self as no more than the sum of its parts).

broadly held and at the same time most affected by the aforementioned information technologies.²⁴

This Part will define the concept of identity as a life-narrative and examine how two commonly held normative conceptions of identity, the *liberal* and the *communitarian* conceptions, are both embedded in our life-narratives.²⁵

A. *Identity as a Life-Narrative*

The view of identity as an individual's life-narrative presents identity as comprised of the story we tell ourselves and others about ourselves.²⁶ This view features identity as intertwined and inseparable from the narrative developing it.²⁷ An individual's identity is constructed through his history—the life-narrative unfolds as a plot that reveals the reasons that matter to the individual. The narrative is, in fact, a form of rationality—it is vital in providing an explanation for the individual's actions.²⁸ The life-narrative helps the individual interpret the episodes of his life. It is the way we see ourselves, define ourselves, and tell others about ourselves.

For example, consider a young man who grows up in an environment where young adults are expected to remain in their hometown and eventually take care of their aging parents. He would view his life-narrative as intertwined with that of his family, and tend to interpret his life decisions to go to college and raise his family in his

24. Conceptions of identity such as bodily continuity, psychological continuity, the self as a collection of societal roles, and the self as no more than the sum of its parts are not mutually exclusive. Some partially overlap with the conception of identity as a life-narrative. However, the view of identity as a life-narrative is most significantly affected by the aforementioned technologies.

25. I do not claim that all life-narratives fit exclusively within the liberal and communitarian categories—some life-narratives may contain aspects of both meta-narratives. The classification into two meta-narratives is an approximation for the purpose of creating an analytic tool.

26. Although “self” and “identity” do not necessarily share an identical meaning, it is conceded that much of the content of the self can be discussed in terms of identity. See Viktor Gecas & Peter J. Burke, *Self and Identity*, in *SOCIOLOGICAL PERSPECTIVES ON SOCIAL PSYCHOLOGY* 42 (Karen S. Cook et al. eds., 1995). I will, therefore, generally use the term “identity.” However, where the term “self” appears, I do not indicate a different meaning.

27. See Stanley Hauerwas & David Burrell, *From System to Story: An Alternative Pattern for Rationality in Ethics*, in *WHY NARRATIVE? READINGS IN NARRATIVE THEOLOGY* 158, 179 (Stanley Hauerwas & L. Gregory Jones eds., 1989) [hereinafter *WHY NARRATIVE?*].

28. See JEROME BRUNER, *MAKING STORIES: LAW, LITERATURE, LIFE* 85 (2002); MARK FREEMAN, *REWRITING THE SELF* 29 (1993); Stephen Crites, *The Narrative Quality of Experience*, in *WHY NARRATIVE?*, *supra* note 27, at 65, 78; Hauerwas & Burrell, *supra* note 27, at 167-68, 179-80; Alasdair MacIntyre, *Epistemological Crises, Dramatic Narrative, and the Philosophy of Science*, in *WHY NARRATIVE?*, *supra* note 27, at 138, 150.

hometown through this life-narrative. His strong familial attachments are a common thread that explains his life decisions.

The conception of identity as a life-narrative envelopes a broad range of life-stories, some of which at first blush may seem incongruent with the notion of a continuous life-narrative. Among those seemingly incongruent formats are life stories envisioning a dynamic, always evolving, constructed, and reinvented self.²⁹ True, an important requirement for a life-narrative to constitute identity is coherence.³⁰ The coherence requirement, however, does not mandate that a narrative be explanatory in a scientific manner. It need not show a necessary connection among occurrences. Rather, it is by structuring a plausible response to the question of what happens next that narrative offers the necessary intelligibility.³¹ For example, former President Reagan's shift from a Hollywood career into politics did not prevent him from developing a coherent life-narrative, featuring him as an evolving, successful, and resourceful individual.³² Thus, the notion of a continuously constructed and always evolving identity is still compatible with the concept of identity as a life-narrative.³³

B. *The Identity Meta-Narratives*

There are an endless variety of individual life-narratives. Many seemingly separate narratives, however, can be classified into culturally embedded identity meta-narratives. They contain implicit

29. Post-modernist writers view identity as dynamic because it is continuously reconstructed and therefore forever changing and evolving. See ROBERT LIFTON, *THE PROTEAN SELF: HUMAN RESILIENCE IN THE AGE OF FRAGMENTATION* 115-35 (1992); Gecas & Burke, *supra* note 26, at 57. Social psychologists offer other versions of the dynamic nature of identity. For example, Jones & Pittman view the individual as shifting from moment to moment as a function of motivations and external situational cues. They perceive her identity to be constantly evolving in ways that incorporate her actions and outcomes. Edward E. Jones & Thane S. Pittman, *Toward a General Theory of Strategic Self-Presentation*, in *PSYCHOLOGICAL PERSPECTIVES ON THE SELF* 231, 233 (Jerry Suls & Anthony G. Greenwald eds., 1983). For other social psychology dynamic identity theories, see GEORGE J. MCCALL & J.L. SIMMONS, *IDENTITIES AND INTERACTIONS: AN EXAMINATION OF HUMAN ASSOCIATIONS IN EVERYDAY LIFE* 71, 86 (rev. ed. 1978); Peter J. Burke, *Identity Processes and Social Stress*, 56 *AM. SOC. REV.* 836 (1991); Lynn Smith-Lovin, *An Affect Control View of Cognition and Emotion*, in *THE SELF-SOCIETY DYNAMIC: COGNITION, EMOTION AND ACTION* 143, 145 (Judith A. Howard & Peter Callero eds., 1991).

30. See MARYA SCHECHTMAN, *THE CONSTITUTION OF SELVES* 97-98 (1996).

31. Hauerwas & Burrell, *supra* note 27, at 177-78.

32. See generally RONALD REAGAN, *AMERICAN LIFE: THE AUTOBIOGRAPHY* (1999).

33. See BRUNER, *supra* note 28, at 64; FREEMAN, *supra* note 28, at 183-84. Furthermore, even the view of identity as fragmented by modern devices that focus the individual on images that are isolated from the mainstream of events is congruent with the notion of a life-narrative. Individuals are able to embed these simultaneous experiences within their life story. See Crites, *supra* note 28, at 85.

cultural guidelines of what identity should be, might be, and should not be.³⁴ Thus, our individual life-narratives are contained within the boundaries of the meta-narratives, which are themselves the creations of our culture.

Two identity meta-narratives are central in our society and, furthermore, are particularly disrupted by the two information technologies. They are the *liberal* and the *communitarian* meta-narratives.³⁵ The two technologies I discuss, genetic testing and the Internet, exert pressure on the content of our individual life-narratives, thereby influencing these meta-narratives.

1. The Liberal and Communitarian Meta-Narratives

In this Section, I will outline the components of the liberal and communitarian identity meta-narratives. The description of these two prevalent normative conceptions of identity will serve as a baseline against which technological influences on identity can be evaluated. Yet, I should caution that the lines dividing the liberal and communitarian theories are murky.³⁶ Furthermore, individual life-narratives are often comprised of elements from both the liberal or communitarian meta-narratives, although they tend to be dominated by either one or the other. I will, nevertheless, endeavor to present the two archetypical identity meta-narratives in order to facilitate the analysis of the technological influences.

34. See BRUNER, *supra* note 28, at 65-66, 69; Victor Turner, *Social Dramas and Stories About Them*, in ON NARRATIVE 137, 163-64 (W.J.T. Mitchell ed., 1981).

35. A third potential identity meta-narrative is the postmodern one. The postmodern identity life-narrative views the self as being in a continuous state of evolution as a result of modern conditions. The self is conceived as fragmented, dynamic, and constructed. See generally KENNETH J. GERGEN, *THE SATURATED SELF: DILEMMAS OF IDENTITY IN CONTEMPORARY LIFE* (reprinted 2000); ANTHONY GIDDENS, *MODERNITY AND SELF IDENTITY: SELF AND SOCIETY IN THE LATE MODERN AGE* (1991); LIFTON, *supra* note 29. I believe that this conception of identity, although popular in academic circles, has not yet evolved to the status of a cultural meta-narrative. Since this Article focuses on examining the pressure applied by genetic testing and the Internet on commonly held conceptions of identity, my inquiry will be constrained to the two generally widespread liberal and communitarian conceptions.

36. For one, theorists typically put forward as communitarian critics of liberal theory do not always identify themselves as such. In addition, liberal theorists have felt a great need to re-interpret their theory to respond to the communitarian critique. See DANIEL H. BELL, *COMMUNITARIANISM AND ITS CRITICS* 4, 8 (1993); WILL KYMLICKA, *MULTICULTURAL CITIZENSHIP: A LIBERAL THEORY OF MINORITY RIGHTS* 154 (paperback ed. 1996); Shlomo Avineri & Avner De-Shalit, *Introduction to COMMUNITARIANISM AND INDIVIDUALISM* 1, 8 (Shlomo Avineri & Avner De-Shalit eds., 1992). For this reason, when discussing the archetypical liberal meta-narrative I will focus on writings that preceded the communitarian critique.

a. The Liberal Meta-Narrative

The liberal identity meta-narrative is in essence a framework, which inserts repeated themes into individual life-narratives. Let us first look at an example of a life-narrative that contains the different ingredients of the liberal identity meta-narrative. This is a hypothetical story about a woman named Sarah who left her home in Chicago to become a painter in Paris.³⁷

Sarah grew up in a middle-class family in a Chicago suburb. Her father is an accountant and her mother a schoolteacher. She excelled at painting very early on and developed an ambition to become a professional painter. Despite her father's desire that she follow in his footsteps and acquire a solid profession such as accounting, at eighteen she decided to move to New York and attend art school. She currently works and resides in Paris, returning home to see her family every other Christmas.

Sarah's story is an archetypical liberal identity life-narrative. Her life-narrative portrays her as an autonomous individual. In following her desire to become a painter, she made her life choices according to her internal motivations, perceptions, and judgments.³⁸ Her main goal is self-fulfillment in both her work and way of life.

The liberal meta-narrative features the individual as an autonomous person whose ends are intentionally chosen and who seeks conditions that will enable her to construct her life as a free and equal rational being.³⁹ Under the liberal scheme, individual autonomy and self-fulfillment enable diversity in life choices, with no person imposing their values and choices on others.⁴⁰ Sarah was thus justified in refusing to follow in her father's footsteps and in choosing instead to fulfill herself as an artist.

Finally, the liberal meta-narrative also features the individual as a bounded, integrated whole that is separate from other individuals

37. Sarah's hypothetical in both its liberal and communitarian versions portrays an extreme scenario of the liberal and communitarian narratives. Individual life-narratives are rarely so extreme. Many life-narratives are comprised of a combination of liberal and communitarian elements, although they tend to lean toward one or the other. The purpose of presenting these extreme versions is to illustrate that the foundation blocks of the liberal and communitarian meta narratives lead us to life-narratives that are significantly different content-wise not just in their formation mode.

38. See JOHN STUART MILL, ON LIBERTY 55-56 (Hackett Publishing, 1978) (1859); Clifford Geertz, *On the Nature of Anthropological Understanding*, 63 AM. SCI. 47, 48 (1975).

39. MILL, *supra* note 38; JOHN RAWLS, A THEORY OF JUSTICE 561 (1971).

40. MILL, *supra* note 38, at 60-61, 67; RAWLS, *supra* note 39, at 564; Ronald Dworkin, *Liberalism*, in LIBERALISM AND ITS CRITICS 60, 64 (Michael J. Sandel ed., 1984); John Rawls, *The Right and the Good Contrasted*, in LIBERALISM AND ITS CRITICS, *supra*, at 37, 49-50.

in society and from society as a whole.⁴¹ Sarah's life-narrative presents her as separate from any specific community, particularly from the one in which she was born and raised. She is featured as a person who selects her own values and leads her life accordingly.

Life-narratives governed by the liberal identity meta-narrative tend to manifest themes that bear some resemblance to Sarah's story. Hence, the individual is likely to appear as autonomous and seeking self-fulfillment; internally driven; equal; unique; an integrated whole; and differentiated from other individuals and from society as a whole.

b. The Communitarian Meta-Narrative

Although both meta-narratives are cultural products, the communitarian meta-narrative is in its essence a cultural narrative incorporating the values of the specific culture in which it prevails. The communitarian meta-narrative rejects central postulates of the liberal scheme. Primarily, it rejects the presentation of the individual as free to revise her own ends independent of the values of any community.⁴² Instead, it features her within her social, cultural, and historical context—individual identity is understood as constituted by the community.⁴³ Consequently, the narrative of the individual converges with those of others: "We are never more (and sometimes less) than the co-authors of our own narratives."⁴⁴ Thus, the individual can only be understood in the context of the community that sets up these narratives.⁴⁵ The individual's life-narrative is composed by communal obligations and guided by the community's values.

Let us consider Sarah's alternative life-narrative in a parallel communitarian universe. Sarah grows up in an Orthodox Jewish family in New York. As she graduates from high school her father falls ill and as the oldest of five children she feels obliged to stay at home and help care for him and her younger siblings. She foregoes her desire to go to art school. She is now happily married to the son of one of her father's closest friends and raises their four children. Painting is still a great source of joy for her and she dedicates her spare time to this hobby.

41. Geertz, *supra* note 38.

42. See KYMLICKA, *supra* note 36, at 91; Michael J. Sandel, *The Procedural Republic and the Unencumbered Self*, in COMMUNITARIANISM AND INDIVIDUALISM, *supra* note 36, at 12, 19, 23; Charles Taylor, *Atomism*, in COMMUNITARIANISM AND INDIVIDUALISM, *supra* note 36, at 29.

43. See MICHAEL J. SANDEL, LIBERALISM AND THE LIMITS OF JUSTICE 150 (2d ed. 1998); Avineri & De Shalit, *supra* note 36, at 1-3.

44. ALASDAIR C. MACINTYRE, AFTER VIRTUE: A STUDY IN MORAL THEORY 199 (2d ed. 1984)

45. *Id.* at 190-209.

We see here Sarah leading her life according to her community's values—placing family and community allegiance above her desire to become an artist. Her life-narrative is not guided by her impulses and a quest for self-fulfillment. Sarah's life-narrative can be comprehended only when placed within the context of the Orthodox Jewish community in which she was born and raised. The values of this community make this second version of her story intelligible.

Sarah's alternative life story shows that life-narratives governed by the communitarian identity meta-narrative can differ significantly from those governed by the liberal identity meta-narrative. Life-narratives derived from the communitarian meta-narrative are unlikely to feature the individual as autonomous and seeking self-fulfillment. Instead, they tend to emphasize the ties of the individual to the community in which she was born and raised.

2. The Meta-Narratives in United States Society

To establish the type of pressures exerted by the two information technologies on normative conceptions of identity it is necessary to first determine which identity meta-narratives are in fact held by American individuals. The liberal meta-narrative is no doubt the dominant cultural identity meta-narrative in the United States.⁴⁶ The meta-narrative is reflected in several frequent themes. One example is the theme of the self-reliant American who is expected to leave home.⁴⁷ Another example emphasizes making something of oneself through work.⁴⁸

Despite its dominance, the liberal meta-narrative coexists with the communitarian meta-narrative.⁴⁹ The communitarian identity meta-narrative is common in Asian, African, Latin American, and many Southern European cultures.⁵⁰ The United States, as a country of immigrants, contains groups holding on to this meta-narrative. Prominent among those groups are some religious and ethnic

46. See Edward E. Sampson, *The Debate on Individualism: Indigenous Psychologies of the Individual and Their Role in Personal and Societal Functioning*, 43 AM. PSYCHOLOGIST 15, 17-18 (1988).

47. ROBERT NEALY BELLAH ET AL., *HABITS OF THE HEART: INDIVIDUALISM AND COMMITMENT IN AMERICAN LIFE* 62-63 (rev. ed. 1996).

48. *Id.* at 65.

49. See YI-FU TUAN, *SEGMENTED WORLDS AND SELF: GROUP LIFE AND INDIVIDUAL CONSCIOUSNESS* 151 (1982); Sampson, *supra* note 46, at 19-20.

50. See Hazel Rose Markus, *Culture and Self: Implications for Cognition, Emotion and Motivation*, 98 PSYCHOL. REV. 224, 225-26 (1991).

minorities.⁵¹ In addition, communities driven by the communitarian meta-narrative can also be found in many small towns and rural communities.⁵²

One common theme reflecting the communitarian meta-narrative is the view of relationships not as means for realizing personal goals but as ends in themselves. Another theme stresses constant awareness of others, their needs, desires, and goals. In some cases, the goals of others may become so central that they may be experienced as personal goals. In other cases, meeting the goals of others will be necessary even if distinct from one's own.⁵³

Having seen that both the liberal and communitarian identity meta-narratives are prevalent in the United States, it is necessary to evaluate the pressures exerted by genetic testing and the Internet on the two conceptions of identity. I will therefore proceed to examine the relationship between these normative conceptions of identity and individual uses of the technologies.

IV. TECHNOLOGICAL PRESSURES ON LIFE-NARRATIVES

In this Part, I will illustrate the type of identity tensions caused by genetic testing and Internet technologies through five stories describing different uses of the technologies. The social scenarios illustrated through these stories have not to this point erupted into legal controversies, although similar circumstances could potentially reach the courts. My objective in this Part is to demonstrate that identity tensions stemming from uses of Internet and genetic testing technologies are not confined to controversies that eventually reach the legal system. I show that identity tensions are part of a much broader social phenomenon. This will underscore the importance of studying the wide-ranging phenomenon in order to assess the extent of social transformation to which the law need react.

Furthermore, it is often hard to tell in advance which social controversies involving the use of new technologies will eventually evolve into legal cases. Thus, the stories in this Part were not selected according to their potential of becoming legal controversies but rather according to their ability to illustrate a wide range of identity

51. Alasdair MacIntyre, *Justice as Virtue: Changing Conceptions*, in COMMUNITARIANISM AND INDIVIDUALISM, *supra* note 36, at 51, 60.

52. See TUAN, *supra* note 49, at 20-21, 145; Markus, *supra* note 50, at 230-31. Furthermore, it was shown that women tend to think in relational terms—a theme that fits with the communitarian meta-narrative. See generally CAROL GILLIGAN, IN A DIFFERENT VOICE: PSYCHOLOGICAL THEORY AND WOMEN'S DEVELOPMENT (1982).

53. See Markus, *supra* note 50, at 231-32.

tensions. By revealing the nature of identity tensions implicated in diverse social uses of the technologies I hope to shed better light on the requisite legal reaction.

The five social scenarios analyzed through these illustrative stories feature highly distinct circumstances. One scenario presents Dana, an anorectic girl, seeking solace and compassion at a Pro-Ana Internet group. A second scenario presents the legendary rise of Marcus, a teenager, who grew to prominence as a leading Internet legal expert. A third portrays Jane, a young woman with an unfortunate genetic predicament. The fourth features Sheri, a priest's wife, who adopted Jewish customs on the basis of her newly discovered genetic heritage. And the last portrays the new hopes and fears brought about by the creation of the Howard African-American DNA databank.

This Part will demonstrate that, although diverse, each of these stories illustrates ways in which individual lives were affected through use of the technologies. In all instances, the technologies create unfamiliar social scenarios affecting who we are and the type of stories we tell about ourselves.⁵⁴

A. *Internet Group Participation*

Pro-Ana web sites advocate the idea that anorexia is not an eating disorder but a lifestyle choice.⁵⁵ The flourishing of Pro-Ana sites is due to thousands of young anorectic girls and women who join using screen names such as “neverthinenuf” or “afraidtolookinthemirror.” The members of these sites often live with their families and experience isolation in their quest for thinness. In the Pro-Ana sites they feel that they find companionship and understanding for their

54. A preliminary cautionary word should precede the identity analysis of both the social scenarios and the legal controversies discussed in Parts IV and V. The individuals portrayed are real individuals, yet only the parts of their life stories that touched the public debate are known. I use the public parts of their stories to demonstrate the type of identity tensions likely to arise in this type of circumstances. For example, since the dominant meta-narrative in United States society is the liberal meta-narrative, I would generally, unless the story's circumstances point otherwise, assume that the individual's life-narrative is characterized by aspects of the liberal meta-narrative. Yet, my analysis as it pertains to any of the specific individuals portrayed is illustrative and not evidentiary.

55. Providing a long list of Pro-Ana sites will probably prove futile as the sites constantly shift location in their struggle to remain active. One example of a Pro-Ana group is the Proanasuicidesociety, at <http://pub82.ezboard.com/bproanasuicidesociety> (last visited Aug. 6, 2003). The Pro-Ana sites are also listed in a sub-category in the Google Directory. However, on my last visit most links were broken. See The Pro-Anorexia Category, Google Directory, at http://directory.google.com/Top/Society/Issues/Health/Body_Image/Pro-Anorexia (last visited Aug. 6, 2003).

efforts.⁵⁶ Despite their popularity, some of these sites were shut down by major web-hosts as a result of a growing public outrage and the efforts of the National Association of Anorexia Nervosa and Associated Disorders.⁵⁷

A fifteen-year-old girl reacted to the public outrage directed at Pro-Ana sites. The girl did not disclose her name, so we will call her Dana. Dana wrote the following letter to a website that published an article advocating the closure of the sites:

I'll let you in on a little secret. We DON'T want help. If we wanted help we would all be FAT. We CHOOSE to go to Pro-Ana sites because that's what we want. And do you think that if all the Pro-Ana sites just vanished one day that you would have cured anorexia? Ana sites help us get through life. We meet people who actually understand us. Girls who go through the same hell as we do and it actually helps to know that there are others like you. Besides . . . this is a lifestyle . . . I just thought I'd let you know that no matter what you all do you'll never get rid of ana . . .⁵⁸

In fact, the Pro-Ana sites never disappeared; they merely resurfaced shortly thereafter under different names or on smaller private web-servers.⁵⁹

The introduction of the Internet enabled the formation of identity groups, such as the Pro-Ana groups, that were unlikely to have formed in life outside the Internet ("real space"). Individuals with visible stigmas, such as people with disabilities, are able to see that there are others with similar experiences and, therefore, do not feel so unique and isolated in real space. However, others who share undesirable, less visible characteristics are less likely to find similarly situated individuals to bond with. The formation of groups centered on marginal identities is facilitated by the Internet's architecture. First, the Internet eliminates the limitation of physical distance, thereby increasing the pool of potential participants. Second, anonymity enables the exploration of unconventional aspects of the self without fear of retribution.⁶⁰

The Internet not only enables the formation of these groups but also exacerbates the effects of group participation. A recent psychology

56. For a description of Pro-Ana sites and interviews with participants of these sites, see Mim Udovitch, *A Secret Society of the Starving*, N.Y. TIMES MAG., Aug. 9, 2002, § 6, at 18.

57. For reports on the efforts to close Pro-Ana sites, see Deirdre Dolan, *Learning to Love Anorexia? 'Pro-Ana' Web-Sites Flourish*, N.Y. OBSERVER, Feb. 3, 2003, § 7, at 1; Joan Ryan, *The Internet Is Where Anas Meet*, S.F. CHRON., Feb. 16, 2003, at D1.

58. The letter was published anonymously on The PlanetGrrl Babe Website, at http://www.btinternet.com/~virtuous/planetgrrlbabe/babeArticles/wasting_away_on_the_web.htm (last visited Aug. 6, 2003).

59. See Dolan, *supra* note 57; Ryan, *supra* note 57.

60. Caroline Haythornthwaite et al., *Work and Community Via Computer-Mediated Communication*, in PSYCHOLOGY AND THE INTERNET: INTRAPERSONAL, INTERPERSONAL AND TRANSPERSONAL IMPLICATIONS 199, 209 (Jayne Gackenbach ed., 1998).

study showed that Internet group participation had a particularly strong transformational effect on individuals participating in groups of concealable marginalized identities.⁶¹ The more involved an individual became with the group, the more important the group identity became for that individual. This in turn increased the acceptance of the previously hidden identity. As the group became more important to a member she began to feel that aspect of herself that was related to the group identity was more socially acceptable than she had previously thought.⁶²

The transformational effect is not only a product of the ability to join similar others. It is the creation of a category, through group participation, that grants legitimacy to the previously marginalized identity theme. In real space we often make our choices in a void. We do not consciously go through all our options and explicitly select one. Our choices on the Internet, on the other hand, are frequently made with the aid of lists of categories that can be narrowed to sub-categories.⁶³ Once we enter a discussion group, our interactions tend to take place around the one-dimensional theme that is the focus of the group. What was an isolated part of one's identity becomes a category around which the life of the group revolves.

Consider another Internet marginal identity group—a group of women who underwent miscarriages, stillbirths, or the loss of their newborn babies. Many of these women are unable to find solace through their real space relationships.⁶⁴ Instead, they find comfort by interacting on the Internet with other women who bereave their lost babies.⁶⁵ The loss event is transformed from an isolated thread in one's narrative into a category around which the group's life evolves. The categorization of the miscarriage theme enhances its centrality and de-marginalizes it.

61. This was demonstrated by a study that compared participants in newsgroups concerning drugs, homosexuality, and sadomasochism with participants in newsgroups concerning nonmarginalized identities. Katelyn Y.A. McKenna & John A. Bargh, *Coming Out in the Age of the Internet: Identity "Demarginalization" Through Virtual Group Participation*, 75 PERSONALITY & SOC. PSYCHOL. 681 (1998).

62. The significance of the group to the individual members was measured by: (i) the amount of active participation (average number of posts) by each member; and (ii) the impact that positive and negative feedback from other members had on the member's behavior. *Id.*

63. See, for example, the AOL group directory where one selects the desired discussion group through a tree of categories and sub-categories. The AOL Group Directory, at <http://groups.aol.com> (last visited Aug. 6, 2003).

64. Patti Hartigan, *The Kindness of Strangers Tens of Thousands of Women Grieving Over Pregnancy Loss Turn to the Internet Every Day. It is the One Place Where They Can Receive Unconditional, and Immediate Support*, BOSTON GLOBE MAG., Aug. 4, 2002, at 10.

65. See The M.I.S.S. Foundation, Netpals (illustrating this type of group bonding), at <http://www.missfoundation.org/family/netpals> (last visited Feb. 27, 2004).

Let us now return to the Pro-Ana case. Active participation in a group that revolves around the anorectic theme legitimizes and strengthens this theme. This takes place through the internalization of the Pro-Ana group narrative. Anorectic girls and women incorporate the Pro-Ana group theme in order to gain strength and solace. Hence, the Pro-Ana case illustrates the way that the incorporation of group values into one's life-story through participation in Internet groups applies pressure on the liberal aspects of that life-narrative. The need to incorporate group values, in particular, affects aspects of the life-narrative that are governed by the uniqueness and separateness tenets of the liberal meta-narrative.

At the same time, the Pro-Ana case illustrates the way that adoption of a new community through the Internet can exert pressure on the communitarian meta-narrative. The communitarian identity meta-narrative does not endorse free choice in the selection of group values. The individual is expected to adhere to the values of the group into which she was born and raised.⁶⁶ Under the communitarian vision, an individual cannot replace the narratives of her real space community with those of her newly adopted Internet community. Hence, exercising a choice to belong to a new group in fact enhances the individual's autonomy and self-fulfillment, thereby strengthening in this respect the liberal aspects of that individual's life-narrative.⁶⁷

B. *Internet Personas*

Marcus Arnold is a fifteen-year-old from a desert town called Perris.⁶⁸ His parents immigrated to the United States from Belize. Like most teenagers, he attends high school. But, at the same time, using the screen name Justin Anthony Wyrick, Jr., he became a top-ranking legal expert on the Internet knowledge-exchange site askme.com. On the site, he described himself as a twenty-five year old with some years of legal education but no bar accreditation. His answers, although never researched, were so highly appreciated that he eventually ranked number three among 150 legal experts—most of whom were licensed attorneys. Within a single two-week period, he answered 939 legal questions. His house quickly filled with stacks of

66. See SANDEL, *supra* note 43, at 150; Avineri & De Shalit, *supra* note 36, at 1-3.

67. Dana's simultaneous membership in both her family and real space community and in the virtual Pro-Ana group could be described as a fragmented post-modern existence. Yet, Dana's anorectic theme is not, in fact, fragmented, since her eating habits and thinness are part of her real space life. Her participation in the Pro-Ana group is directly related to her real space identity.

68. Michael Lewis, *Faking It*, N.Y. TIMES MAG., July 15, 2001, § 6, at 32.

court cases sent to him for review. He was also requested to prepare motions. Yet, he never acquired any law books. Asked how he answers the questions he replied: "It's scary. I just know these things." As Marcus became more successful, people started asking him for his phone number and fee structure. This unnerved him, and he eventually changed his expert profile to read "15-year old intern attorney expert." The disclosure was followed by a storm of hostile messages and his rankings were reduced. Yet, despite his disclosure and the hostile reaction, he rebounded, and two weeks after he disclosed his age became the number one ranked expert on the site.⁶⁹

In real space Marcus was a high school student, but cyberspace gave him the opportunity to thrive as a much-esteemed legal expert. Internet discussion forums, role games, and even email enable individuals to select personas that differ from their real space ones. Individuals who are shy and introverted, for instance, have the opportunity to explore powerful personas. Cyberspace popular culture is filled with tales of masks for age, race, gender, and class, masks for almost every aspect of identity.⁷⁰

The Internet is generally characterized by an absence of auditory and visual cues and by personal anonymity. Individuals are not held back by material determinants of social value, such as appearance, status, and popularity.⁷¹ One online role game participator explained:

You don't have to worry about the slots other people put you in as much. It's easier to change the way people perceive you, because all they have got is what you show them. They don't look at your body and make assumptions. They don't hear your accent and make assumptions. All they see is your words. . .⁷²

Although role playing has always been an integral part of our lives, as we assume different social roles as parents, employees, or friends, Internet architecture enables us to go beyond traditional role-playing. Marcus, a fifteen year old, was unlikely to achieve high esteem in the grown-up world. Yet, the Internet blocked out information about his age, enabling Marcus to develop the persona he desired based on his written words alone.

69. *Id.*

70. See Beth Kolko & Elizabeth Reid, *Dissolution and Fragmentation: Problems in On-Line Communities*, in *CYBERSOCIETY 2.0: REVISITING COMPUTER MEDIATED COMMUNICATION AND COMMUNITY* 212, 218 (Steven G. Jones ed., 1998).

71. See Heather Bromberg, *Are MUDs Communities? Identity, Belonging and Consciousness in Virtual Worlds*, in *CULTURES OF INTERNET: VIRTUAL SPACES, REAL HISTORIES, LIVING BODIES* 143, 148 (Rob Shields ed., 1996).

72. SHERRY TURKLE, *LIFE ON THE SCREEN: IDENTITY IN THE AGE OF THE INTERNET* 184 (1995).

The Internet's ability to let a person be several different people at the same time exerts pressure on the aspects of that individual's life-narrative that are derived from the liberal meta-narrative. The possibility—often described as a post-modern ability—to fragment one's identity (to simultaneously have multiple identities) explicitly applies pressure on the tenet of the liberal meta-narrative that conceives of the individual as a bounded whole.⁷³ Although the extent to which individuals feel that their cyberspace identity is separated from their real one varies, it is not only these users' normative conceptions of identity that are influenced by the technology.⁷⁴ The tension is particularly exacerbated when the adopted cyberspace identity is starkly different from the real space one. Individuals who were confronted with a disclosure that an individual with whom they had interacted on the Internet had a real space identity that greatly differed from her cyberspace identity often describe their experience in terms of betrayal. They talk of how their notions of the world and of themselves have been destabilized, rocked beyond recognition, leaving them emotionally and socially adrift.⁷⁵ Hence, Internet-enabled fragmentation can destabilize not only the user's normative conception of identity but also the conceptions held by others with whom the user interacts.

Yet, despite the fact that fragmentation expressly applies pressure on the wholeness tenet of the liberal meta-narrative, it is the communitarian conception of identity that is more significantly disrupted. The communitarian notion of identity is also incompatible with the notion of multiplicity. It does not accommodate the concept of an individual who can voluntarily exit his community and become something else outside the confines of that community while seemingly having never left at all. Furthermore, the multiplicity offered by Internet technology enhances the autonomy and self-fulfillment tenets of the liberal conception of identity by enabling the individual to explore aspects of his identity that he is unable to exercise in real space. Thus, while Internet fragmentation both strengthens and destabilizes aspects of the liberal meta-narrative, it is

73. See GIDDENS, *supra* note 35, at 169; LIFTON, *supra* note 29, at 8-9, 50-73; ALLUCQUERE ROSANNE STONE, *THE WAR OF DESIRE AND TECHNOLOGY AT THE CLOSE OF THE MECHANICAL AGE* 59-60 (1995); TURKLE, *supra* note 72, at 46.

74. For some, fragmentation is so extreme that they feel their states of consciousness are altered; that is, their notion of what is reality changes. Others believe that cyberspace brings out identities that existed deep within them the whole time. Finally, some feel that their cyberspace identities change the way they interact in real space. See Bromberg, *supra* note 71, at 148-50.

75. See Kolko & Reid, *supra* note 70.

the communitarian meta-narrative that is solely threatened through this use of the technology.

C. Gene Carrier Status

Jane was in her mid-twenties when she was tested for a neurodegenerative disease known as spinocerebellar ataxia type I.⁷⁶ She always knew that her family was afflicted with the disease and that she may also be a carrier of the gene. Carriers usually exhibit symptoms around thirty to forty years of age. They undergo a painful ten to twenty year process of neurological deterioration culminating in death. The results identified her as a carrier of the gene. After receiving the test results Jane felt that she had been given a death sentence. For the next two years she remained deeply depressed. She was unable to continue her studies or to make a career choice. Ambivalent and uncertain about every decision, she took odd jobs, transferring from one to another, sometimes unable to work at all. She could not enjoy regular social events and felt alienated from her friends. She felt paralyzed and burdened by her genetic secret and resentful toward her friends who were free to proceed with their lives.⁷⁷

Genetic information, unlike other medical information, affects individuals' lives even in the absence of any symptoms.⁷⁸ Psychology studies found that individuals who test positive for a genetic disease experience particularly stressful reactions in the short-term.⁷⁹ Furthermore, although most diseases are complex and are only partly related to whether a person tests positive for a gene, people tend to perceive a broad range of genetic test results as threatening to their identity.⁸⁰ This perception is a result of a deterministic cognitive bias that stems from the view of the gene as the essence of identity.⁸¹ The

76. Howard F. Taswell & Susan K. Sholtes, *Predictive Genetic Testing: A Story of One Family*, 17 FAM. SYS. & HEALTH 111, 115 (1999).

77. *Id.*

78. See Ruth Chadwick, *The Philosophy of the Right to Know and the Right Not to Know*, in THE RIGHT TO KNOW AND THE RIGHT NOT TO KNOW 13, 18-19 (Ruth Chadwick et al. eds., 1997).

79. See Judith L. Benkendorf et al., *Impact of Genetic Information and Genetic Counseling on Public Health*, in GENETICS AND PUBLIC HEALTH IN THE 21ST CENTURY 361, 376 (2000); Caryn Lerman et al., *Genetic Testing: Psychological Aspects and Implications*, 70 J. CONSULTING & CLINICAL PSYCHOL. 784, 793 (2002).

80. Cancer is an example of a complex disease. See Eric Kodish et al., *Genetic Testing for Cancer Risk: How to Reconcile Conflicts*, 279 JAMA 179, 179 (1998).

81. See DOROTHY NELKIN & M. SUSAN LINDEE, THE DNA MYSTIQUE: THE GENE AS A CULTURAL ICON 2 (1995); Jacquelyn Ann K. Kegley, *Genetic Information and Genetic Essentialism: Will We Betray Science, the Individual and the Community*, in GENETIC

cognitive bias is reflected in a tendency to overestimate the risk of incurring a disease when one tests positive for a gene. There is an inclination to assign a one-to-one correspondence between a disease and a gene despite the relative rarity of such a correlation.⁸²

Other studies found that stressful reactions to test results were stronger when the genetic information particularly threatened one's personal goals, decisions, and social commitments, as well as basic personality characteristics.⁸³ These findings support the existence of an identity transformation period that occurs when acute pressure is exerted on one's life-narrative.

Jane's case illustrates the effects a genetic predicament can have on one's life-narrative and the resulting need for a transformation period before an alternative life-narrative can be formed. In the two years that followed the test, Jane was unable to make any long-term decisions, including focusing on studying and selecting a future career.⁸⁴

The deterministic aura that accompanies genetic information affects the liberal aspects of individuals' life-narratives, in particular those that are derived from the autonomy and self-fulfillment tenets of the liberal identity meta-narrative. Yet, it is not merely the individual's perception of herself as lacking the freedom to make her life choices that is affected. It is indirectly the content of these choices and consequently the content of the life-narrative that are also transformed. Genetic test results can render previous life choices unsuitable, thus creating a need to fill one's life with new content. But, the new choices made within the framework of a restricted future may be of a constricted and less ambitious nature.

D. Genetics and Traditional Group Membership

Sheri Bashor is married to a minister.⁸⁵ Her family's history is rife with a rare genetic disease called Machado-Joseph, a fatal disorder of the nervous system that cripples and paralyzes the body

KNOWLEDGE: HUMAN VALUES AND RESPONSIBILITY 41, 41, 48-49 (Jacquelyn Ann K. Kegley ed., 1998).

82. See Kodish et al., *supra* note 80, at 179-81; Kelly C. Smith, *Genetic Disease, Genetic Testing and the Clinician*, 285 JAMA 91 (2001).

83. Arthur Falek, *Sequential Aspects of Coping and Other Issues in Decision Making in Genetic Counseling*, in PSYCHOLOGICAL ASPECTS OF GENETIC COUNSELLING 23, 28 (Alan E.H. Emery & Ian M. Pullen eds., 1984).

84. Taswell & Sholtes, *supra* note 76, at 115.

85. Alex Doron, *Hayehodi Hachole Hanoded [The Ill Nomadic Jew]*, MAARIV (Tel Aviv), Feb. 14, 2003, at 7.

leaving the intellect intact.⁸⁶ Up until the 1990s, the disease was believed to originate from residents of the Azure islands.⁸⁷ Bashor decided to conduct her own personal investigation of the origins of the disease in her family.⁸⁸ As she was pursuing her personal research quest, the gene responsible for causing the disease was identified and her finding was supported by medical research. Machado-Joseph was discovered to be a genetic mutation spread by Portuguese Jews who were coerced to convert to Christianity in the fifteenth century.⁸⁹ Bashor remains married to a priest. Yet, having discovered her Jewish heritage, she now also follows Jewish customs and celebrates Jewish holidays.⁹⁰

Bashor, a priest's wife, followed the Christian faith; yet, genetic information introduced an alternative religion—the Jewish religion—into her life. The effect of genetic information on religious group membership illustrates a dual pressure on the communitarian meta-narrative. First, it exemplifies the ability of genetic technology to replace a traditional mode of communitarian identity formation. Second, it illustrates the ability of genetic technology to cause a shift from one religious community to another.

The first pressure centers on the shift from religion to gene as the defining element of community membership. The defining elements of communities, and consequently of their narratives, traditionally included religion, ethnicity, race, and sexuality.⁹¹ For centuries, these community narratives provided loose norms or models that were in fact narratives that people could use in shaping their life plans and in telling their life stories.⁹²

The ability to identify genes and obtain genetic information is relatively new. Yet, due to its scientific aura, genetic information has quickly gained a position as the ultimate guarantor of truth. It has

86. Sheri Bashor, Machado Joseph Disease & Sephardic Link, at <http://www.saudades.org/mjdsephlink.htm> (last visited Feb. 11, 2004); Machado Joseph Disease, Mazonet Jewish Genetic Diseases at <http://www.mazonet.com/genetics/machado.asp> (last visited Feb. 14, 2004).

87. See Doron, *supra* note 85.

88. See *id.*; Bashor, *supra* note 86.

89. See Doron, *supra* note 85; Bashor, *supra* note 86.

90. See Doron, *supra* note 85.

91. K. Anthony Appiah, *Identity, Authenticity, Survival: Multicultural Societies and Social Reproduction*, in MULTICULTURALISM: EXAMINING THE POLITICS OF RECOGNITION 149, 150-51 (Amy Gutmann ed., 1994).

92. *Id.* at 159-60. I should note here that the scope of the discussion is limited to the relationship between community narratives and individual life-narratives and does not extend to the vast field of identity politics. See, e.g., Charles Taylor, *The Politics of Recognition*, in MULTICULTURALISM: EXAMINING THE POLITICS OF RECOGNITION, *supra* note 91, at 25 (discussing identity politics).

taken central stage in our cultural landscape as it has replaced the notion of the soul in its ability to explain the person.⁹³ Consequently, old communitarian notions of group formations are, at times, cast aside as people start regarding genes as more stable over time than traditional aspects of community identity.⁹⁴ Granting this priority to genes gives genetic knowledge the potential to transform traditional notions of community identity—influencing notions of family, ethnic, and racial identity, de-stabilizing long-standing patterns of community membership, and rupturing backward-looking narratives.⁹⁵

The second source of pressure is illustrated through the ability of genetic information to change religious group memberships. Although religions are alternative communitarian narratives, the communitarian meta-narrative does not endorse the exchange of community values. This applies even when the exchange is made between two traditional community narratives.

E. Group DNA Databases

Howard University, a historically African-American institution, declared its plans to create the largest African-American DNA database in the United States. It expects to store DNA samples from over 25,000 people during a five-year period. The database's purpose is to promote the testing and the determination of causes of genetic diseases that are predominant among African-Americans. It will also facilitate research that will determine which drugs are most suitable for African-American patients. Yet, past experience with genetic studies of specific ethnic minorities raises concerns of potential discrimination and stigmatization. At the same time, some believe that Howard's involvement reduces the risks that the information would be misused.⁹⁶

93. See NELKIN & LINDEE, *supra* note 81, at 2, 38-57; see also Dorothy Roberts, *The Genetic Ties*, 62 U. CHI. L. REV. 209, 214-17 (1995) (discussing the cultural importance of the gene to one's sense of self).

94. See Paul Brodwin, *Genetics, Identity and the Anthropology of Essentialism*, 75 ANTHROPOLOGICAL Q. 323, 328 (2002). For example, use of genetic tests to define membership among Indians could exclude individuals who belonged to that tribe since birth. See, e.g., Josephine Johnston, *Resisting a Genetic Identity: The Black Seminoles and Genetic Tests of Ancestry*, 31 J.L. MED. & ETHICS 262 (2003).

95. Brodwin, *supra* note 94, at 324, 326-28.

96. Andrew Pollack, *DNA of Blacks to Be Gathered to Fight Illness*, N.Y. TIMES, May 27, 2003, at A1. For a discussion of racial distinctions in health care, see generally Barbara A. Noah, *The Participation of Underrepresented Minorities in Clinical Research*, 29 AM. J.L. & MED. 221 (2003); Charles Sullivan, *Racial Distinctions in Medicine*, 5 DEPAUL J. HEALTH CARE L. 249 (2002).

Genetic research that focuses on specific ethnic or racial groups merits particular concern. Unlike regular medical information, genetic information renders individuals as innately different, thereby becoming a dangerous tool in the hands of those seeking to discriminate and stigmatize. History has shown that genetic research conducted on specific groups often results in adverse ramifications for members of the group. African-Americans specifically endured the consequences of genetic research. In the 1970s, a major episode involved testing for the gene of sickle cell anemia, a genetic disease that is prevalent among African-Americans. The testing resulted in employment and health insurance discrimination.⁹⁷

Even when the researchers administering an ethnic or race specific genetic database make every effort to prevent discrimination, the identification of either genetic diseases that are predominant among members of that group or the reduced effectiveness of broadly used drugs on members of that group can be a double-edged sword. Third parties can use this general information to discriminate against such individuals. Furthermore, even absent specific adverse discriminatory acts, research aimed specifically at racial or ethnic minorities can lead to stigmatization.

Genetic discrimination and stigmatization can be enhanced when the genetic information concerns a group with a history of being discriminated against, such as African-Americans. The effects are exacerbated as a result of the combination of genetics' statistics and a tendency to overstate and abuse the data. Statistics demonstrate that some racial and ethnic minorities exhibit susceptibilities to certain genetic diseases. But, the stigma associated with minority status causes the existence of any such statistics to be amplified and to further increase stigmatization.⁹⁸ The enhanced discrimination and stigmatization tends to form and reinforce the ties between members of racial and ethnic groups. Consequently, the creation of racial or ethnic specific genetic databases illustrates the pressure exerted not only on the equality tenet of the liberal meta-narrative but also on the tenet of the liberal meta-narrative that posits the individual as separate from others.

Even in the absence of discrimination and stigmatization, the very existence of ethnicity or race specific genetic research can destabilize the liberal conception of identity. Research that

97. LORI B. ANDREWS, *FUTURE PERFECT: CONFRONTING DECISIONS ABOUT GENETICS* 92-93 (2001).

98. Herbert Nickens, *The Genome Project and Health Services for Minority Populations*, in *THE HUMAN GENOME PROJECT AND THE FUTURE OF HEALTH CARE* 58, 65-66 (Thomas H. Murray et al. eds., 1996).

emphasizes the commonalities between members of a racial or ethnic group can strengthen the notion that individuals are interlinked with others of their group. The cultural belief that the gene symbolizes the essence of our identity and is the core of all truth about our nature reinforces the relational effect of the information.⁹⁹ Consequently, even if the researchers running the database succeed in preventing misuse of the information, the very creation of the database and its line of investigation may exert pressure on the liberal identity meta-narrative.¹⁰⁰ The individual life-narrative could be pushed toward convergence with the life-narratives of members of his racial or ethnic group. Every racial and ethnic community includes members who broke away. These individuals may be adversely affected by being forced to confront their biological heritage in ways that clash with their individually developed inner stories.¹⁰¹

F. Summary

The social scenarios illustrated through these stories portray different instances in which technological transformation of individual life-narratives can destabilize their governing identity meta-narratives. Although our life-narratives are seldom conscious experiences, pressure has the power to bring life-narratives to the forefront.¹⁰² In such cases, it is the style of the life-narrative that is shaken. Those affected find themselves dancing to a new rhythm.¹⁰³ The tensions that develop unsettle existing liberal and communitarian normative conceptions of identity that are embedded in individual life-narratives.

The stories analyzed in this Part illustrate a broad range of identity tensions implicating both normative identity conceptions. First, pressure is applied to the liberal conception of identity through the adoption of Internet group narratives; the fragmentation enabled through Internet anonymity; the deterministic perception of genetic

99. See NELKIN & LINDEE, *supra* note 81, at 2, 38-57.

100. I should note that parallel developments related to genetic testing of minorities can actually draw apart racial communities by demonstrating by genetic variance that their members are not as genetically related as previously thought. See, e.g., Johnston, *supra* note 94; Gladys Nieves Ramirez, *MitDNA and Race in Puerto Rico*, EL NUEVO DIA, Aug. 29, 1999, <http://www.indio.net/aymaco/Proof.htm>. These developments, like the tensions illustrated in Bashor's case, can at times exert pressure on the communitarian identity meta-narrative by destabilizing long held conceptions of community memberships.

101. See Arthur L. Caplan, *Handle with Care: Race, Class and Genetics*, in JUSTICE AND THE HUMAN GENOME PROJECT 40 (Timothy F. Murphy & Marc Lappe eds., 1994).

102. See SCHECHTMAN, *supra* note 30, at 116; Crites, *supra* note 28, at 78.

103. See Crites, *supra* note 28, at 83.

medical information; and the ability of genetic information to strengthen racial and ethnic ties. Second, pressure is applied on the communitarian meta-narrative through Internet-enabled fragmentation and through shifts between communities that result from the ability to join a virtual Internet community and from the changes in traditional group affiliations induced by genetic information.

Some of the social scenarios described here could conceivably develop into legal controversies. One could plausibly imagine the distraught parents of an anorectic teenager filing suit against a private web-host that serves the pro-ana group of which their daughter is a member. But, more importantly, although some of the identity themes illustrated in this Part are not currently part of an ongoing legal controversy, some reappear as the underlying tensions of currently adjudicated controversies. The identity tensions identified in this Part will shed additional light on the nature of the legal controversies and on their appropriate resolution.

V. IDENTITY AS A ZONE OF NORMATIVE CONCERN

The individual stories discussed illustrate the extensiveness of the social changes taking place as a result of the use of genetic testing and Internet technologies. The technological innovations transform a wide-ranging variety of social relations and social structures, thereby causing recurring destabilizations of our normative conceptions of identity.

But should identity pressures merit our normative concern? The question becomes of particular importance as we proceed further to examine the legal controversies presented in Part II.

A. *Justifying Identity Protection*

The question posed here, put simply, is why should we be concerned about technological change transforming the stories individuals tell about themselves? The significance of our life-narratives stems from their vital role in providing meaning and coherence in our lives and relationships. Because of the critical importance of life-narratives for individuals, as a society we are obliged to protect a broad variety of life-narratives.

As individuals we have a need for an inner story. Our inner story enables us to define meaning in our lives. It navigates us when

we act, providing a mental compass.¹⁰⁴ Maintaining the coherence of our life-narratives is significant irrespective of whether the life-narrative is based on stability or on constant transformation. The importance of our inner life story becomes most apparent when it is disrupted.¹⁰⁵ An occurrence that prevents an evolving life-narrative from continuing to transform would be considered a disruption in the same way as would an occurrence that interferes with a consistent and stable life-narrative.

The clinical case of "Mr. Thompson" illustrates the significance of maintaining a coherent life-narrative. "Mr. Thompson" lost his long-term memory and was constantly in the process of inventing different pasts for himself. The literature describes him as "... desperate, in a frenzy ... He must seek meaning, make meaning, in a desperate way, continually inventing ..."¹⁰⁶ The maintenance of an internal life story is, thus, of such importance that, when it is lost, there is a desperate need to replace it.

Yet, one need not reach as far as clinical circumstances to appraise the centrality of our life-narratives. Disruptions to life-narratives profoundly affect individual lives, even in the absence of pecuniary harm. Consider the hypothetical case of Karl. Karl was a law school professor in an Eastern European country. The fall of the communist regime in his country made the atmosphere so inhospitable to individuals of his ethnicity that he decided to immigrate to the United States. Once in the United States he was unsuccessful in obtaining a law school teaching job. His foreign legal education combined with his locally oriented scholarship made him an unattractive candidate. On the other hand, his multilingual skills made him an appealing candidate for a large corporate law firm in New York. At the law firm he was very successful, became a partner, and is now financially much better off than ever before. Yet, he is unhappy. He takes no pride in facilitating large business deals. He is unhappy because his life-narrative does not portray him as a dealmaker but as a social thinker. The central issue for Karl is that the life he is leading is incongruent with the way he perceives himself. It is the incompatibility between Karl's inner story and the realities of his new life that is at the crux of his discontent.

Karl's discontent demonstrates the centrality of our life-narratives to our well-being. His discontent—despite the overall

104. See JONATHAN GLOVER, *THE PHILOSOPHY AND PSYCHOLOGY OF PERSONAL IDENTITY* 152 (1988).

105. See GIDDENS, *supra* note 35, at 53.

106. GLOVER, *supra* note 104, at 152 (quoting OLIVER SACKS, *THE MAN WHO MISTOOK HIS WIFE FOR A HAT* (1985)).

improvement in his quality of life—shows the extent to which coherence and meaning are vital to our lives.¹⁰⁷ Disruptions to individual life-narratives, therefore, merit concern even in the absence of any pecuniary harm.

Yet, it is not only individual life-narratives and individual discontent that are at stake here but also our normative views of the type of individual identities we would like to dominate our society. At issue here is the societal balance we endorse between individual life-narratives governed by the liberal meta-narrative and individual life-narratives governed by the communitarian meta-narrative. In United States society, the societal equilibrium of normative conceptions of identity is tilted toward the liberal meta-narrative.¹⁰⁸ The social equilibrium of normative conceptions of identity can be transformed as a result of changes in individual life-narratives. This transformation can take place through the social adoption of new technologies. The individual life-narratives affected are not solely those of the persons using the technology. Rather, the life-narratives of family, friends, and community members may also be indirectly affected. For example, the Howard genetic research can affect not only the identities of African-Americans whose genetic information is analyzed, but also the identities of African-Americans who did not submit their DNA to the database.

When a new balance occurs, it can be tilted further toward the liberal or communitarian side of the spectrum, depending on the type of pressure exerted by the technology.¹⁰⁹ Since our societal beliefs, legal institutions, and legal discourse are generally founded on liberal principles, concern is most likely to arise when pressure is exerted on

107. Disappointments are part of our daily life. I do not claim here that every disappointment from the way life has turned out would amount to a disruption of a life-narrative. It is only when the style of one's life-narrative is shaken that one would define the incompatibility between her expectations and reality in terms of identity. Whether something amounts to a disruption of one's life-narrative is a subjective judgment that can only be determined by the individual. The same event may be identity transforming for one yet a mere run of the mill life disappointment for another.

108. See Markus, *supra* note 50, at 224-25.

109. Pressure exerted on a normative conception of identity can affect the equilibrium in two ways. First, the equilibrium may shift due to the enhancement of the opposing identity meta-narrative. For example, as illustrated by the Howard database case, enhancement of involuntary relationships between individuals exerts pressure on the liberal notion of the individual as separate from others. In such a case, the equilibrium will shift due to the enhancement of the communitarian meta-narrative which is a relational conception of identity. Secondly, the equilibrium may shift where technological pressure weakens a normative conception of identity without enhancing its opposing one. For example, changes in the traditional defining elements of group membership from religion to genes, as illustrated by Bashor's story, destabilize the communitarian meta-narrative, thereby shifting the equilibrium by weakening the communitarian conception of identity without enhancing the liberal meta-narrative.

the liberal conception of identity. Yet, despite the dominance of the liberal meta-narrative, the significance of inner stories to individual lives mandates safeguarding the life-narratives stemming from the communitarian meta-narratives as well. Every individual should be able to maintain the life-narrative that provides his life with coherence and meaning. Consequently, although some cases will involve conflicting identity interests and safeguarding one identity interest will necessarily require sacrificing another, our obligation is at the very least to consider the full spectrum of identity interests. Hence, any outcome reached without the consideration of both liberal and communitarian identity interests will necessarily be deficient.

Despite the liberal predisposition of our legal system, the obligation to consider and preserve communitarian ways of life is in fact already embedded in legal tradition. Judicial decisions in a variety of areas contend with the need to preserve communitarian preferences. One example is in the context of obscene materials, in which the Supreme Court in *Miller v. California* held that obscenity should be determined according to community standards.¹¹⁰ Another example is related to health care: cases in which parents refused medical treatment for their children on religious grounds. In these cases, courts considered the severity of the child's ailment, the timing of the legal proceeding, and the religious basis for the decision in determining when to uphold parents' decisions.¹¹¹ Consequently, the normative obligation to safeguard the identity equilibrium is congruent with the entrenched obligation to defend both liberal and communitarian life preferences.¹¹²

110. See *Miller v. California*, 413 U.S. 15, 36-37 (1973).

111. See *In re Green*, 307 A.2d 279 (Pa. 1973) (holding that a seventeen-year-old and his family, who were Jehovah's Witnesses, may refuse corrective spinal surgery that would affect his quality of life but was not a matter of life and death); Ira C. Lupa, *Mediating Institutions: Beyond the Public/Private Distinction: The Separation of Powers and the Protection of Children*, 61 U. CHI. L. REV. 1317, 1359-61 (1994).

112. I focus in this section on the psychological justification for protecting individual life-narratives and on the importance of considering changes of normative conceptions of identity. These justifications, however, are only a first step toward providing a normative justification for the incorporation of identity interests within our legal system. A complete normative justification should incorporate a theory that elaborates on the relationship between a commitment to identity and the existing commitments of our liberal legal system. Such theory should further elaborate on the relationship not only between liberal and communitarian approaches in general but also on the relationship between liberal and communitarian identity interests in particular. A theory that encompasses these issues will enable us to eventually resolve doctrinal conflicts where one needs to weigh and determine the significance of liberal and communitarian identity interests against each other and against other traditional interests. While the composition of such a political theory of identity is of significance to this argument, it warrants a project all of its own. This Article is part of a larger project that seeks to examine the acceptance process of new technologies as they impact different social and legal values and

Our legal decisions involving genetic testing and the Internet inevitably affect the identity equilibrium. Decisions that permit unrestricted use of the technology, in essence, authorize a post-technology equilibrium while decisions that restrict use of the technology move us back toward the pre-technology equilibrium. It is important to recognize that once a technology has been in use, either an affirmation of the post-technology equilibrium or the return to a pre-technology equilibrium can disrupt individual life-narratives, thereby exerting pressure on one or both normative conceptions of identity.¹¹³ Consequently, we are obliged to engage in an identity-conscious legal discourse that would consider the different identity interests at stake.¹¹⁴

Importantly, identity protections are not lacking only in the context of genetic testing and the Internet. Identity tensions lurk behind social controversies to which legal doctrines as diverse as those concerning equality, product liability, privacy, and the family are applied.¹¹⁵ Yet, incorporation of identity interests is particularly warranted in the contexts of legal controversies that involve uses of genetic testing and Internet technologies. The reasons are twofold. First, the technologies significantly amplify existing pressures on our normative conceptions of identity. Second, when a technology is in the midst of its diffusion stage, we are provided with a window of opportunity in which we can influence its uses. Our ability to make choices is extended when uses of a technology are still new. At a later

interests. The project cuts across technologies and values. This project's goal in the context of the identity study is more modest, seeking to highlight and investigate the ability of new technologies to create a need for a relatively unused legal interest. In so doing, it provides part of the argument for the incorporation of identity interest into our legal discourse. Yet, the complete theoretical and doctrinal framework needed for incorporating identity interests into our legal framework requires much broader academic investigation.

113. Whether a specific event disrupts an individual life-narrative is a subjective matter to be determined from the point of view of the individual. The same use of a technology can affect individuals disparately. For example, for one woman a positive test result indicating that she carries the breast cancer gene can be a life-devastating event transforming her conception of herself as a woman. At the same time, another woman receiving the same result may be mostly grateful that she knows and can now take the appropriate precautions. Internet and genetic testing technologies, however, merit special concern because of the likelihood that they will transform individual identities. The pressures they apply on the foundational elements of the liberal and communitarian meta-narrative make it likely that, in many cases, individual life-narratives will be subjectively disrupted.

114. This is not to say that the legal decision maker is obliged to engage in an appraisal of the effects of its decisions regarding the use of technological innovations on the societal identity equilibrium. The discussion of the pre-technology and post-technology equilibrium is brought up here and throughout the Article to demonstrate the nature of the social transformation caused by the technologies and to emphasize the significance of taking individual identity interests into account.

115. See generally sources cited *supra* note 7.

stage, after controversies surrounding an innovation subsidy, only one perception of the innovation is accepted by all. For example, the structure of the bicycle, underwent different forms, such as the three-wheel format, but has eventually reached a final form, which is no longer debated.¹¹⁶ Internet and genetic testing technologies have destabilized our societal equilibrium of normative conceptions of identity. Different uses of these technologies shift the equilibrium toward the liberal or communitarian side of the spectrum. While uses of the technologies are new we can still make a choice as to whether we would like to adopt the post-technology equilibrium or tilt the balance back toward the pre-technology stance. This type of choice is more difficult to make when it is not new uses of technologies that are at stake but deeply entrenched social patterns. Nevertheless, the development of identity conscious decision making in the realm of genetic testing and the Internet could eventually open the door to similar decision making in other areas of law in which incorporation of identity interests is also warranted, although harder to achieve.¹¹⁷

B. *Distinguishing Identity from Autonomy*

The focus on identity as a life-narrative should not be confused with an oft-used perception of autonomy that uses similar terminology—autonomy as self-authorship. Some may be led to believe that it is autonomy, not identity, that is at stake here. Autonomy as self-authorship centers on the individual's ability to freely author his life and to make independent decisions.¹¹⁸ Yet, the normative conceptions of identity, which are the focus of this Article, differ from autonomy in two primary respects.

The first distinction concerns autonomy relating only to the liberal meta-narrative. This Article is concerned with the centrality of individuals' inner stories to their lives, irrespective of whether these stories are part of the liberal or the communitarian meta-narrative. Autonomy interests advocate the protections of life-narratives that are created freely and individually by the person, not those that are created by community values.¹¹⁹ Autonomy, therefore, does not

116. See BIJKER, *supra* note 8, at 280.

117. See *generally* sources cited *supra* note 7.

118. Like identity, autonomy is a protean concept, which means different things to different people. Richard H. Fallon, *Two Senses of Autonomy*, 46 STAN. L. REV. 875, 876 (1994). Among its many meanings, it is used as the equivalent of liberty, self-rule, or freedom of will. Yet one of its common uses is in the context of self-authorship. See GERALD DWORKIN, *THE THEORY AND PRACTICE OF AUTONOMY* 6, 13 (1988); Yochai Benkler, *Siren Songs and Amish Children: Autonomy, Information and Law*, 76 N.Y.U. L. REV. 23, 35 (2001); Fallon, *supra*.

119. See MILL, *supra* note 38.

safeguard the full range of narratives that identity interests mandate safeguarding.

The second difference concerns the distinction between the *form* in which a life-narrative is created and its *content*. The technological influences studied here relate more closely to the *content* of one's life-narrative, not the *modes* by which the life-narrative is formed.¹²⁰ The focus here is not on the *ways we make* the stories we tell but on the *type* of stories that are eventually told. True, the identity meta-narratives contain elements dealing with the formation of narratives. The liberal meta-narrative explicitly features autonomy and self-authorship while the communitarian meta-narrative posits the narratives of the individual as converging with those of others. However, identity is about the resulting stories. A person holding the communitarian meta-narrative is likely to have a very different personal narrative than that of a person endorsing the liberal meta-narrative. To underscore one potential difference, the prototypical communitarian life-narrative is likely to be driven by strong obligations to others in a tight knit community. The liberal meta-narrative, on the other hand, is likely to feature an individual living in an urban environment strongly emphasizing self-fulfillment obtained through the pursuit of a professional career.¹²¹

It is very often the disruption to the *content* of one's life-narrative that people experience most strongly and not the changes in their ability to form their own life-narratives. We often disregard the restriction of our choices because we fail to discern that what we perceive as a diverse range of options is in fact the same alternative in different outfits.¹²² But, furthermore, even when our life choices are overtly limited, the need to react to the restriction and select the less desirable alternative is often a one-time event. Once the choice is made it is the content of the resulting life-narrative that accompanies us for years to come. Looking back at the Karl hypothetical, the fall of the Communist regime restricted Karl's alternatives. He was forced to leave his country. Yet, his consistent discontent is only indirectly a matter of autonomy—the result of the constriction of his options. His

120. This is not to say that genetic testing and the Internet do not influence autonomy interests. However, this inquiry is outside the scope of this Article. For studies on the influences of genetic testing and the Internet on autonomy, see generally Benkler, *supra* note 118; Julie E. Cohen, *Examined Lives: Informational Privacy and the Subject as Object*, 52 STAN. L. REV. 1373 (2000); Robert Wachbroit & David Wasserman, *Patient Autonomy and Value-Neutrality in Non-directive Genetic Counseling: In the Context of Genetic Counseling, Value-Neutrality Is Impossible*, 5 STAN. L. & POL'Y REV. 103 (1995).

121. See *supra* Part III.B.

122. For example, we seemingly have many cable channels to choose from while in fact they tend to broadcast similar contents. See Benkler, *supra* note 118, at 92-97.

discontent looms from the incompatibility of his life-narrative—his perception of himself as a social thinker—with the life he leads as a corporate lawyer.

VI. IDENTITY PRESSURES AND LEGAL CONTROVERSIES

Legal disputes involving genetic testing and the Internet stem from tensions similar to those stirring the social scenarios described in Parts II and IV. Although seemingly unrelated and decided under separate doctrines, I will show in this Part that these legal debates are in fact an additional reflection of the destabilization of normative conceptions of identity.

By examining the legal debates, I will demonstrate that the legal discourse governing these controversies is often laden with extensive technological descriptions and efforts to adjust traditional doctrines to the new technologies through analogy to earlier technologies.¹²³ Identity pressures are not discussed. Instead, the legal battles are fought with familiar and worn-out tools. Privacy and freedom of speech, frequent contenders in techno-legal debates, are repeatedly brought forward. It is striking that although the discourse does not identify and consider identity interests, determinations that affect our normative conceptions of identity are constantly made. Indirect determinations generally either sanction the technological pressure and affirm the post-technology shift in the identity equilibrium or return the balance to its pre-technology state by restricting the use of the technology. Furthermore, I will show that such indirect legal treatment of identity often fails to protect identity interests.

Finally, although the impact of identity tensions varies from one controversy to another, I will indicate when possible the direction in which identity-conscious adjudication is likely to shift the relevant legal outcome. I will not endeavor in this Article to provide explicit normative resolutions of identity interests' adjudication or structure the controversy-specific doctrinal framework through which identity interests can be inserted into the debate.¹²⁴ Consequently, although I acknowledge that identity interests could be accommodated through

123. See Bernstein, *supra* note 5, at 1042-43 (describing the phenomenon of technological visibility).

124. Such context-specific resolutions cannot be appropriately supported in the absence of a political theory of identity adjudication. See *supra* note 112. Furthermore, providing specific resolutions of the appropriate normative result would require extensive doctrinal analysis of the law implicated in each controversy while the controversies discussed in this Article are merely illustrative of the broad phenomenon taking place.

constitutional, statutory and common law forms, I will restrict my analysis to the framework in which the legal discourse related to that controversy traditionally took place.

In this Part I will discuss the five legal controversies presented in Part II of this Article. The controversies involve: (i) the physician's duty to warn relatives of a patient's genetic condition; (ii) mandatory submission of DNA samples to government databases; (iii) commercial profiling on the Internet; (iv) the involuntary exposure of anonymous Internet identities; and (v) the restriction of minors' access to Internet content. I will examine each controversy in the context of the underlying identity tensions and the identity outcome reached through the application of traditional doctrinal tools.

A. *Genetic Testing and the Duty to Warn*

Donna Safer's father died from colorectal cancer. Safer was diagnosed with the disease at the relatively early age of thirty-six. She sued her father's physician for failing to warn her of the genetic nature of her father's disease.¹²⁵

Cases resembling this scenario are slowly trickling through the court system.¹²⁶ A similar scenario that is causing concern among medical practitioners and genetic counselors should also be considered in this context.¹²⁷ Let us improvise on the *Safer* scenario to present this common clinical dilemma. The father, I will call him Jack, actually tests for the colon cancer gene and upon finding out his positive carrier status he undergoes yearly colonoscopies. Any polyps found are routinely removed and he lives to an old age. His physician advises him that he notify his relatives so that they can get tested themselves. Jack explains that he is not in touch with his siblings but that he will make sure that his children get tested. Once the daughter tests positive she undergoes routine colonoscopies herself. She does not get sick at age thirty-six and instead becomes pregnant and starts a family with her new husband. However, one of Jack's estranged brothers is diagnosed with advanced colon cancer at age forty. He also tests positive for the colon cancer gene. He sues Jack's physician for failure to warn him of Jack's genetic condition.

125. See *Safer v. Estate of Pack*, 677 A.2d 1188, 1189-90 (N.J. Super. Ct. App. Div. 1996); see also *supra* note 9 and accompanying text.

126. See *Pate v. Threlkel*, 661 So. 2d 278, 280-82 (Fla. 1995).

127. For descriptions of clinical scenarios involving conflicting family interests, see generally DAVID H. SMITH ET AL., *EARLY WARNING: CASES AND ETHICAL GUIDANCE FOR PRESYMPTOMATIC TESTING IN GENETIC DISEASES* (1998).

Pressures on the liberal identity meta-narrative underlie the duty-to-warn controversy. These tensions are similar to the ones illustrated through the Howard database case, in which social tensions were related to genetic information's ability to enhance ethnic and racial ties. In this case the relational nature of genetic information enhances the ties within a smaller unit—the family.

Genetic information in the duty-to-warn controversy influences the tenets of the liberal meta-narrative that posit the individual as equal, autonomous, and separated from others. First, the individual's concept of himself as an equal individual could be directly affected through discrimination and stigmatization resulting from the sharing of his genetic information. Stigmatization and discrimination can take the institutional form of insurance or job discrimination but can also affect personal relations.¹²⁸ Discrimination and stigmatization are traditionally viewed as a privacy problem; however, it is important to recognize that they also affect the way we view ourselves.

Secondly, and of particular importance, the belief that the individual is unique, autonomous, and separate from others and from society as a whole is destabilized by the familial nature of genetic information.¹²⁹ The familial nature of genetic information impedes independence from one's genetic parents. Connections are established irrespective of love and choice—genetic information unites those who may not feel connected or have not chosen to be united.¹³⁰

128. See generally Larry Gostin, *Genetic Discrimination: The Use of Genetically Based Diagnostic and Prognostic Tests by Employers and Insurers*, 17 AM. J.L. & MED. 109 (1991).

129. On the familial nature of genetic information, see generally ROGER B. DWORKIN, LIMITS: THE ROLE OF THE LAW IN BIOETHICAL DECISION MAKING 94-104 (1996); Janet L. Dolgin, *Personhood, Discrimination and the New Genetics*, 66 BROOK. L. REV. 755, 756-57, 770 (2000). The family-oriented nature of genetic information and its influence was perceived by those undergoing genetic tests. In an interview conducted five years after family members were tested for Huntington's disease, sentiments ran strong. One member proclaimed: "Someone should have said 'This will change your life forever—not only for you but for your family.'" Another explained: "It's a family disease. Just like pure nature. Even if we had all tested negative for it, it's not that it would be suddenly gone from our family." Susan Sobel & D. Brooks Cowan, *The Process of Family Reconstruction After DNA Testing for Huntington's Disease*, 9 J. GENETIC TESTING 237, 240 (2000). Another study found that family members who tested negative for the Huntington gene often felt they lost their commonality with their family. Susan K. Sobel & D. Brooks Cowan, *Impact of Genetic Testing for Huntington's Disease on the Family System*, 90 AM. J. MED. GENETICS 49, 53 (2000). One woman described her feelings as follows: "I don't want to be left out of the family because I am not sick. My sisters are special people now . . . I had been part of this very elite group of people who may be very ill, and it was like a claim to fame. You're a special person because you might be dying." *Id.* She felt that for her "testing has destroyed the family forever . . ." *Id.* At the same time her sister who tested positive said: "It's like a real family now. I never had one of those before." *Id.*

130. See KAJA FINKLER, EXPERIENCING THE NEW GENETICS: FAMILY AND KINSHIP ON THE MEDICAL FRONTIER 182 (2000). Although the effects of the familial nature of genetic information are particularly pertinent where adult relatives are concerned, similar tensions evolve when

Genetic testing technology is in fact composed of two technological layers that together produce genetic information that influences identity. The first is the identification of a gene. The knowledge that a disease that is prevalent among one's family members is genetic changes the nature of the ties between members of a family. The second technological layer is genetic testing itself. Once an individual is identified as a carrier of a disease gene, it is likely that other individuals in her family are carriers of the same gene.¹³¹

Genetic information pulls together family members who grew apart and developed separate life-narratives. Consider Jack, who notifies his children of his genetic status but refrains from notifying his siblings. He left his small hometown in a rage thirty years ago and has not seen his siblings since. He feels completely detached from them and from the community in which he grew up. However, the newly acquired genetic information unexpectedly binds his life-narrative, which was independent for decades, with those of his estranged relatives. He realizes that—as far as he has gone—they may still share a similar life story.

The binding quality of genetic information is qualitatively different from other forms of medical information that preceded it. Genetic information is not unique in involuntarily linking individuals who up to that point lead separate existences. Medical information can at times interlink individuals who do not share their lives. The tracing of individuals who may have contracted HIV from a specific patient is a prevalent example.¹³² Yet, genetic information is unique in the type of re-linking it creates and in its cultural formative force.

First, genetic information is distinguished from medical information in its cultural force. Unlike medical information, genetic information is culturally perceived as the essence of identity—it is

fetuses undergo genetic testing. Where an amniocentesis reveals the existence of a dominant genetic disorder, such as Huntington's disease, this indicates not only that the fetus will develop the disease, usually around the age of forty, but also that the parent will share this fate. See ANDREWS, *supra* note 97, at 39-40. Furthermore, even where a test reveals the existence of a nondominant genetic disorder, such as Tay-Sachs, the test results carry information for future siblings, even though they do not indicate that the parent will incur the disease. See *Curlender v. Bio-Sci. Labs.*, 165 Cal. Rptr. 477 (Ct. App. 1980).

131. For example, although it was long known that Huntington's disease is a genetic disease, the actual test was only developed in the 1980s. Michael Hayden, *Predictive Testing for Huntington's Disease: The Calm After the Storm*, 356 LANCET 1944, 1944 (2000); see also Taswell & Sholtes, *supra* note 76 (describing family relations based on the knowledge of a familial genetic disease and the transformation taking place after the family gets tested).

132. See Karen H. Rothenberg, *The AIDS Project: Creating a Public Health Policy—Rights and Obligations of Health Care Workers*, 48 MD. L. REV. 93, 181-83 (1989) (describing contact tracing programs).

conceived as the true self that is incapable of deceit.¹³³ The cultural significance, therefore, exacerbates the binding effects. Secondly, although contagious diseases also bind together the interests of family members who often share the same habitat,¹³⁴ they are unlikely to bring together blood-relatives who have grown apart. The ties re-united through genetic information are often exactly the stifling familial ties that the liberal scheme allows us to sever. The self-reliant individual who leaves home in his quest for self-exploration is a dominant liberal theme.¹³⁵ Thus, genetic information threatens a focal point of the liberal meta-narrative.

Identity tensions are aggravated when an individual needs to balance his own interest in keeping his genetic information confidential with the benefit that this information may bring to his relatives. Even in the absence of a third party promoting disclosure, the familial nature of the information exerts pressure on the individual to place communal family interests above his own considerations.

The cases that reached the courts arose when a third party, the physician, was in the position of having to act as a mediator between the technology and the individual's liberal identity interests. The courts generally held that a physician's duty to warn extends beyond his patient to identified members of the patient's family.¹³⁶ Thus, in the *Safer* case, the court found that Safer's father's physician's duty extended beyond Safer's father to Donna herself.¹³⁷

To this point, the courts have not yet ruled on facts similar to those described in our second scenario—where Jack refused to warn his estranged siblings. Yet, two courts in dictum commented on a potential outcome of such a scenario. The courts that considered the issue were not in unison with regard to its resolution. The Florida Supreme Court in *Pate v. Threlkel* stated that a physician is only obliged to convey the genetic nature of the disease to the patient. It declined to impose a duty of notifying the relatives on the physician, taking into account the administrative difficulty of identifying and locating the relatives and the physician's confidentiality duty toward his patient.¹³⁸ In contrast, the New Jersey Superior Court adjudicating the *Safer* case refused to hold that the physician's duty is limited to

133. See NELKIN & LINDEE, *supra* note 81, at 2, 38-57.

134. See, e.g., *Edwards v. Lamb*, 45 A. 480 (N.H. 1899).

135. See BELLAH, *supra* note 47, at 62-63.

136. *Pate v. Threlkel*, 661 So. 2d 278, 282 (Fla. 1995); *Safer v. Estate of Pack*, 677 A.2d 1188, 1192 (N.J. Super. Ct. App. Div. 1996).

137. *Safer*, 677 A.2d at 1191-92.

138. *Pate*, 661 So. 2d at 282.

informing the patient. The court stated that there might be instances in which it would be necessary to resolve the conflict between the physician's duty to warn and the patient's desire to keep his genetic information confidential. The court thereby acknowledged that a physician might be required to disclose a patient's genetic information against the patient's will.¹³⁹

The resolutions suggested by the *Safer* and *Pate* courts offer determinations in the identity arena. They in fact endorse two conflicting identity outcomes. Imposing a duty to warn on the physician, despite his patient's objection, would sanction the technological pressure on the liberal identity meta-narrative. The requirement that genetic information derived from the testing of one family member be shared with all members unsettles the notion of the family as composed of autonomous individuals who are free to choose their own relationships.¹⁴⁰ Consequently, the imposition of a duty would result in a shift of the identity equilibrium toward the communitarian meta-narrative and create a new post-technology equilibrium. On the other hand, a refusal to impose a duty to warn when the patient objects would restrict potential uses of the technology by making testing by family members less likely. Such a refusal by the courts would alleviate the pressure on the liberal identity meta-narrative and contribute toward shifting the balance back to its pre-technology position in which individuals did not share their relatives' genetic information.

The courts have not yet reached a resolution on this issue. However, the analysis the courts conducted portrays a simplistic picture that does not take into account the complex scheme of identity interests involved. The courts' analysis centered on the scope of the physician's duty to warn. They considered (i) whether the harm was foreseeable, evaluating the ability to identify the third parties at risk; (ii) the nature of the harm, i.e., whether or not the disease was preventable; and (iii) the duty of confidentiality toward the patient.¹⁴¹ Although these considerations are relevant and vital in assessing

139. *Safer*, 677 A.2d at 1192-93.

140. See Janet L. Dolgin, *Choice, Tradition and the New Genetics: The Fragmentation of the Ideology of Family*, 32 CONN. L. REV. 523, 542-49, 552-58 (2000); Dolgin, *supra* note 129, at 756-57, 770, 806-07, 809.

141. *Pate*, 661 So. 2d at 281-82; *Safer*, 677 A.2d at 1192. The *Safer* Court also emphasized the ability to avert or minimize the harm. *Safer*, 677 A.2d at 1191-92. For writings evaluating these controversies in terms of the conflict between the physician's duty to warn and the physician's duty of confidentiality, see, for example, Ellen Wright Clayton, *What Should the Law Say About Disclosure of Genetic Information to Relatives?* 1 J. HEALTH CARE L. & POL'Y 373, 382-90 (1998); Karen H. Rothenberg, *Breast Cancer, The Genetic "Quick Fix" and the Jewish Community*, 7 HEALTH MATRIX J.L. & MED. 97 (1997).

whether a duty to warn need be imposed, they fail to encompass the identity implications.

Beginning with the patient, a requirement to disclose his genetic information affects his individual life-narrative. Consider Jack, who determined his own destiny by fleeing his hometown and leading a life separate from his siblings. This aspect of his life-narrative that embodied the liberal meta-narrative tenets of autonomy and separation was abruptly disrupted by the need to consider the interests of his estranged siblings above his own. He realizes that his life-narrative cannot be—and perhaps never was—separate from that of his kin. His autonomous decision to stay apart from his siblings is undermined. Furthermore, he is required to actively place his interest in keeping his personal genetic information confidential below those of others to whom he does not desire relating.

On the relative's side, the impact of the genetic information was evaluated only in terms of the harm that may befall the relative should he incur the genetic disease. Although a legitimate consideration, the nature of the harm cannot be evaluated solely in medical terms. Conveying familial genetic information to a relative who did not submit to testing implicates his identity interests. The relative, like the patient, is affected by the familial nature of the information—he unexpectedly finds himself sharing the narrative of others. His narrative is constrained by a group narrative he finds himself coerced to share. This affects his conception of himself as a unique person. Furthermore, the involuntary receipt of the information destabilizes his conception of himself as an autonomous person. He is not allowed to make the decision of whether he desires to know his familial genetic information.¹⁴²

Identity-conscious adjudication that considers identity interests is less likely to impose a duty to warn because identity interests add additional weight against the imposition of such a duty. Under the current analysis, the patient's interests are already weighed against the duty to warn. The duty of confidentiality protects the patient from disclosure of his genetic information against his will.¹⁴³ Yet, consideration of the patient's identity interests would further tilt the balance against disclosure. At the same time, the relative's interests against disclosure are not accounted for at all in the courts' analysis. The relative's interests are only considered in the medical context and are, therefore, weighed solely for the imposition of

142. See Jorgen Husted, *Autonomy and a Right Not to Know*, in *THE RIGHT TO KNOW AND THE RIGHT NOT TO KNOW*, *supra* note 78, at 55; David E. Ost, *The Right Not to Know*, 9 J. MED. PHIL. 301 (1984).

143. *Pate*, 661 So. 2d at 281-82; *Safer*, 677 A. 2d at 1192.

a duty to warn. Consideration of the relative's identity interests would add additional weight against the imposition of the duty. The consideration of identity interests would, thus, alleviate the pressure on the liberal identity meta-narrative.¹⁴⁴

Yet, as pointed out, the framework of existing doctrine is limited to assessing the foreseeability and nature of the harm and the duty of confidentiality and does not consider identity interests. Consequently, application of existing doctrines is more likely to result in the imposition of the duty to warn. The imposition of the duty to warn in a broad variety of cases will, in effect, enforce the post-technology equilibrium, which erodes the liberal conception of identity. Hence, under the current regime the law is likely to fail in protecting liberal identity interests.

B. Mandatory Submission of DNA Samples to Government Databases

Melvin Taylor Gaines, convicted for nonviolent crimes, was required under Nevada law to submit his DNA sample to the state's criminal database. The requirement is not related to Gaines' individual case but to the government goal of preventing future crimes. Gaines sued the State, claiming that the requirement to submit a DNA specimen is an unreasonable search and seizure under the Fourth Amendment.¹⁴⁵

Lawsuits like the one brought by Gaines are becoming increasingly widespread due to the expanding use of DNA databanks. Two types of databanks are mandatory for certain groups of individuals. The most common are criminal DNA databanks. These databanks are currently maintained by the federal government and all fifty states.¹⁴⁶ DNA is extracted from individuals not for the purpose of

144. One can argue that relieving the pressure on the liberal meta-narrative by considering identity interests would contribute toward creating a now false consciousness of separateness. Yet, although the related nature of genetic information tilts the identity equilibrium toward the communitarian conception of identity we still have a choice. Although we may be unable to tilt the equilibrium all the way back, connectivity between individuals is also affected by the uses to which the information is put. One level of connectivity is obviously created by the knowledge becoming known to the individual himself. One's conception of connectivity, however, would be further affected if the information was released to others, carrying with it, for example, adverse insurance effects resulting from relatives reporting to their insurance companies or even repeated phone calls from a once distant cousin now reporting weekly on new medical advances related to the family disease.

145. See *Gaines v. Nevada*, 998 P.2d 166, 168, 171-73 (2000); see also *supra* notes 10-15 and accompanying text.

146. Mark A. Rothstein & Sandra Carnahan, *Legal and Policy Issues in Expanding the Scope of Law Enforcement of DNA Databanks*, 67 BROOK. L. REV. 127, 131 (2001); Robin Cheryl Miller,

solving the crime for which they were indicted, but in the interest of solving future crimes. The Military also maintains a DNA database of all enlisted personnel, the stated purpose of which is the identification of combatants' remains.¹⁴⁷

The current trend is toward the expansion of the scope of DNA databanks.¹⁴⁸ In the criminal arena, the trend has been to expand the contents of databanks from those convicted of murder and sex offenses to include individuals convicted of other violent crimes. Recently, a growing number of states started requiring all felons and even arrestees or individuals who committed misdemeanors to submit DNA samples.¹⁴⁹ Furthermore, police executing dragnet operations require thousands of individuals to submit to DNA testing on the basis of random characteristics such as race or location. These DNA samples are also retained in the databases.¹⁵⁰

While the number of individuals whose genetic information is extracted involuntarily is constantly increasing, the law provides little protection against unauthorized use of the DNA samples contained in the databases. This lack of protection leaves the door open to the extraction of medical and potentially trait information from the DNA

Annotation, *Validity, Construction and Operation of State DNA Database Statutes*, 76 A.L.R.5th 239, § 2b (2003).

147. See Sarah Gill, *The Military's DNA Registry: An Analysis of Current Law and a Proposal for Safeguards*, 44 NAVAL L. REV. 175, 176 (1997).

148. See generally Jonathan Kimmelman, *Risking Ethical Insolvency: A Survey of Trends in Criminal DNA Databanking*, 28 J.L. MED. & ETHICS 209 (2000); Nachama L. Wilker et al., *DNA Data Banking and the Public Interest*, in DNA ON TRIAL: GENETIC IDENTIFICATION AND CRIMINAL JUSTICE 141 (Paul R. Billings ed., 1992); see also D.H. Kaye & Michael E. Smith, *DNA Identification Databases: Legality, Legitimacy, and the Case for Population-Wide Coverage*, 2003 WIS. L. REV. 413 (arguing for further expansion of DNA databanks).

149. See, e.g., ALA. CODE § 36-18-24 (1991) (requiring all felons to submit a DNA sample); MASS. GEN. LAWS ANN. ch. 22E, § 3 (West 2002) (requiring misdemeanants to submit a DNA sample); VA. CODE ANN. § 19.2-310.2:1 (Michie 2000) (requiring arrestees of certain offenses to submit a DNA sample); see also David H. Kaye, *Two Fallacies About DNA Databanks for Law Enforcement*, 67 BROOK. L. REV. 179, 180 (2001); Rothstein & Carnahan, *supra* note 146, at 131-32.

150. LORI ANDREWS & DOROTHY NELKIN, *BODY BAZAAR: THE MARKET FOR HUMAN TISSUE IN THE BIOTECHNOLOGY AGE* 102-03, 107, 123 (2001). The expansion is not limited to the criminal arena. DNA samples are collected by hospitals that store DNA samples of newborns, by academic institutions and commercial labs, and even by funeral homes and autopsy firms. *Id.* at 84-85; Jean E. McEweb, *DNA Databanks*, in GENETIC SECRETS: PROTECTING PRIVACY AND CONFIDENTIALITY IN THE GENETIC ERA 231, 240-41 (Mark A. Rothstein ed., 1997); Teresa K. Baumann, Note, *Proxy Consent and a National Databank: An Unethical and Discriminatory Combination*, 86 IOWA L. REV. 667, 676-78 (2001). Even purportedly consenting individuals, such as newborns' parents, are in practice not given the option of refusal. *Id.* at 85. Finally, where relatives or individuals actually request the testing it is unclear that the samples would not be tested for other purposes since these institutions are generally unregulated and furthermore are motivated by a quest for profit. McEweb, *supra*, at 241-42; *Secret DNA Not So Secret Now*, INDIANAPOLIS STAR, Dec. 3, 2002, at 16A [hereinafter *Secret DNA*].

samples. The absence of protection is particularly concerning with regard to the vast collections of DNA samples in criminal databases. Few states expressly prohibit the use of DNA samples, whether identifiable or anonymous, to derive health information.¹⁵¹ Many states explicitly allow anonymous use of the DNA data for research purposes. Some statutory language expressly provides for use of the samples for research related to genetic disease.¹⁵² Although anonymity is emphasized, the samples are not in fact anonymous because the original database can be used to identify them.¹⁵³ In addition, many states allow use of the DNA samples in any judicial proceeding if otherwise admissible.¹⁵⁴ Such uses could include admission of the DNA sample to show existing predisposition for a disease in tort cases or familial relationship in parentage proceedings.¹⁵⁵

The mandatory requirement to submit a DNA sample resulted in multiple lawsuits similar to that of Melvin Taylor Gaines. The obligation to submit a DNA sample is unrelated to the crime for which the individual was convicted or arrested. Military men and prisoners on the eve of their release repeatedly objected to submitting their DNA sample. Fear of discrimination and concerns that once a sample is in the database mistaken matches could be made are no doubt driving the debate. Yet, lawsuits were also brought by military men who were not concerned by mistaken identity matches and by death sentence inmates who were not threatened by either mistaken matches or discrimination by future employers or insurers.¹⁵⁶ These cases demonstrate that an additional tension underlies the debate.

Concerns that the genetic information contained in the database will leak stem from the absence of adequate statutory protections and from the technological difficulty of providing complete

151. See, e.g., Rothstein & Carnahan, *supra* note 146, at 164 n.216.

152. See, e.g., ALA. CODE § 36-18-20; see also Eric T. Juengst, *I-DNA-Fication, Personal Privacy, and Social Justice*, 75 CHI.-KENT L. REV. 61, 68-69 (1999); Rothstein & Carnahan, *supra* note 146, at 164 n.216. For examples of states allowing use of the samples for non-identifiable research, see ALASKA STAT. § 44.41.035 (Michie 2002); CAL. PENAL CODE § 295.1(c)(5) (West 1999).

153. See Juengst, *supra* note 152, at 69.

154. For an example of allowing use of criminal DNA samples in other proceedings, see ALA. CODE § 36-18-28.

155. See, e.g., N.J. STAT. ANN. §§ 9:17-52 (West 2002), 53:1-20.21 (West 2001) (allowing the use of the samples contained in the criminal DNA databases to identify parentage); N.D. CENT. CODE § 31-13-06 (1996) (same); see also ANDREWS & NELKIN, *supra* note 150, at 91-92, 123.

156. See generally *Mayfield v. Dalton*, 901 F. Supp. 300 (D. Haw. 1995), *vacated & remanded on other grounds*, 109 F.3d 1423 (9th Cir. 1997); *Alfaro v. Therhune*, 120 Cal. Rptr. 2d 197 (Ct. App. 2002); ANDREWS & NELKIN, *supra* note 150, at 113-14.

immunity from computer hackers.¹⁵⁷ Yet, the detrimental effects are not limited to potential harm from third party discrimination. Even in the absence of third party knowledge and abuse, the disclosure of the information can disrupt individual life-narratives.

Our genetic predispositions are part of our constitution; they do not exist as information, however, until a DNA sample is extracted and analyzed. Many individuals would resist the mere creation of this data. Resistance is particularly strong when the data conveys information about untreatable diseases of which future onset is certain, such as Huntington's disease. However, due to the deterministic bias discussed earlier, individuals often resist being tested for a broader range of genetic conditions.¹⁵⁸ Once the information is created there is no complete immunity against it trickling back to the individual. The individual could obtain the knowledge directly or indirectly as a result of a discriminatory act or even a protective action of a well-meaning party.¹⁵⁹

The genetic information received by the individual threatens the autonomy and self-fulfillment tenet of the liberal identity meta-narrative. The effect is not solely related to the involuntary manner through which the DNA is collected. The liberal conception of identity is affected by the content that the individual would have perhaps justifiably preferred not to face. The information entails a deterministic aura that can transform life-narratives.¹⁶⁰ As illustrated by Jane's reaction to the dire genetic predicament of neurodegenerative disease she will develop in the future, genetic

157. See Elizabeth Reiter, *The Department of Defense DNA Repository: Practical Analysis of the Government's Interest and the Potential for Genetic Discrimination*, 47 BUFF. L. REV. 975, 1016-20 (1999) (describing the difficulty of protecting the military DNA database against hackers); *Secret DNA*, *supra* note 150 (describing a survey of private genetic databases that found less than 40 percent of them to be secure).

158. Studies of actual testing by individuals from high-risk families show that the less treatable the disease, the lower the percentage of individuals who will submit to testing. Only 10 to 12 percent of high-risk individuals chose to test for the gene of the untreatable Huntington's disease, while 42 percent of high-risk individuals chose to test for the gene of the significantly preventable colon cancer disease. See Lerman, *supra* note 79, at 789, 796-97; Caryn Lerman et al., *Genetic Testing in Families with Hereditary Nonpolyposis Colon Cancer*, 281 JAMA 1618 (1999); Colon Cancer Alliance, *Colorectal Cancer: Facts and Figures*, at <http://www.ccalliance.org/pdfs/crcfact.pdf> (last visited Feb. 18, 2004).

159. For example, employers may conduct genetic testing to prevent factory employees who are sensitive to certain work-place conditions from being exposed to these conditions. See Kirke D. Weaver, *Genetic Screening and the Right Not to Know*, 13 ISSUES L. & MED. 243, 245-47 (1997) (describing workplace screening). In such cases, even if the employee is not notified regarding the results of the test, his transfer to a different part of the factory will in essence notify him of his test results.

160. See NELKIN & LINDEE, *supra* note 81, at 2; Kegley, *supra* note 81, at 41, 48-49.

information has the potential of changing the content of our choices.¹⁶¹ It can do so by constraining us, making us less ambitious, less likely to overcome internal personal hurdles, and in some cases less likely to seek the fulfillment of long-term goals. Destabilization of the liberal identity meta-narrative follows the constriction of personal narratives.

Under the current legal regime samples are saved for future use and the scope of such use is rarely restricted. Consequently, individuals who submit their DNA sample are threatened by the potential receipt of undesired information. But, furthermore, even if legal restrictions and technological progress would make the leakage of such information unlikely, the mandatory requirement to submit a DNA sample destabilizes an additional tenet of the liberal meta-narrative, the tenet that posits the individual as separate from others. The law requires individuals to submit what is perceived by many as the essence of the self.¹⁶² What they hold dearly as signifying their soul is collected together with other samples and at best considered as just another statistic. True, as members of a society we are often required to act for the greater good. For example, those better off economically are expected to pay higher taxes that provide for the less fortunate. Yet, here it is the very self that is utilized to serve communal interests, such as combating crime or medical research.¹⁶³ The knowledge that this “copy” of the self is out there, merged insignificantly with those of others and utilized to serve communal goals, is a great source of unease for individuals whose life-narrative is governed by the liberal postulates.

The main cause of action raised in cases in which individuals refused to provide a DNA sample was the Fourth Amendment right to be free from unreasonable search and seizure.¹⁶⁴ Yet, the courts

161. See Taswell & Sholtes, *supra* note 77, at 114-15.

162. Military men who were willing to give their lives for their country were unwilling to submit their DNA. They declared that their “genetic blueprint” had special meaning for them. ANDREWS & NELKIN, *supra* note 150, at 114.

163. Property terminology generally governs the discourse relating to use of human body parts. See generally Moore v. Regents of the Univ. of Cal., 793 P.2d 479 (Cal. 1990). It was often argued that property protects market relations, that it envisions the person as detached from his body, thereby enabling alienation. See Richard Gold, *Owning Our Bodies: An Examination of Property Law and Biotechnology*, 32 SAN DIEGO L. REV. 1167, 1223-24 (1995); Radhika Rao, *Property, Privacy and the Human Body*, 80 B.U. L. REV. 359, 364, 425, 428-29, 444 (2000). The debate is still open as to whether property should be utilized where non-commercial values are at issue. See, e.g., Gold, *supra*, at 1242-43; Margaret Jane Radin, *Property and Personhood*, 34 STAN. L. REV. 957 (1981). Yet, in this case I believe that the nonprofit nature of most of the databanks concerned drives us further away from property discourse and toward a discourse involving communal interests that implicates notions of identity.

164. A broad range of causes of action was raised to challenge the constitutionality of DNA databanks, all of which failed. Rothstein & Carnahan, *supra* note 146, at 132-33; Miller, *supra* note 146, § 2a. Courts held that the mandatory drawing of blood does not violate the First

generally held that the requirement to provide a sample for inclusion in a DNA database does not constitute an unreasonable search and seizure.¹⁶⁵ This conclusion was reached even when the statute at issue mandated submission of a DNA sample from nonviolent felons¹⁶⁶ or juveniles¹⁶⁷ and, in the case of the military, when the purpose of the requirement was not to fight crime but to identify remains.¹⁶⁸

The courts' holdings that the mandatory requirement to test does not violate the Fourth Amendment indirectly provided an identity resolution. Had the courts imposed restrictions on the use of the technology by finding the requirement to submit DNA unconstitutional, it would have alleviated the pressure on the liberal identity meta-narrative. This would have tilted the equilibrium back to its pre-technology position. But, by refusing to impose restrictions on the use of the technology, the decisions authorized the pressure on the liberal identity meta-narrative, sanctioning the new post-technology identity equilibrium.

The courts' analysis focused on the physical elements of the genetic testing procedure, particularly on the implementation of DNA testing through the extraction of blood. The courts held that the physical intrusion committed through the withdrawal of blood is minimal.¹⁶⁹ DNA testing was frequently compared to and viewed as similar to fingerprinting. Taking into account the important governmental interest in fighting crimes or identifying remains, the courts in these cases concluded that the extraction of blood is

Amendment right to the free exercise of religion. Miller, *supra* note 146, §§ 2a, 7. They also held that the Fifth Amendment right against self-incrimination is not violated because the samples are not testimonial. Miller, *supra* note 146, §§ 2a, 11; Rothstein & Carnahan, *supra* note 146, at 149. Furthermore, the courts rejected claims that the mandatory testing violated substantive due process, equal protection, cruel and unusual punishment, ex post facto punishment, or separation of powers. See generally Miller, *supra* note 146; Rothstein & Carnahan, *supra* note 146. The Fourth Amendment claim, although similarly rejected, was the most frequently raised and is considered to be the strongest cause of action used in this context. See Rothstein & Carnahan, *supra* note 146, at 152.

165. See generally Miller, *supra* note 146, §14. But see *United States v. Kincade*, 345 F.3d 1095, 1113-14 (9th Cir. 2003) (holding that the mandatory requirement to submit a DNA sample violates the Fourth Amendment), *reh'g en banc granted*, 2004 U.S. App. LEXIS 89 (9th Cir. Jan. 5, 2004).

166. See, e.g., *Jones v. Murray*, 962 F.2d 302, 305-08 (4th Cir. 1992); *State v. Maass*, 64 P.3d 382, 383-84, 388-89 (Kan. 2003); *Gaines v. Nevada*, 998 P.2d 166, 168, 171-73 (Nev. 2000); *Johnson v. Commonwealth*, 529 S.E.2d 769, 779 (Va. 2000); *Doles v. State*, 994 P.2d 315, 316, 319 (Wyo. 1999).

167. See, e.g., *In re Maricopa County Juvenile Action*, 930 P.2d 496 (Ariz. Ct. App. 1996); *State ex rel. Juvenile Dep't v. Orozco*, 878 P.2d 432, 434-36 (Or. Ct. App. 1994).

168. See *Mayfield v. Dalton*, 901 F. Supp. 300, 303-04 (D. Haw. 1995), *vacated & remanded on other grounds*, 109 F.3d 1423 (9th Cir. 1997).

169. See, e.g., *Boling v. Romer*, 101 F.3d 1336, 1339-40 (10th Cir. 1996); see also *Jones*, 962 F.2d at 307.

minimally intrusive.¹⁷⁰ The only arguments concerning the nature of the information created involved traditional infringement of privacy through third party abuse of the information. Yet, even these arguments were rejected by the courts.¹⁷¹

The courts generally reached the conclusion that the mandatory DNA submissions do not constitute an unreasonable search and seizure by balancing bodily intrusion, governmental interest, and privacy rights. The courts then held that the minimal bodily intrusion, the government interest in identification in cases of future crimes, and the diminished privacy rights of convicted persons render the mandatory testing a reasonable search and seizure.¹⁷² The courts focused on the act of bodily intrusion and the taking of blood. Yet, although the taking of blood was justifiably part of the courts' debate, it constitutes only part of the offense. The acts of creation and retransmission of the genetic information also play a key role in the wrongdoing. Privacy protection from bodily intrusion does not provide protection against these acts. Instead, it provides protection against a third party's intrusion of an individual's privacy, particularly against physical intrusion but also against the taking of information.¹⁷³

The acts of creation and retransmission involve identity interests. Identity interests are implicated in the creation of personal information that is culturally of an enhanced formative nature. They are also implicated in the threat that this previously unknown information will be received by the individual who will be adversely affected by it, even in the absence of third party involvement.

The legal discourse disregards the elements that give rise to identity destabilization. First, the courts repeatedly stress that the information derived from a blood sample is substantially the same as that derived from fingerprinting.¹⁷⁴ However, the identification information obtained through fingerprinting is previously known to the individual and does not carry the same cultural significance as the DNA. Second, even dissents that noted the unique nature of genetic

170. See *Jones*, 962 F.2d at 307; *Mayfield*, 901 F. Supp. at 303-04; *Orozco*, 878 P.2d at 435-36.

171. See *Mayfield*, 901 F. Supp. at 304; *Patterson v. State*, 742 N.E.2d 4, 10 n.4 (Ind. Ct. App. 2000); *Landry v. Att'y Gen.*, 709 N.E.2d 1085, 1095-96 (Mass. 1999).

172. *Boling*, 101 F.3d at 1339-40; *Landry*, 709 N.E.2d at 1092; *Doles v. State*, 994 P.2d 315, 319 (Wyo. 1999). Some courts undertake a different mode of analysis that considers the government's special needs beyond normal law enforcement. See, e.g., *State v. Olivas*, 856 P.2d 1076, 1084-86 (Wash. 1993). But see *United States v. Kincade*, 345 F.3d 1095, 1113-14 (9th Cir. 2003).

173. Several dissents considered the matter in terms of potential abuse of the information. See, e.g., *Rise v. Oregon*, 59 F.3d 1556, 1569 (9th Cir. 1995) (Nelson, J., dissenting).

174. See *id.* at 1559; *Alfaro v. Therhune*, 120 Cal. Rptr. 2d 197, 209-10 (Ct. App. 2002).

information and the potential ramifications of its disclosure focused on the need for protection from improper use and ignored the flow of information back to the individual himself.¹⁷⁵

Since identity interests are not safeguarded by existing privacy protections, it is not surprising that the courts' deliberations failed to prevent the erosion of the liberal conception of identity. Regardless of the specific constitutional construction through which identity interests can be inserted into the debate,¹⁷⁶ the incorporation of these interests would weigh against the mandatory requirement to submit a DNA sample. Identity interests would be added to the interest of privacy protection from bodily intrusion currently considered and balanced against the government's interest in combating crime. Thus, consideration of identity would increase the likelihood of a finding of unconstitutionality, in particular when the government's interest is weaker, such as cases of nonviolent crimes, misdemeanors, or for military personnel.

C. *Commercial Profiling on the Internet*

Let us consider the hypothetical case of Ted, which is based on several commercial profiling stories of a similar nature.¹⁷⁷ Ted is a football coach who acts as his child's primary caretaker. As a result of purchasing baby gear on the Internet, he is now perceived on the Internet as a woman. He receives diet ads and emails addressing him as "Mom" or "Madam." Consequently, he experiences some misgivings with regard to his decision to act as his daughter's primary caretaker, wondering to what extent his choice is so socially unacceptable as to render him a woman on the Internet.¹⁷⁸

Ted's gender transformation on the Internet was a result of the activities of profiling companies, the best known of which is DoubleClick. DoubleClick promised its web-site clientele that it would place their banner advertisements in front of viewers who match their demographic target. It did so by utilizing "cookies" to store and collect information about Internet users. The information included names, email addresses, telephone numbers, searches performed on the

175. See *Rise*, 59 F.3d at 1569 (Nelson, J., dissenting).

176. Laying the doctrinal framework through which identity can be inserted into the specific constitutional debate related to mandatory DNA databases would require a complex constitutional analysis which is beyond the scope of this Article. The constitutional construction would most likely involve an analysis of the scope of the Fourth Amendment right to be free of unreasonable search and seizure and the relevant relationship between the constitutional protection of privacy and the interest of identity.

177. See *Zaslow*, *supra* note 16.

178. See *supra* text accompanying note 16.

Internet, web pages or sites visited, and other information that users would not normally expect to be available to advertisers. Public outrage erupted more specifically over DoubleClick's intent to merge its online information with that of Abacus, a marketing database containing real space personal information. DoubleClick was eventually sued in a class action filed by individuals whose personal information it had gathered.¹⁷⁹

What is commercial profiling and how is it executed on the Internet? Profiling is defined as the recording and classification of behaviors. Companies collect information derived from a number of resources to build comprehensive individual profiles in order to better target products and to sell dossiers on behavior. Individual identities are linked to characteristics such as shopping preferences, sex, and hobbies. Profiling companies have well-developed lexicons to classify individuals. One profiling company, for instance, divides individuals into fifteen different groups that are in turn categorized into various subgroups. An example of such a group is "Urban Uptown," comprising of "Urban Gold Coast," "Money & Brains," "Young Literati," "American Dreams," and "Bohemian Mix."¹⁸⁰

Although profiling existed in the pre-Internet era (e.g., in the form of targeted advertising delivered by traditional mail), Internet architecture greatly enhanced its scope and reach. The Internet enhanced both the ability to execute the act of profiling through collection and categorization and the ability to use it by targeting information back to the individual. Collection and categorization were facilitated by the fact that all actions in cyberspace can be recorded and tracked, thereby enabling cheap and easy access to masses of information. Small bits of information that were formerly meaningless or unworthy of the effort of collection can now be aggregated to produce meaningful information.¹⁸¹ Transmitting information back to individuals became similarly easy due to the efficiency and cost effectiveness of information transfer in cyberspace. Furthermore, as the Internet became more mainstream, a greater part of individuals' lives was spent in cyberspace. This increased the volume of available

179. See *In re DoubleClick, Inc. Privacy Litigation*, 154 F. Supp. 2d 497, 499, 502 (S.D.N.Y. 2001); *Amid Protests, DoubleClick and Abacus Announce Plans for \$1 Billion Merger*, ELECTRONIC ADVERTISING & MARKETPLACE REP., June 29, 1999, at 13; Joseph Gallivan, *Privacy Group Calls for DoubleClick Nix*, N.Y. POST, June 22, 1999, at 39.

180. See Electronic Privacy Information Center, *Privacy and Consumer Profiling*, at <http://www.epic.org/privacy/profiling> (last visited Feb. 18, 2004).

181. See Helen Nissenbaum, *Protecting Privacy in an Information Age: The Problem of Privacy in Public*, 17 LAW & PHIL. 559, 575-78 (1998) (describing the new threat created by new information technologies' ability to collect and analyze previously small and unnoticed facts about individuals).

personal data. Time spent online also increased, thereby enhancing the opportunities to target individuals with commercial information that profilers believed would interest them.¹⁸²

Commercial profiling exerts pressure on the liberal identity meta-narrative. The pressure stems from the dual act of (i) creation of personal information through nonconsensual collection of personal data, and (ii) involuntary reflection of profiled information back to the individual who may not desire to receive it or acknowledge it.

The identity tensions do not arise from the nonconsensual taking of personal information, which is a traditional privacy problem.¹⁸³ The identity problem is related to the way all these bits of information are aggregated to form a profile. Profiling activities are problematic because through categorization they mischaracterize and stereotype the individual. The information used for profiling is not the complete set of facts about a specific individual. We are judged on the basis of small bits of information that often reflect some brute facts about what we do without the reasons. Furthermore, judgments based on these isolated incidents leave little room for randomness, idiosyncrasy, or mistakes, and little allowance for learning effects or second chances.¹⁸⁴ Isolated bits of personal information are confused with genuine knowledge; this creates an inaccurate picture of individuals' full range of interests and complicated personalities.¹⁸⁵ Profiling, therefore, distorts our life-narratives by attempting to recreate them on the basis of several isolated facts. These facts are generalized and form the foundations for a new, arbitrary life-narrative. Ted's case illustrates this effect. Although in real space Ted's child-caring role, traditionally a feminine role, was well integrated with his other masculine roles as a former football player, a football coach, and a husband, cyberspace was less forgiving. In cyberspace categories that reflect societal stereotyping and stigmatization, Ted's unique life-narrative could not exist. An afternoon combining child caring and hand embroidery is anticipated.

182. See Shaun A. Sparks, *The Direct Marketing Model and Virtual Identity: Why the United States Should Not Create Legislative Controls on the Use of Online Consumer Personal Data*, 18 DICK. J. INT'L L. 517, 527-28 (2000); Stanford Institute for the Quantitative Study of Society, SIQSS Internet and Society Study, at http://www.stanford.edu/group/siqss/Press_Release/internetStudy.html (last visited Jan. 14, 2004).

183. See, e.g., *Kyllo v. United States*, 533 U.S. 27 (2001).

184. Cohen, *supra* note 120, at 1404-05; James P. Nehf, *Recognizing the Societal Value in Information Privacy*, 78 WASH. L. REV. 1, 23-24 (2003); Daniel J. Solove, *Privacy and Power: Computer Databases and Metaphors for Information Privacy*, 53 STAN. L. REV. 1393, 1424-25 (2001).

185. JEFFREY ROSEN, *THE UNWANTED GAZE: THE DESTRUCTION OF PRIVACY IN AMERICA* 166-67 (Vintage Books 2001); Cohen, *supra* note 120, at 1404-05.

However, time spent combining baby caring, watching sports, and drinking beer with the guys is outside the realm of profilers' imagination.

Yet, the newly created, often twisted, life-narratives do not present an identity threat by their mere creation. It is their re-transmission back to the individual that produces the pressure on the liberal identity meta-narrative. That re-transmission creates a feedback effect that makes the prophecy come true to a certain extent. The feedback effect makes our life-narratives more similar to those created by the profiling companies. The feedback effect is illustrated through Ted's sense of discomfort with the life-narrative that features him as his daughter's primary caretaker and the possibility that this discomfort will induce him to reconsider his choice. The distorted life-narrative involuntarily transmitted back to us has the ability to change the way we perceive ourselves and thereby affect our life-narrative.

Profiling merits concern because, unlike other commercial influences, it is both personalized and computerized.¹⁸⁶ As a result of the broad exposure of the profiling controversy, many individuals are now aware of the personalized nature of their cyberspace universe.¹⁸⁷ They know that the information they receive is often based on their past choices and on the profiler's characterization of who they are. But, such personalization is less common in real space, where targeting is more expensive. Furthermore, the personalization in Internet profiling is computerized and in our society machines have great authority—we tend to believe that things that are computerized are accurate.¹⁸⁸ Thus, the life-narrative created through profiling has

186. I compare profiling to other commercial influences and not to societal sources of influences in general because as a society we tend to accept certain sources of influence on the individual's life-narrative as more legitimate than others. These sources include family members, friends, and the education system. Efforts of commercial entities to influence are not considered as legitimate. This, for example, is reflected in the lower level of protection granted to commercial speech in First Amendment doctrine. *See generally* Cent. Hudson Gas & Elec. Corp. v. Public Serv. Comm'n, 447 U.S. 557 (1980). Consequently, one should not compare the influence exerted by a parent and the impact of profiling. Instead, one should contrast Mattel's Barbie's influence on the formation of gender biases and Ted's gender transformation on the Internet.

187. Profiling activities and the consequent loss of anonymity on the Internet were covered in many popular reports. *See, e.g.*, Robert O'Harrow, Jr., *Restraint Pledged on "Profiling"; Internet Ad Networks Set Up Site to Give PC Users Input*, WASH. POST, Nov. 9, 1999, at E3; Will Rodger, *Internet Profiling Under Fire; Broomfield Firm's Parent Accused of Privacy Breach*, DENVER POST, Feb. 6, 2000, at K7; Shaun Sutner, *States Seeking Privacy Strategies*, TELEGRAM & GAZETTE (Worcester, Mass.), Apr. 25, 2001, at A1.

188. *See* TURKLE, *supra* note 72, at 105.

an even greater impact and merits greater concern than the odd mail catalogue that lies waiting in our mailbox.

The pressure applied by profiling on the liberal identity meta-narrative is related to several tenets of the liberal normative conception of identity. Profiling primarily affects notions of the individual as autonomous, unique, and separate from society as a whole.¹⁸⁹ Commentators have raised concerns that profiling impedes our autonomy because an individual's set of options is a function of her perceived state of the world and of the options for action that are known to her.¹⁹⁰ Yet, by restricting the range of options available, profiling inevitably also influences the types of life-narratives told. The autonomy tenet of the liberal identity meta-narrative is closely linked to the tenets that posit the individual as unique and separate. Profiling does not merely limit the number of available alternatives. It also tends to strengthen certain types of alternatives. Profilers focus on mainstream social categories. Little room is left for more unique life-narratives. Individual lives are caricatured to conform to predefined social categories. Through its feedback effect, profiling impedes the individual's ability to distinguish himself from others and hold on to a life-narrative that does not converge into a mainstream category.¹⁹¹

The legal discourse governing the profiling controversies is a privacy discourse. The courts generally refused to find profiling companies liable for infringement of the privacy of individuals whose

189. It could potentially also affect the equality tenet of the liberal identity meta-narrative, through discriminatory acts by third parties that would impede an individual's ability to get a job, a credit loan, or health insurance. See Nehf, *supra* note 184, at 26; Solove, *supra* note 184, at 1424; Tal Z. Zarsky, "Mine Your Own Business!": Making the Case for the Implications of the Data Mining of Personal Information in the Forum of Public Opinion, 5 YALE J.L. & TECH 1, 21-33 (2002). Yet, since public outrage halted at least to a certain extent use of real space information and such claims have not yet surfaced, I will focus here on the effects of the changes in our cyberspace universe of information.

190. See Yochai Benkler, *Free as Air to Common Use: First Amendment Constraints on Enclosure of the Public Domain*, 74 N.Y.U. L. REV. 354, 381-82 (1999); Benkler, *supra* note 118, at 54; Cohen, *supra* note 120, at 1424-25; Julie E. Cohen, *Privacy, Ideology and Technology: A Response to Jeffrey Rosen*, 89 GEO. L.J. 2029, 2034-35 (2001). It should be noted that this relationship was also discussed in terms of privacy. See generally Jeffrey Rosen, *The Purposes of Privacy: A Response*, 89 GEO. L.J. 2117 (2001). But see Lawrence Lessig, *Privacy and Attention Span*, 89 GEO. L.J. 2063 (2001) (rejecting privacy as the necessary solution to the attention span problem).

191. Another effect of profiling, albeit a secondary one, is the facilitation of fragmentation of the kind we saw in Marcus' case. One can readily imagine a teenager accidentally profiled as an adult taking advantage of the benefits accompanying an adult status on the Internet. This effect, similar to Marcus' case, applies pressure on the communitarian notion of identity.

information they had used.¹⁹² The debate was characterized by detailed discussions of the relevant technology—that is, the Internet and cookies.¹⁹³ The courts determined the cases by applying traditional communications statutes, such as the Electronic Communications Privacy Act (“ECPA”), the Wiretap Act, and the Computer Fraud and Abuse Act, which were created to govern communication modes that preceded the Internet.¹⁹⁴

The communications statutes that were applied were originally designed to provide protection in the traditional privacy scenario in which a third party intrudes upon the privacy of individuals. Under the ECPA, plaintiffs argued that the placement of cookies constituted unauthorized access to communications facilities and the communications stored prior to their transmission.¹⁹⁵ Under the Computer Fraud and Abuse Act, plaintiffs argued that profilers obtained information through unauthorized computer access.¹⁹⁶ Lastly, under the Wiretap Act, the cause of action raised by plaintiffs was unlawful interception of communications.¹⁹⁷

The aforementioned privacy statutes did not provide indirect protection of identity interests. The statutes adjudicated were structured to protect strictly against the taking of information by a third party. A major part of the profiling legal opinions was, therefore, dedicated to whether users consented to the placement of cookies enabling the collection of information.¹⁹⁸ Yet, although profiling inevitably involves the act of taking of information, these takings are often of miniscule bits of information and cannot on their own explain the resulting social tensions. The social tensions also result from the nature of the information created and its reflection back to the individual. Profiling companies transmit alternative life-narratives that they create through an aggregation of facts that tends to follow

192. See generally *In re Toys R Us, Inc. Privacy Litig.*, MDL No. M-00-1381, 2001 U.S. Dist. LEXIS 16947 (N.D. Cal. Oct. 9, 2001); *Chance v. Avenue A, Inc.* 165 F. Supp. 2d 1153, 1158-63 (W.D. Wash. 2001); *In re DoubleClick, Inc. Privacy Litig.*, 154 F. Supp. 2d 497 (S.D.N.Y. 2001).

193. See generally *Toys R Us*, 2001 U.S. Dist. LEXIS 16947; *DoubleClick*, 154 F. Supp. 2d at 499, 502.

194. See generally *Toys R Us*, 2001 U.S. Dist. LEXIS 16947; *Chance*, 165 F. Supp. 2d at 1158-63; *DoubleClick*, 154 F. Supp. 2d at 499, 507-19.

195. *Toys R Us*, 2001 U.S. Dist. LEXIS 16947, at *7; see also *Chance*, 165 F. Supp. 2d at 1160; *DoubleClick*, 154 F. Supp. 2d at 507.

196. *Toys R Us*, 2001 U.S. Dist. LEXIS 16947, at *28; see also *Chance*, 165 F. Supp. 2d at 1158; *DoubleClick*, 154 F. Supp. 2d at 519-20.

197. *Toys R Us*, 2001 U.S. Dist. LEXIS 16947, at *19-20; see also *Chance*, 165 F. Supp. 2d at 1162; *DoubleClick*, 154 F. Supp. 2d at 514.

198. *Toys R Us*, 2001 U.S. Dist. LEXIS 16947, at *14-18, *23-24; see also *Chance*, 165 F. Supp. 2d at 1161; *DoubleClick*, 154 F. Supp. 2d at 507-10, 514; *In re Pharmatrak, Inc. Privacy Litigation*, 329 F.3d 9, 12-13 (1st Cir. 2003), *on remand* 292 F. Supp. 2d 263 (D. Mass. 2003).

mainstream social narratives. The transmission of information back to the individual creates identity tensions even in the absence of any pecuniary harm. The Wiretap Act, the only cause of action that covers flow of information back to the individual, provides protection only against pecuniary harms, such as blackmail, threats, and public embarrassment.¹⁹⁹

Although privacy interests are at stake, identity interests also need to be considered. Yet, once again—since privacy protection was not structured to cover the identity interests at stake—it is not surprising that the courts failed to protect the liberal identity interests implicated.²⁰⁰ The unsuccessful effort to apply the incompatible privacy doctrine resulted in a sanctioning of the pressure on the liberal meta-narrative. Inclusion of identity interests, in this context as an additional policy interest embedded in statutory language, would have added an additional motivation to privacy protections for imposing restrictions on profiling activities. The inclusion of identity interests would have increased the likelihood of a legal result that would protect the liberal conception of identity.

D. *Gay Anonymity on the Internet*

Timothy McVeigh kept his sexual orientation secret from the military base where he served, but at the same time was openly gay in cyberspace. The Navy conducted an investigation to reveal its gay member's real space identity and eventually received the information from AOL's customer service. McVeigh was discharged from the Navy for engaging in homosexual conduct and filed suit in court.²⁰¹

McVeigh's use of the Internet to express his gay identity is not unique. Cyberspace has proven invaluable as a way for closeted gays to explore their sexual identity. It has been instrumental in bringing gays out of their isolation of closeted lives and into the network of

199. *Toys R Us*, 2001 U.S. Dist. LEXIS 16947, at *23-28; see also *Chance*, 165 F. Supp. 2d at 1162-63; *DoubleClick*, 154 F. Supp. 2d at 514-19.

200. DoubleClick subsequently signed two major settlements that imposed certain restrictions on its broad range of profiling activities. Unhindered by traditional communications statutes, the settlements were somewhat successful in alleviating identity tensions. Yet, the settlements' restrictions were only partial, often focusing on prohibitions on the use of personally identifiable information, such as names, phone numbers, and email addresses. See Agreement Between the Attorneys General of the States of Arizona, California, Connecticut, Massachusetts, Michigan, New Jersey, New Mexico, New York, Vermont, and Washington and DoubleClick (Aug. 26, 2002), at http://www.oag.state.ny.us/press/2002/aug/aug26a_02_attach.pdf; Official Ct. Notice of Settlement In re DoubleClick, Inc. Privacy Litig., Master File No. 00-CIV-0641 (NRB), Mar. 29, 2002, at <http://www.epic.org/privacy/internet/cookies/dblclkproposedsettlement.pdf>.

201. See *supra* text accompanying notes 17-19; see also *McVeigh v. Cohen*, 983 F. Supp. 215, 219 (D.D.C. 1998).

others like them.²⁰² Two elements of cyberspace architecture that allowed identity groups, such as the Pro-Ana groups, to flourish are at work here as well: anonymity and the elimination of physical distance.

First, the anonymity provided by cyberspace architecture enables gay individuals who are reluctant to come out in real space to explore their gay identities without threat of rejection and violence. A study researching gay chat rooms found that individuals participating in these groups differ significantly from gays who do not visit gay chat rooms.²⁰³ The study showed that the participants are younger, more likely to live at home or with a female partner, less open about their homosexuality, and less likely to be members of gay organizations.²⁰⁴ These results indicate the important role of Internet anonymity in the lives of those who are inhibited from exploring their gay identity in real space.²⁰⁵

Secondly, by eliminating physical distance, the Internet creates communities that transcend geographic constraints. Participants in the lesbian website *gaygirls.com*, for example, explained that their experiences on the site remove them from their immediate physical locality and offer them an alternative place that satisfies their desire to be accepted and to belong.²⁰⁶ The elimination of physical distance is particularly significant for gays and lesbians because in real space they tend to come out in urban environments that are densely populated with gays and lesbians.²⁰⁷ Yet, many gay individuals, like McVeigh, do not reside in an environment that is tolerant toward gays. Thus, the ability to belong to an alternative community outside one's restrictive real space is a significant outlet for such individuals.

I previously referred to the findings of a study that showed that Internet group participation had particularly strong transformational effects on individuals participating in groups of concealable marginalized identities. The study showed that as a participant became more involved in the group she became more inclined to accept

202. Bettina Heinz et al., *Under the Rainbow Flag: Webbing Global Gay Identities*, 7 INT'L J. SEXUALITY & GENDER STUD. 107, 121 (2002).

203. Ronny Tikkanen & Michael W. Ross, *Technological Tearoom Trade: Characteristics of Swedish Men Visiting Gay Internet Chat Rooms*, 15 AIDS EDUC. & PREVENTION 122, 122 (2003).

204. *Id.* Although the study was conducted in Sweden, the authors expected that similar results would have been found had the study been conducted in the United States. *Id.* at 130.

205. See Jonathan Alexander, *Queer Webs: Representations of LGBT People and Communities on the World Wide Web*, 7 INT'L J. SEXUALITY & GENDER STUD. 77, 78-79 (2002); Tikkanen & Ross, *supra* note 203, at 131.

206. Sally R. Munt et al., *Virtually Belonging: Risk, Connectivity, and Coming Out On-Line*, 7 INT'L J. SEXUALITY & GENDER STUD. 125, 129 (2002).

207. *Id.* at 134.

that previously hidden aspect of her identity.²⁰⁸ Furthermore, an additional study found that those who are constrained from expressing their real sexual needs in real space are more likely to turn to the Internet for their sexual self-expression and to locate their sexual selves there than to their real space relationships.²⁰⁹ For these individuals, their online sexual identities become increasingly important and consequently demarginalized.²¹⁰

Gays' anonymous use of Internet technology exerts pressure on both normative conceptions of identity. On the liberal side, it is the conception of the individual as a non-fragmented whole that is destabilized. We saw this type of fragmentation effect when the Internet enabled Marcus to simultaneously be a high-school student and a respected legal expert. Similarly, individuals who hold themselves out as gay only in cyberspace experience a certain degree of fragmentation—one facet of their identity exists in real space and the other in cyberspace. The real space persona is a heterosexual self that may belong to organizations and communities that are intolerant toward gays while the cyberspace persona openly pronounces itself as gay.

Yet, it is the pressure on the communitarian concept of identity that is the driving force of this controversy. The communitarian concept of identity is threatened not only by fragmentation but also by the ability the Internet gives gays to break away from the values of their real space community.²¹¹ Gays can do so without stepping out of their homes and taking the risk of being identified. They can seek other gay individuals that are not within their intolerant real space environment. Internet technology enables gay individuals to abandon the anti-gay values of their communities and to appear to maintain them at the same time. We have seen a similar type of pressure on the communitarian meta-narrative in the case of the Pro-Ana group. Although our reaction to the desirability of the two types of Internet

208. McKenna & Bargh, *supra* note 61, at 681. The findings of this study are particularly relevant in the case of closeted homosexuals because one of the marginalized identity newsgroups on which the study's conclusions were based was alt.homosexual. *Id.* at 687.

209. Katelyn Y.A. McKenna et al., *Demarginalizing the Sexual Self*, 38 J. SEX RES. 302, 309 (2001).

210. *Id.*

211. An Internet community can be distinguished from the military community in that it is usually both voluntary and one-dimensional. Although joining the military is a voluntary act, its encompassment of all aspects of one's life diminishes its voluntary nature—the longer an individual stays in the military, the less likely he is to exit at random. Yet, it should be acknowledged that some Internet communities, such as game communities, may lose their one-dimensional nature for individuals who spend large amounts of time there, consequently resembling for them the nature of the military community.

activities is likely to differ, in both cases the Internet exerts a similar pressure on the communitarian identity meta-narrative. The communitarian conception of identity is destabilized by Internet technology's facilitation of the individual's ability to voluntarily shift between groups and consequently group values.

The Internet enables gay individuals to shift values without making a choice between their real space community and their gay identity. Although their gay persona often exists prior to their cyberspace activities, psychology research indicates that acting upon this persona in cyberspace is likely to strengthen this life-narrative thread.²¹² The strengthening of the gay life-narrative thread weakens communal heterosexual or anti-gay narratives. An important tension that underlies gays' anonymous use of the Internet is the threat of destabilization of heterosexual or anti-gay communitarian meta-narratives. The search conducted by military personnel that ultimately led to McVeigh's discharge illustrates the tension created by the threat to the military anti-gay communitarian meta-narrative.

An important tension underlying the McVeigh controversy was the post-technology shift in the identity equilibrium away from the communitarian conception of identity.²¹³ Yet, the legal controversy was conceived solely in privacy terms. In its judgment the court relied on privacy doctrines, specifically on the ECPA, focusing on whether the Navy acted legally when it obtained McVeigh's real space identity from AOL. The ECPA limits the government's ability to obtain private information about individuals. Under the ECPA, the government can obtain information from an online provider only if (1) it obtains a warrant; or (2) it gives prior warning and obtains a subpoena or a court order authorizing the disclosure.²¹⁴ Since the Navy abided by neither option the court found that it obtained the incriminating evidence illegally.²¹⁵

Indirectly the court's privacy holding handed out a resolution in the identity arena. Two alternative outcomes were situated at the opposing ends of the spectrum of possible identity resolutions. At one

212. McKenna & Bargh, *supra* note 61, at 681, 687.

213. The McVeigh controversy was also described in terms of self-determination. McVeigh's pursuit by the military was portrayed as restricting his ability to navigate between his two personality aspects: the homosexual and the military one. It was stressed that surveillance could restrict the individual's decision-making ability. See Paul M. Schwartz, *Privacy and Democracy in Cyberspace*, 52 VAND. L. REV. 1607, 1657-58 (1999). The McVeigh controversy is correctly portrayed in terms of autonomy; yet, I believe that depicting the case in terminology that is derived solely from the liberal identity meta-narrative autonomy sheds only partial light on the tensions that drive the debate.

214. *McVeigh v. Cohen*, 983 F. Supp. 215, 219 (D.D.C. 1998).

215. *Id.* at 219-20.

end was the option to sanction the pressure on the communitarian meta-narrative and thereby endorse the shift in the identity equilibrium. A decision that safeguards Internet anonymity would have endorsed the shift in the identity equilibrium. At the other end of the continuum was the alternative of alleviating the pressure on the communitarian meta-narrative by returning the identity equilibrium to its pre-technology balance. An outcome that facilitates the exposure of a cyberspace persona's real space identity would have tilted the balance back toward its pre-technology stance.

It is important to recognize that this type of controversy illustrates a conflict between contradictory identity interests. Both communitarian and liberal identity interests are at stake. Communitarian identity interests are held by those, in this case the Navy personnel, opposed to the anonymous use of the Internet by gays. Yet, the liberal identity interests of gays like McVeigh who desire to use the Internet anonymously are also at stake. Although gays' ability to achieve multiplicity through use of the Internet may at first blush seem to describe an endorsement of a postmodern life-narrative, it can also be viewed as an enhancement of the liberal life-narrative. The transformation of gay individuals' life-narratives through the Internet enhances the liberal aspects of their life-narrative, in particular those governed by the uniqueness, autonomy and self-fulfillment, and separateness from society tenets. It allows individuals whose real space circumstances confine them to communities where the governing values are in tension with integral parts of their identity to break out without making a full life-change involving physically altering relationships, jobs, or habitat. McVeigh's case illustrates that the Internet can enable the selection of a distinctive life-narrative which combines two seemingly divergent aspects of an individual's identity: for McVeigh, a Navy officer and a homosexual.

As the *McVeigh* decision was confined to the ECPA's framework, the court needed only to resolve whether the Navy's acts to reveal McVeigh's identity were banned by the ECPA's procedural barriers. The court held that the disclosure of personal information without the appropriate procedural acts is illegal.²¹⁶ This outcome endorsed the post-technology identity equilibrium. The protection of anonymity sanctions the pressure on the communitarian meta-narrative. Consequently, the court, through its imposition of privacy restrictions, indirectly protected McVeigh's liberal identity interests. Yet, McVeigh's privacy and identity interests are not one and the

216. *Id.*

same. McVeigh's privacy interest consisted of preventing the information about his homosexuality from being known to people in the military. His identity interest, however, comprised of maintaining the ability to live this fragmented multiple narrative of being a Navy officer and a homosexual at the same time.

Determining the outcome of identity-conscious adjudication is less clear in this case because two types of identity interests are implicated in the controversy.²¹⁷ Yet, it is apparent that whichever outcome is reached, it is likely to be deficient and arbitrary in the absence of consideration of identity interests. The debate in this case was held within the traditional realm of protection from privacy intrusion by "big brother."²¹⁸ The focus on protection from "big brother" obstructs our vision, causing us to neglect crucial dimensions of the controversy.²¹⁹ The debate failed to consider an important aspect of the controversy—the effect on identity interests. This failure is particularly disconcerting because different identity interests were at stake and although McVeigh's identity interests were protected, the communitarian ones represented by the Navy personnel were discarded without deliberation. It is often the case that a legal resolution, while alleviating the pressure on one individual's life-narrative, still enhances the pressure on another person's life-narrative. Thus, this case illustrates that even when the legal outcome indirectly protects an identity interest—in this case McVeigh's—the legal decision is still deficient if it did not take into account the full spectrum of identity interests.²²⁰

E. Restriction of Internet Content for Minors

Emmalyn Rood, a teenager who was confused about her sexual identity, wanted to research lesbian sources on the Internet in the privacy of the public library. Yet, she was blocked by filtering software that was required under the CIPA, which aims to prevent minors from

217. Providing even an estimated identity outcome would require an explicit theory of adjudication of identity interests that is based on a political theory of identity. Such theory would be necessary to determine the weight accorded to different types of identity interests when weighed against each other. *See supra* note 112.

218. *McVeigh*, 983 F. Supp. at 220.

219. *See Solove, supra* note 184, at 1395-98, 1429.

220. Although my sympathies lie with the legal outcome that protects McVeigh's liberal identity interests, my point here is that such outcome cannot be legitimized in the absence of a consideration of all implicated identity interests.

gaining access to certain materials deemed harmful to them. Rood sued, claiming the CIPA requirement is unconstitutional.²²¹

Although Emmalyn Rood went ahead and sued, she is not unique. Many teenagers who are confused about their sexual identities turn to the Internet as a source of information and guidance. Among these teenagers is Jeffrey, who made his story public in a newspaper interview but preferred not to disclose his full name.²²²

Jeffrey realized that he was gay when he was fifteen. He is a devout Southern Baptist, attending church several times a week where the pastor makes a point of condemning homosexuality. In his despair, he called a crisis line for gay teenagers where a counselor suggested that he attend a gay support group in a city an hour and a half away. Yet, Jeffrey was too young to drive and could not ask his parents to be driven there. Eventually he typed the words "gay" and "teen" into an Internet search engine and was amazed to find himself in an online gay world, replete with resource centers, articles, advice columns, personals, chat rooms, message boards, and many other closeted kids like himself. Jeffrey is terrified that should his parents find out they will refuse to support him and pay for his college education, or that if his schoolmates discover they will react with violence.²²³

The anonymity and elimination of physical distance enabled by Internet architecture fill the same instrumental role for gay teenagers exploring their gay identities as they fill for adult homosexuals. The Internet was said to have revolutionized the experience of growing up gay.²²⁴ Teenagers can use the practical information and advice available on these sites to prepare, discuss, and shape their gay identities before trying them out in real space.²²⁵ In particular, gay teenagers can use the Internet to find not only abundant resources but also personal narratives of individuals describing their coming out experiences, specifying who initiated the conversation, who responded,

221. See *supra* notes 20-22 and accompanying text; see also *Am. Library Ass'n v. United States*, 201 F. Supp. 2d 401 (E.D. Pa. 2002), *rev'd*, 539 U.S. 194 (2003).

222. See Jennifer Egan, *Lonely Gay Teen Seeking Same*, N.Y. TIMES MAG., Dec. 10, 2000, at 110.

223. *Id.* Although Jeffrey, instead of using the public library, garrisoned his personal computer with personal codes and passwords, his story manifests the significance of enabling teenagers to freely explore their sexual identities outside their homes and schools.

224. *Id.* For a discussion of the broader societal benefits of exposure to sexual information on the Internet, see Carlin Meyer, *Reclaiming Sex from the Pornographers: Cybersexual Possibilities*, 83 GEO. L.J. 1969 (1995).

225. Munt et al., *supra* note 206, at 136.

and which terms were used to denote sexuality and which terms were refused.²²⁶

The main social concern raised in the *American Library* debate was Congress' desire to prevent minors' exposure to pornography in public libraries, through both direct access and indirect viewing when adults access pornographic materials.²²⁷ Yet, another important social tension also underlay the *American Library* controversy—the pressure on the communitarian meta-narrative. Gay teenagers want to use the Internet to experiment with and learn about their gay identities without stepping into the real gay world. They want to use the Internet to test the waters at their own pace. Through the Internet they can receive information without risking discovery. Yet, the filtering devices installed under the CIPA requirement stop their exploration short. In the case of minors, our societal identity equilibrium is tilted further toward the communitarian identity meta-narrative. Minors are expected to abide by the values of their parents, schools, and communities.²²⁸ The ability that the Internet grants gay teenagers to break outside these values without taking the risks that have traditionally held them back tilts the balance. The CIPA filtering devices requirement has the ability to effectively alleviate the pressure on the communitarian meta-narrative and shift the equilibrium back. Hence, the courts' resolutions in *American Library* regarding the constitutionality of the CIPA requirement, in effect, determined whether to alleviate the pressure on the communitarian meta-narrative.²²⁹

The courts adjudicated the *American Library* dispute under First Amendment principles. When the Supreme Court decided *American Library*, it held that the CIPA's requirement that federally funded public libraries use filtering software does not violate the First Amendment.²³⁰ The plurality's opinion rested on two primary tenets. First, it found that a public library is not a public forum for web publishers and, therefore, the CIPA need not withstand a strict scrutiny analysis.²³¹ Secondly, it distinguished between a refusal to fund libraries that do not install filtering software and an imposition

226. *Id.* at 131-33.

227. *United States v. Am. Library Ass'n*, 539 U.S. 194, 123 S. Ct. 2297, 2301-02 (2003).

228. James G. Dwyer, *Parents' Religion and Children's Welfare: Debunking the Doctrine of Parents' Rights*, 82 CAL. L. REV. 1371, 1379-1405 (1994) (describing court cases in the area of education and health care granting parents rights to control the way in which their children are raised).

229. *See Am. Library Ass'n v. United States*, 201 F. Supp. 2d 401, 446, 449, 487 n.34 (E.D. Pa. 2002), *rev'd*, 539 U.S. 194, 123 S. Ct. 2297 (2003).

230. *Am. Library Ass'n*, 539 U.S. 194, 123 S. Ct. 2297, 2301.

231. *Id.* at 2303-05.

of a penalty on those who refuse, holding that the former as opposed to the latter is constitutional.²³² The Court's discourse was embedded in First Amendment doctrine and constitutional jurisprudence technicalities, yet the outcome reflected a clear determination in the identity sphere. The Court's determination, in essence, alleviated the pressure on the communitarian meta-narrative. The endorsement of the CIPA's limitations on Internet access available to minors tilted the balance back closer to gay teenagers' pre-Internet alternatives, thereby preserving the pro-communitarian identity equilibrium that is traditionally applicable to minors.

The Court's decision as it related to minors was unanimous. The disagreement between the judges was limited to the effects on adults whose ability to receive information is impeded in order to protect minors.²³³ In their dissenting opinion, Justices Souter and Ginsburg expressly stated that the CIPA does not violate minors' First Amendment rights.²³⁴ Hence, as far as gay teenagers were concerned, the court unanimously approved restricting their use of Internet technology, thereby failing to protect their identity interests.

Although important interests in this case were both Congress' desire to protect minors from exposure to pornography and consideration of First Amendment rights,²³⁵ inclusion of identity interests was necessary in order to achieve a complete legal evaluation of the interests at stake.²³⁶ The *American Library* controversy, like the *McVeigh* controversy, involved competing identity interests. Communitarian identity interests are represented by family, friends, and community members who may advocate a heterosexual preference for a growing teenager. Yet, an important identity interest is the life-

232. *Id.* at 2307-08.

233. Justice Stevens in his dissenting opinion raises the concern that the state would reduce the adult population to reading what's fit only for children. *Id.* at 2314 n.2 (Stevens, J., dissenting); *see also id.* at 2318-25 (Souter and Ginsburg, JJ., dissenting).

234. *Id.* at 2319. Justice Stevens' dissenting opinion goes even further by approving filtering preferences that are structured by local librarians according to their specific community values. *Id.* at 2314-15 (Stevens, J., dissenting). Local filtering that uses selection criteria based on local community values is particularly congruent with the communitarian identity meta-narrative.

235. For discussions of the government's and First Amendment interests related to Internet pornography cases, see generally FRED H. CATE, *THE INTERNET AND THE FIRST AMENDMENT: SCHOOLS AND SEXUALLY EXPLICIT EXPRESSION* 83-96 (1998); Mark C. Alexander, *The First Amendment and Problems of Political Viability: The Case of Internet Pornography*, 25 *HARV. J.L. & PUB. POL'Y* 977 (2002); Catherine J. Ross, *Anything Goes: Examining the State's Interest in Protecting Children from Controversial Speech*, 53 *VAND. L. REV.* 427 (2000); Nadine Strossen, *Current Challenges to the First Amendment* 36 *GONZ. L. REV.* 279 (2000-01).

236. Inclusion of identity interests within the constitutional framework applicable to filtering software would require a comprehensive constitutional analysis which is again outside the scope of this Article. Such analysis would most likely include an evaluation of the role of identity within and outside the ambit of the First Amendment.

narrative of the teenagers exploring their gay identity. This type of sexual exploration changes their life-narratives in ways that enhance the autonomy and self-fulfillment and separateness from society tenets of the liberal conception of identity. Hence, the use of the technology not only exerts pressure on the communitarian meta-narrative, but also augments the liberal aspects of such teenagers' life-narratives. The Court's decision, while protecting communitarian identity interests, limits gay teenagers' ability to explore cyberspace and thereby returns the identity equilibrium further toward its pre-technology position.

Although the existence of conflicting identity interests makes the outcome of identity-conscious adjudication unclear, the Court's resolution is clearly deficient. Without considering identity interests, the Court's ruling pulled the identity equilibrium back toward its pre-technology position, thereby failing to protect the liberal aspects of the life-narratives of teenagers like Rood. Their identity interests were sacrificed without deliberation.

Furthermore, the *American Library* decision not only failed to protect the liberal conception of identity, but it also conflicted with the identity outcome in the *McVeigh* decision. The *McVeigh* decision preserved the post-technology balance for closeted adult homosexuals. It sanctioned the pressure on the communitarian meta-narrative by authorizing the newly found ability to explore identities outside one's communal narratives. The *American Library* decision reached the opposite identity resolution by restricting this option. Transparency would have enlightened the debate by enabling analogy to cases like *McVeigh* that deal with similar pressures.

F. Summary

In this Part, I demonstrated that once we endeavor to go beyond doctrinal partitions we are able to observe the full impact of social change brought by the technological innovations. Identity tensions were seen to underlie a broad range of legal controversies involving Internet and genetic testing technologies. Yet, legal discourse did not acknowledge identity tensions. Furthermore, legal outcomes frequently failed to protect identity interests.

VII. IDENTITY AS PART OF OUR LEGAL DISCOURSE

The previous Parts revealed how social change was induced by the use of genetic testing and Internet technologies. The aforementioned technologies have had a substantial impact on the

social structures and relations through which many individuals conceive their identity. At the same time, the law failed to provide an adequate response by both failing to protect identity interests and failing to acknowledge them. In this Part, I will demonstrate that failure to protect identity interests often stems from an incompatibility between the informational scenario driving the controversy and the informational scenario that the traditional doctrines were designed to resolve. Consequently, existing doctrines are structurally deficient in their ability to accommodate consideration of identity interests. I will argue that the degree of social change combined with the inability of our legal tools to provide an appropriate response point to a need for legal transformation.

The need to incorporate identity interests into the debate may differ from case to case and depend on the extent to which identity tensions are at the core of the controversy. Yet, two general approaches to the incorporation of identity interests are generally applicable to the resolution of identity tensions. I will dedicate the last section of this Article to a preliminary evaluation of the advantages and drawbacks of two alternative approaches for the protection of identity interests. The first approach calls for expressly including identity as an independent interest in the relevant techno-legal discourse. The second endorses indirect protection through the restructuring of traditional doctrinal tools. Neither approach, however, suggests that identity interests would necessarily trump traditional considerations. The proposals call only for the consideration of identity interests alongside traditional interests.

A. *Explaining Failures*

Legal doctrines are formed according to the state of affairs known at the time of their conception. At best they can adapt to fit changing conditions. Yet, at times, circumstances change and new social scenarios are created that are incompatible with the scenarios upon which the doctrine was originally conceived. I will focus in this section on the three controversies in which failure to protect identity interests was clearly identified. The controversies concerning commercial profiling, the physician's duty to warn, and mandatory DNA databases are characterized by new informational scenarios. The three controversies were resolved under privacy principles. These doctrines were structured to deal with specific informational scenarios, that is, with certain traditional schemes of information flows between parties. It appears that the reason for the failure lies

with the incompatibility between the traditional privacy informational scenario and the scenarios that existed in these cases.

The three controversies involved an act of taking of personal information. In the profiling controversy, it was the aggregation of personal information about the Internet user by a profiling company. In the duty-to-warn controversy, the act involved a physician's use of his patient's genetic information for the benefit of the patient's relative. Finally, in the DNA database controversy, it was the State's extraction of DNA samples of prisoners or soldiers in order to incorporate them into government DNA databases. The controversies were analyzed within the confines of privacy statutes, privacy tort laws, and privacy constitutional principles governing takings of information. The informational scenario at the basis of these doctrines features a third party who without authorization uses personal information of another in a fashion that disadvantages that person.

Legal protection of identity interests failed because the scenarios that characterized the three controversies involved unique features that did not fit within the traditional taking scenario. In these controversies, the takings were only an ancillary part of the informational scenario. Tensions were stirred in these controversies by involuntary creation and involuntary relay of information to the individual.

The informational scenarios at the basis of these controversies contained two unique characteristics. The first characteristic was the focus on the initial stage—the creation of the information. This initial stage involved (i) an involuntary creation of personal information; (ii) that was not previously known to the individual; (iii) through a culturally formative mode. Personal information was created without the person's permission. The facts created about the individual were not known to him prior to the act of creation. Finally, the personal information was powerful because it was created in a manner that carries a persuasive force in our culture, that is, computerized information or information derived from our genes. This focus on the creation stage is distinguished from privacy protection that is usually concerned with subsequent information stages: collection and dissemination. Privacy protection usually involves confidentiality measures when the information is collected or protection from abuse or discrimination when the information is disseminated. It does not concern the initial stage of the creation of the information.²³⁷

237. An example of protection in the dissemination stage involves protection from genetic discrimination by employers or health insurers. See generally Richard Bornstein, Note and Comment, *Genetic Discrimination, Insurability and Legislation: A Closing of the Legal Loopholes*, 4 J.L. & POL'Y 551 (1996); Jeremy A. Colby, *An Analysis of Genetic Discrimination*

The second characteristic of the three scenarios concerns the effects of involuntary transmission of the information back to the individual, irrespective of third party knowledge or abuse. Privacy doctrines are traditionally concerned with the taking act, and therefore focus on the flow of information from the invaded individual to the third party.²³⁸ Yet, in these three controversies it was the flow of information back to the individual that was focal.

Table 1 illustrates the distinction between the informational scenario at the basis of traditional privacy doctrines designed to deal with takings of information and the informational scenarios involved in the profiling, duty-to-warn, and DNA databases controversies.

Table I: Informational Scenarios

| | Information Stage | | |
|----------------------------------|--|------------------------------------|------------------------------------|
| <i>Flow Direction</i> | Creation | Collection | Dissemination |
| <i>Individual to Third Party</i> | | Traditional Informational Scenario | Traditional Informational Scenario |
| <i>Third Party to Individual</i> | New Technologies' Informational Scenario | | |

The three controversies were characterized by the centrality of either the creation of the information or the flow of information back to the individual or both. The profiling controversy involved the computerized creation of an alternative life-narrative through the aggregation of bits of personal information. The alternative life-narrative was then involuntarily relayed back to the individual through the transformation of his Internet universe. The duty-to-warn controversy concerned the involuntary relaying of culturally awed familial genetic information to relatives of the patient. The DNA

Legislation Proposed by the 105th Congress, 24 AM. J.L. & MED. 443 (1998); John V. Jacobi, *Genetic Discrimination in a Time of False Hopes*, 30 FLA. ST. U. L. REV. 363 (2003). An example of protection in the collection stage involves the physician's duty of confidentiality and confidentiality of medical records. See generally Judy E. Zelin, Annotation, *Physician's Tort Liability for Unauthorized Disclosure of Confidential Information About Patient*, 48 A.L.R.4th 668 (1986); Wanda Ellen Wakefield, Annotation, *Physician-Patient Privilege as Extending to Patient's Medical or Hospital Records*, 10 A.L.R.4th 552 (1981).

238. For examples of cases involving the typical takings informational scenario, see *Kyllo v. United States*, 533 U.S. 27 (2001); *Carson v. Here's Johnny Portable Toilets, Inc.*, 698 F.2d 831 (6th Cir. 1983).

database controversy implicated the involuntary creation of genetic information that was incorporated into a public DNA database. The creation of the genetic information produced the threat of its involuntary disclosure to the individual himself, even absent knowledge or abuse by a third party.

The disparity between the informational scenarios at the basis of these controversies and the traditional informational scenario significantly reduces the likelihood that identity interests would be protected through use of traditional doctrines. Hence, structural deficiency makes consideration of identity interests less likely.

The inapplicability of traditional tools to social scenarios created by genetic testing and the Internet emphasize the need for legal innovation. Furthermore, the nature of the failure creates conditions that increase the likelihood of successful legal change. The failure stemmed from the alteration of traditional informational scenarios. An informational scenario is in essence the framework of the fact pattern that is at the basis of the controversy. Transformations of the fact patterns underlying legal precedents weaken the force of *stare decisis*. The strength of opinions is related to the facts on which they are based; consequently, if these facts change, the opinion—which is based on them—will be weakened.²³⁹ Once a precedent's authority is undermined, the likelihood of change increases. Hence, the incompatibility between informational scenarios increases the chances of accomplishing legal change.

B. Protecting Identity Interests

Identity tensions filled a role in inflaming a long series of social and legal controversies involving genetic testing and the Internet. Consideration of identity interests, therefore, becomes vital for ensuring the appropriate accommodation of the two technologies. Furthermore, incorporation of identity interests in the techno-legal debate could serve as a stepping stone toward consideration of identity interests in the general legal debate.

Yet, the impact and consequently the degree of need for the incorporation of identity interests are likely to differ even between the cases analyzed in this Article. The impact is contingent on the extent to which identity tensions are at the core of the controversy. When identity tensions are at the very center of the controversy, incorporation of identity interests into the legal discourse may

239. See Stuart Minor Benjamin, *Stepping into the Same River Twice: Rapidly Changing Facts and the Appellate Process*, 78 TEX. L. REV. 269, 270-87, 303 (1999).

determine the legal outcome. When identity tensions are at the periphery of the controversy, consideration of identity interests may not determine the resolution of the case, though the consideration is still of significance. Awareness of the full range of social interests implicated in a legal controversy is essential in all cases, but all the more so where such interests are eventually trumped by other considerations. Furthermore, our perception of whether identity tensions are at the core of the debate is contingent on our sensitivity to identity as a central value. As we become more cognizant of the need to protect identity interests, we are likely to perceive a broader variety of identity tensions to be at the core of the controversy. Consequently, as we become further sensitized to identity concerns, the consideration of identity interests is likely to have a greater impact on the legal outcome.

In this Part, I propose two alternative approaches for the protection of identity interests: (i) express inclusion of identity as an independent interest; and (ii) indirect protection through the refining of traditional doctrinal tools. Yet, regardless of the mode in which identity interests will be incorporated, these proposals suggest that identity interests should be considered among other interests. The proposals do not argue that identity interests should necessarily trump competing interests. At the same time, it is posed that identity interests should be considered regardless of our evaluation of the worth of any individual life-narrative. The significance of life-narratives to individuals warrants that none should be dismissed without consideration. For example, let us consider a hypothetical case in which the parents of an anorectic teenager sue the web-host which hosts their daughter's Pro-Ana group. In this case, we would expect that any identity interest argument raised would be defeated by arguments related to the anorectic girl's medical interests. Yet, although we may as a society devalue the girl's life-narrative, we are obliged, because of the subjective significance of life-narratives to individuals, to introduce the girl's identity interests into our legal decision making. This obligation is particularly significant because many life-narratives may subjectively appeal to some while appearing abhorrent to others. Thus, identity interests should not be dismissed before they even enter the legal debate. In the case of the anorectic girl, although her life-narrative is most likely to be trumped by her medical interests, it should similarly not be dismissed off-hand.

1. Identity as an Independent Interest

The first approach endorses the express incorporation of identity interests into the legal debate. Insertion of identity interests into the legal discourse could take different doctrinal forms. Privacy, another child of technological innovations, is embodied in our legal discourse through constitutional law,²⁴⁰ statutory law,²⁴¹ and tort law.²⁴² Identity interests are already recognized in tort law within the realm of the right to publicity and defamation doctrines. I will, therefore, use a duty-to-warn controversy involving tort doctrines as an example of the incorporation of identity as an independent interest.

Express incorporation of identity interests in the duty-to-warn controversy would require consideration of identity as an additional interest to those currently considered by the courts. On the patient's side, the identity interest would be weighed in addition to the privacy interest covered by the duty of confidentiality. On the relative's side, two opposing interests would be considered: the relative's identity interest and the relative's medical interest. Overall, the patient and the relative's identity interests and the patient's privacy interest would be balanced against the potential medical harm to the relative.²⁴³

A proposal to incorporate a new interest into the legal discourse must consider that the law does not easily lend itself to change. Yet, technological innovations are often characterized by a relative suddenness of appearance that is accompanied by an aura of change. Accelerated change in the traditionally slow-to-evolve legal field gains legitimacy through the need to react to rapid exogenous scientific progress.²⁴⁴ Specifically, history has shown that technological innovation can both create and bring to the forefront legal values that for years were at the margins of legal discourse. The primary example concerns privacy. Privacy first entered legal consciousness in the now famous Warren & Brandeis *Harvard Law Review* article.²⁴⁵ The article raised the need for privacy protection in light of the intrusion caused by the press' use of a technological innovation—photography.²⁴⁶ The

240. See, e.g., *Whalen v. Roe*, 429 U.S. 589 (1977); *Katz v. United States*, 389 U.S. 347 (1967); *Berger v. New York*, 388 U.S. 41 (1967); *Griswold v. Connecticut*, 381 U.S. 479 (1965).

241. See, e.g., Health Insurance Portability and Accountability Act of 1996, Pub. L. No. 104-191, 110 Stat. 1936; The Privacy Act of 1974, 5 U.S.C. § 552a (2000).

242. See RESTATEMENT (SECOND) OF TORTS § 652A (1977).

243. The ability to identify the party at risk would also be considered.

244. See *Berger*, 388 U.S. at 49; see also Price & Duffy, *supra* note 4, at 1007-12 (discussing the relationship between technological change and doctrinal transformation).

245. See Brandeis & Warren, *supra* note 1.

246. *Id.* at 195.

right to privacy was gradually recognized by the courts and eventually adopted in two Supreme Court opinions dealing with new forms of wiretapping technologies.²⁴⁷ Its expansion was continuously pushed forward by a stream of new technologies, ranging from the birth control pill to computerized databanks.²⁴⁸

One might argue that the vagueness of the concept of identity makes it an unlikely candidate for legal application. Yet, our legal discourse is replete with vague terminology. The legal debate regularly features references to multi-faceted values. Let us look again at the privacy example. Among privacy's many definitions are "a psychological condition of 'being apart from others,'" "freedom not to participate in the activities of others," "a social ritual by means of which an individual's moral title to his existence is conferred," "a boundary through which information does not flow from the persons who possess it to others," and "the state of limited access by others to certain modes of being in a person's life."²⁴⁹ Despite that, we do not hesitate before we toss privacy into the legal concoction.

Finally, the case for express incorporation of identity in legal discourse should be facilitated by the fact that identity is not an absolute newcomer to the legal debate. Identity concerns are often raised in the context of identification, a prominent example of which is cases involving identity theft.²⁵⁰ It also appears outside the context of identification in doctrines such as the right to publicity and defamation. Although not a prominent player, it has been lingering in the wings of legal debate. Commentators pointed out that identity lurks behind legal doctrines as diverse as those concerning equality, product liability, privacy, and the family.²⁵¹ Hence, the alternative for relief of identity tensions through the consideration of an independent identity interest is a viable option.

2. Refining Our Tools

Express incorporation of identity interests into legal discourse could greatly benefit the resolution of identity tensions. Still, major

247. *Katz v. United States*, 389 U.S. 347 (1967); *Berger*, 388 U.S. 41; see also David W. Leebron, *The Right to Privacy's Place in the Intellectual History of Tort Law*, 41 CASE W. RES. L. REV. 769, 793-98, 802 (1991).

248. See *Whalen v. Roe*, 429 U.S. 589 (1977); *Griswold v. Connecticut*, 381 U.S. 479 (1965).

249. Kahn, *Privacy*, *supra* note 7, at 371-72; see also Daniel J. Solove, *Conceptualizing Privacy*, 90 CAL. L. REV. 1087, 1099-1124 (2002) (discussing different conceptions of privacy).

250. See, e.g., *United States v. Mejía-Barba*, 327 F.3d 678 (8th Cir. 2003); *United States v. Karro*, 257 F.3d 112 (2d Cir. 2001).

251. See generally MINOW, *supra* note 7; Carbado & Gulati, *supra* note 7; Hunter, *supra* note 7; Kahn, *Privacy*, *supra* note 7; Kahn, *Product Liability*, *supra* note 7; Yoshino, *supra* note 7.

legal changes are not easy to come by.²⁵² A somewhat more conservative approach would advocate the indirect acknowledgment of identity interests through expansion of existing doctrines to cover the newly created informational scenarios. Under this approach, identity interests would be accounted for without recognition of identity as an independent interest. Identity terminology would not become part of the legal discourse involving the two technologies.

Let us look again at the duty-to-warn example. The privacy doctrine applied failed to cover the informational scenario created by genetic testing technology. The primary reason for the failure was the traditional focus on the flow of information from the individual and not toward the individual. Yet, some privacy doctrines are not traditionally applied to taking scenarios but to autonomous decision-making situations. The doctrines applied to cases implicating autonomous decision making were designed with a different informational scenario in mind. They were originally created to govern scenarios in which the crux of the controversy involved the flow of information to the individual. In the medical arena, these situations were generally covered within the context of the informed consent doctrine.²⁵³ Commentators who acknowledged the effect on the relative who unwillingly received his familial genetic information proposed resolution through the right to make decisions in privacy in particular through the application of the right to informed consent.²⁵⁴ This resolution would in effect create a hybrid privacy doctrine combining elements of both the takings and the autonomous decision-making scenarios. In practice, use of informed consent doctrine in this context would place the decision of whether to receive the information in the relative's hands. Placing the decision with the relative would indirectly alleviate some of the pressure on the liberal identity meta-narrative because individuals who are particularly vulnerable would select not to receive the information. Yet, the relative will be affected by the impact of the familial genetic information even if he refuses to know. Once he is approached he retains the knowledge of the existence of information that connects him with his kin. Furthermore, additional doctrinal adjustments would be required to protect the patient's identity interests.

Doubtless, the slighter the required legal change, the greater the likelihood of its acceptance. Adjustments within existing doctrinal

252. On the difficulties of adjusting law to new technologies, see generally Monroe E. Price, *The Newness of New Technology*, 22 CARDOZO L. REV. 1885 (2001).

253. See generally *Canterbury v. Spence*, 464 F.2d 772 (D.C. Cir. 1972).

254. See Husted, *supra* note 142; Ost, *supra* note 142; Weaver, *supra* note 159, at 270-78.

principles are more likely to be accommodated than is a direct insertion of a new interest into the debate. This approach alleviates the difficulty of inserting a relatively novel concept into a conservative, backward-looking common law system. Yet, the necessary doctrinal adjustments may vary in degree. Some may not accomplish protection merely through the incorporation of existing principles. Even in the duty-to-warn example, further adjustments would be required to provide comprehensive protection of both patient and kin's identity interests. As the requisite solution becomes more creative, this approach will encounter difficulties similar to those accompanying the first alternative.

In addition, protection of identity interests without express acknowledgment of the identity tensions at stake suffers from a certain lack of transparency. The absence of transparency would particularly affect those who do not participate in the debate, but are indirectly affected by it. They would not be part of the making of the legal patchwork and would, therefore, be unlikely to discern the true ramifications from the language of law. Thus, lack of transparency would again impair the understanding of the forces driving the debate. This lack of transparency is particularly disconcerting when the resolution authorizes the erosion of one of the normative identity conceptions. Furthermore, the absence of an explicit identity discourse enhances the partitioning of debates that deal with the very same interests under different doctrines. Such partitioning prevents the enrichment of the debate through analogy to other controversies involving identity tensions.

Finally, an additional difficulty arises on the theoretical sphere. Privacy doctrines were the ones persistently demonstrated to be based on an informational scenario that is incompatible with those created by the new technologies. Further inquiry is required to find whether privacy as a philosophical concept embodies protection of the relevant identity interests. The question is crucial for a complete evaluation of this second approach, and should be undertaken in the context of any endeavor to provide a comprehensive construction of the requisite identity protection mechanisms.²⁵⁵

VIII. CONCLUSION

In this Article, I have shown that transcending the doctrinal fragmentation that governs our techno-legal discourse improves our

²⁵⁵ For a theoretical discussion of the relationship between identity and privacy, see Kahn, *Privacy*, *supra* note 7.

ability to appreciate the full social impact of technological innovations and the consequent need for legal transformation. By looking beyond doctrinal partitions, this Article revealed the existence of identity tensions in seemingly unrelated controversies involving the use of genetic testing and Internet technologies. The picture exposed underscores the need for legal change through the incorporation of identity protection measures into our legal discourse.

I have also embarked upon a preliminary evaluation of two alternative approaches for the incorporation of identity interests into our legal discourse. Both the direct and indirect incorporation approaches bear a likelihood of success. Yet, further study should be conducted to develop specific doctrinal solutions. Taking into account the breadth of the scenarios involving identity interests, such construction should be considered on a case-by-case basis. It is my hope that this Article was successful in its primary objective to draw attention to the need to look beyond doctrinal compartmentalization and resolve identity tensions in order to accomplish successful accommodation of Internet and genetic testing technologies.