

public mural, Albuquerque, New Mexico, photographed August, 2004



## the new spatial politics of social data

Elvin K. Wyly<sup>1</sup>

University of British Columbia

November 2, 2004

---

<sup>1</sup> Ideas for a guest lecture delivered to Geography 345, *Geographic Thought and Practice*; Department of Geography, University of British Columbia. I am grateful to Derek Gregory for the opportunity to think through some of these issues, in the context of histories of geographies as well as unfolding, just-in-time manufactured histories of casualties, premised on “The principle that if they had not been counted they did not count...” Derek Gregory (2004). *The Colonial Present: Afghanistan, Palestine, Iraq*. Oxford: Blackwell, p. 207. I am also grateful to Jatinder Dhillon, Michael J. Medler, Vernon R. Wyly, Daniel J. Hammel, Detlef Holberg, Liz Lee, Jayme Walenta, and Kathe Newman for extremely valuable insights, and I also thank Tom Slater, University of Bristol, who has reminded me that the epistemology of “Bloody Statistics” is best captured by Kevin Archer’s frustration with “Numbers, Schmunbers.”

## Facts

MR. McCLELLAN: ...I just don't ~ I have no information that points in that direction. But I would point out that this new information that has come to light demonstrates how irresponsible it is for Senator Kerry to jump to conclusions based on unsubstantiated information. It shows a reckless disregard for the facts. And the President must make conclusions based on the facts. The commander of the 2nd Brigade ~

Q ~ reckless disregard for the ~

MR. McCLELLAN: That's what ~ he's making unsubstantiated accusations without knowing the facts.

Q ~ is different than saying a reckless disregard for the facts.

MR. McCLELLAN: You got your question, let me finish my response....<sup>2</sup>

\*

"There wasn't anything. The Americans and British created facts where there were no facts at all."<sup>3</sup>

\*

"There are no facts as such. We must always begin by introducing a meaning in order for there to be a fact."<sup>4</sup>

## Statistics. Bloody Statistics.

David N. Livingstone's splendid book, *The Geographical Tradition*, is widely regarded as one of the best histories of the many different ways that geographers have seen themselves and their enterprise over the last five hundred years.<sup>5</sup> Livingstone's story begins in the European 'Age of Reconnaissance' with the pioneering, practical scientific endeavors of a fifteenth-century Portuguese prince (Prince Henry 'the Navigator'), and stretches across centuries of scientific innovation, Enlightenment philosophy, and colonial-imperial violence. And then his story arrives in the second half of the twentieth century, when a series of intersecting trends began to remake large parts of the field. A struggle for disciplinary identity intensified in the shadow of the "threat

---

<sup>2</sup> Scott McClellan (2004). "Press Gaggle by Scott McLellan." *Press Secretary Briefing, The White House*. October 28. Available at <http://www.whitehouse.gov/news/releases/2004>

<sup>3</sup> Hans Blix, interviewed in James Bamford (2004). *A Pretext for War: 9/11, Iraq, and the Abuse of America's Intelligence Agencies*. New York: Doubleday, p. 360.

<sup>4</sup> Friederich Nietzsche, cited in Watts, Michael (1988). "Struggles over Land, Struggles Over Meaning: Some Thoughts on Naming, Peasant Resistance and the Politics of Place." In Reginald G. Golledge, Helen Couclelis, and Peter Gould, editors, *A Ground for Common Search*, pp. 31-50. Goleta, CA: The Santa Barbara Geographical Press.

<sup>5</sup> David N. Livingstone (1992). *The Geographical Tradition*. Oxford: Blackwell.

of institutional annihilation”<sup>6</sup> after the Geography department at Harvard was closed in 1948; a spirited and often hostile debate broke out between those advocating the study of local, unique regional *patterns* and those arguing for generalization and the search for systematic *process*; and several prominent figures introduced American readers to obscure European theoretical works just when a new generation of students were searching for ways to prove themselves and establish their reputations. Beginning in the late 1950s, parts of the field were recast as “spatial science” ~ as a search for systematic order, spatial organization, and laws of spatial interaction and behavior that could provide the basis for prediction, planning, and control.<sup>7</sup> In *practice*, this meant that many new geographers were spending more and more of their time learning inferential statistics, differential calculus, and computer programming in an enterprise that gradually became known as the “Quantitative Revolution.”<sup>8</sup> And in *theory*, a deeper shift was underway. Much of the new work began as pure excitement and discovery ~ a risky but idealistic, wide-eyed inductive empiricism. But it relied implicitly<sup>9</sup> on the philosophical foundations of *positivism*, a contested philosophy of science that privileged observation and metaphysical realism, the view that a real, external world could be adequately represented with reducible models and representations, and that an objective, neutral investigator could explain phenomenon by following a specified set of tests ~ a set of procedures that could be replicated by other investigators in the ongoing search for scientific truths. Many observers, therefore, have suggested that the widely-used term for this period, the “Quantitative Revolution,” is a misnomer for what was in reality a *Positivist* Revolution. The inescapable paradox, of course, was that geographers became smitten with positivism precisely when the natural sciences were being rocked by fundamental uncertainties, when “positivism was entirely outmoded in the wider intellectual world.”<sup>10</sup>

---

<sup>6</sup> Livingstone, *Tradition*, p. 311. “When the geography programme was terminated at Harvard in 1948 a new sense of crisis swept through the profession.” Yet Livingstone also emphasizes that geographers were not producing the kind of scholarly work that provided a convincing case for those who sought to defend geography at Harvard.

<sup>7</sup> There was also great optimism that spatial science could help to unite physical and human geography, an enduring division that was becoming more contentious amidst greater specialization in the academy.

<sup>8</sup> And their later reflections present heroic accounts of what was understood to be an Aугean enterprise, a direct and hostile challenge to the old guard mixed with the unbounded optimism and energy of youth. “Looking back on my early graduate days in the fall of 1956 at Northwestern I feel incredibly lucky and privileged...Ed Thomas, a third-year doctoral student, who travels down to Chicago with a weekly liaison with . . . a *computer*! Multiple regression . . . *four* variables . . . urban relationships . . . explained variance. ‘Ah yes . . . variance’ we repeated, furrowing our brows with the profundity of the concept. And then, when he was out of earshot, ‘What the hell is *variance*?’ for we would have impaled ourselves on our soil augurs before admitting that we did not know. Hurried consultations that night; frantic scanning of Croxdon and Cowden; what on earth did Snedecor say? But the next day we casually dropped a few beta coefficients of our own.” Peter R. Gould (1979). “Geography, 1957-1977: The Aугean Period.” *Annals of the Association of American Geographers* 69(1), 139-151.

<sup>9</sup> As Livingstone puts it: “geography’s contract with positivist vocabulary was a means of ratifying the subject’s renewed infatuation with scientific aspiration, and the work that this empiricist mood inspired revealed a discipline increasingly smitten with the language of mathematics.” Livingstone, *Tradition*, p. 321. And then, “...I still think there are good grounds for supposing that quantitative geography’s early encounter with positivism was altogether *implicit*. The personal testimony of some of those nurtured on the quantitative paradigm bear this out. Johnston, for example, confessed that even by the time he had acquired a reputation as a ‘quantifier’ he still had ‘no coherent philosophy of the discipline’ and was ‘an empiricist’ even though he ‘didn’t know it...’ Livingstone, *Tradition*, p. 322. Ultimately, Livingstone suggests that “Geography’s confrontation with the vocabulary of logical positivism ... was a *post hoc* means of rationalizing its attempt to reconstitute itself as spatial science.” Livingstone, *Tradition*, p. 328.

<sup>10</sup> Livingstone, *Tradition*, p. 321.

Quantification and positivist philosophies of science generated an enormous backlash across the social sciences. It became clear that there could be no indisputable, firm ground upon which all competing claims to valid, rational knowledge could be adjudicated. Livingstone provides a penetrating review of the many challenges to positivism that have emerged in the last thirty years, and concludes that the aspirations for a cold, hard, rational positivist spatial science were fundamentally misplaced. Aiming for a detached, neutral arbiter of scientific truth-claims could never really succeed ~ and even if it did, the victory would destroy all the *humanity* of human geography. Livingstone concludes that “it is now clear that classical foundationalism is in bad shape and had better be given up for dead. In this context geographers will have to acknowledge that warranted knowledge is relative to a body of beliefs, not to a body of certitudes. Pluralism in the geographical academy is thus an inevitability.”<sup>11</sup>

Livingstone’s account is engaging, panoramic, and magisterial. It has become the prevalent way that human geographers understand the changes in our field over the past forty years. Yet the title of his chapter raises fundamental questions that are, once again, at the center of contentious struggles over the purpose and relevance of geographical inquiry. In an evocative reference to humanist and political-economy scholars who were troubled by the veneer of brutal neutrality and the cold hard calculus of quantification practiced by those who came to be called the “space cadets,” Livingston titles his chapter:

“Statistics Don’t Bleed: Quantification and its Detractors.”

## Counter-Mappings

But statistics *do bleed*.<sup>12</sup> And because they do, we confront an urgent need to reconsider some of

---

<sup>11</sup> Livingstone, *Tradition*, p. 345.

<sup>12</sup> A very partial sampling of terribly depressing examples. Statistics from Special Operations Consulting and Security Management Group, Inc., a private security firm operating in Iraq, show the location and type of attacks launched by insurgents across the entire country ~ a total of 2,368 attacks from late August to late September, 2004. The statistics do bleed for many of the 799 homemade bombs (not all of which found their mark), and for some of the 664 mortar and rocket attacks. William McNulty and James Glanz (2004). “30 Days, 2,368 Attacks.” *New York Times*, September 29, A10. On September 8, 2004, the total number of U.S. soldiers killed in Iraq since the invasion in March, 2003 surpassed the one-thousand mark. The *Times* published a full two-page spread with photographs of each of the thousand dead, who “come from all branches of the armed services and represent the highest toll since the Vietnam War.” *The New York Times* (2004). “The Roster of the Dead.” September 9, A22-A23. For a powerful alternative rendering of these statistics, see Eric Blumrich’s attempt to break through the media-saturated environment that makes too many people numb to the reality of distant statistics that bleed and die. <http://www.bushflash.com/1000.html>. Missing from all of these U.S.-focused accounts, of course, is any recognition of Iraqi deaths. As Derek Gregory observes of the Western press coverage in the war’s early days: “For American and British viewers, their troops had families and friends ~ *lives* ~ but Iraqi troops were without these affiliations. Cut free from the ties that bound them to others, they just disappeared ~ neither bodies nor even numbers ~ but ... just *dead*.” Derek Gregory (2004). *The Colonial Present: Afghanistan, Palestine, Iraq*. Oxford: Blackwell, p. 207. Civilian deaths and dismemberments were judged even less worthy of any attempt to count. See the poignant, painful collection of statements by Colin Powell, Tommy Franks, and other Coalition officials attempting to justify the considerable efforts to *avoid* counting Iraqi civilian casualties: Gregory, *Colonial Present*, pp. 330-331. An alternative coalition of researchers in London monitors open-source intelligence to maintain a count of Iraqi civilians directly killed by military intervention. Their estimates at the end of October, 2004 are a minimum of 14,219 and a maximum of 16,352. <http://www.iraqbodycount.org>.

the prevailing assumptions that have been woven into our understanding of what geography is all about. Although the story line gets a bit specialized and obtuse at times, it's easy to summarize the main points. Quantification has been unmoored from its narrowly-constructed epistemological, ideological, and political foundations. In other words: data, observation, statistics and all the rest are no longer seen as the exclusive domain of One Right Way to Find Truth.<sup>13</sup> This is obvious to most people, who understand fully how easy it is to lie with statistics, maps, or photographs. Yet most scholars in the humanities and social sciences continue to associate 'calculative practices'<sup>14</sup> with positivist epistemology and conservative ideology. This association runs deeper in geography than in many other fields, and perpetuates a dichotomy between 'radical' critical social theorists (who are suspicious of quantification as an instrument of a discredited, technocratic positivism and of state surveillance and oppression) and 'orthodox' spatial scientists (who are cautious toward any stream of social theory that seems incompatible with positivist principles of neutrality, objectivity, and scientific authority). But in the last few years, a counter-mapping movement that first emerged in the days of the 1960s quantitative revolution has gained renewed strength. This movement seeks to reclaim the scientific and strategic value of calculative practices, while incorporating the critical, fundamental insights of scholars working from the standpoints of structuralism, humanism, phenomenology, feminism, poststructuralism, and postcolonial theory. Here, we consider three prominent examples of this new synthesis, and then we examine how these approaches shed light on current American electoral politics at the Presidential level.

### Radical Statistics

In 1975, a number of scholars involved in the establishment of the British Society for Social Responsibility in Science decided to form a more specialized organization to provide a response to what seemed to be a worsening problem of misuse and distortion of statistics. The *Radical Statistics Group* seeks to challenge a number of official practices: the "mystifying use of technical language

---

Stephen Hawking and several other prominent British scientists planned a protest in London's Trafalgar Square timed to coincide with the November 2, 2004 U.S. Presidential election; Hawking recorded a message to be played at the rally, where the names will be read of five thousand Iraqi men, women, and children known to have been killed in the war so far. But the total deaths are far higher, estimated in a study published in October 2004 in the *Lancet* at 100,000. Andy McSmith (2004). "Stephen Hawking to Lead Anti-War Protest on Election Day." *The Independent*, October 31. The U.S. And British governments immediately questioned the *Lancet* figure, citing media-based studies that put the figure closer to 15,000. As Scott Ritter observes, "the basis for such an endorsement is unclear, since neither the U.S. nor the U.K. admits to collecting data on Iraqi civilian casualties." Scott Ritter (2004). "More than 100,000 Iraqis have Died ~ And Where is Our Shame and Rage?" *The Guardian*, November 1.

<sup>13</sup> For extended debates between those who advocate and challenge the possibilities of a contemporary, activist social science in urban inquiry, see Brian J.L. Berry (2002). "Big Tents or Firm Foundations?" *Urban Geography* 23(6), 501-502; Elvin K. Wyly (2004). "Geographies of the United States in the Year 2004." *Professional Geographer* 56(1), 91-95; Robert W. Lake (2002). "Just the Facts." *Urban Geography* 23(8), 701-702; and Jennifer R. Wolch (2003). "Radical Openness as Method in Urban Geography." *Urban Geography* 24(8), 645-646.

<sup>14</sup> The phrase comes from Peter Miller's analysis of the role of accounting and other "mechanisms through which programs of government are articulated and made operable. Rather than focusing on the ways in which the economy is shaped by economics, attention is directed at the ways in which accounting shapes social and economic relations." Peter Miller (2001). "Governing by Numbers: Why Calculative Practices Matter." *Social Research* 68(2), 379-396, quote from p. 379.



to disguise social problems as technical ones;<sup>15</sup> the lack of community control in setting the goals for statistical data collection and the use of information; the “power structures” that control the use of statistics and limit the autonomy of those employed to study data; and the “fragmentation of social problems into specialist fields, obscuring connectedness.”<sup>16</sup> As a reflection of the group’s interdisciplinary character, the Group presents no comprehensive challenge on the level of ontology or epistemology: there is no foundational critique, for instance, to portray data and statistics as lacking any kind of stable meaning. Rather, the movement emphasizes context and contingency, and seeks to challenge the systematic distortion of survey procedures and other government data collection efforts, the proliferation of public-private relations that threaten privacy, and the misuse of statistical practices to avoid solving inherently social problems. Radical Statistics is a comparatively small organization;<sup>17</sup> but it stands as a direct counter-mapping, a clear challenge to the idea that calculative practices can *only* serve conservative ideological purposes.

### Statistical Citizenship

Matthew Hannah, a geographer at the University of Vermont, takes this analysis much farther with the concept of statistical citizenship. Hannah’s inquiry has been deeply influenced by the critical insights of the science studies literatures, but he is troubled that “the political analysis often does not go much beyond emphasizing that systems of counting and classifying are imposed modes of discipline or colonization, and thus that resistance to these systems can be perfectly legitimate.”<sup>18</sup> This move is disempowering if *it ends here*: we are left with the insight that all of the infrastructures of counting and calculation ~ maps, numbers, classification systems, formalized categories, statistical techniques and assumptions ~ are social constructions, rather than a priori axioms of nature or reality; but we have no alternative unless we work to develop social constructions that challenge dominant representations. Hannah thus calls his approach “social constructionism *al dente*,” a perspective that does not force a choice between undisputable, universal truth and the “time-tested figure of the ‘slippery slope’”<sup>19</sup> when everything is seen as constructed, situated, partial, unstable, and thus ultimately un-knowable. “What we are obliged to do is work out exactly how and in what configuration the things we take for granted in any particular context and the things we do not will relate to each other and have real consequences.”<sup>20</sup>

The practices of counting, mapping, and calculating have very real consequences ~ particularly when the enterprise involves the power, resources, and authority of the state, large corporations,

---

<sup>15</sup> Radical Statistics Group (2004). *About Radstats*. Available at <http://www.radstats.org.uk/about.htm>, accessed November 1.

<sup>16</sup> Radical Statistics Group (2004). *About Radstats*. Available at <http://www.radstats.org.uk/about.htm>, accessed November 1.

<sup>17</sup> The Group publishes a journal three times per year, and hosts an annual conference, usually alternating between locations in the north and south of the U.K. The most important scholarly book-length work produced by the Group is Daniel Dorling and Stephen Simpson, editors (1999). *Statistics in Society: The Arithmetic of Politics*. London: Arnold.

<sup>18</sup> Matthew G. Hannah (2001). “Sampling and the Politics of Representation in U.S. Census 2000.” *Environment and Planning D: Society and Space* 19, 515-534, quote from p. 517.

<sup>19</sup> Hannah, “Sampling,” p. 518.

<sup>20</sup> Hannah, “Sampling,” p. 518.

universities, or other institutions. Hannah's particular case study examines the question of sampling in the U.S. Census, which has been at the center of debate over the problem of the differential undercount – the fact<sup>21</sup> that the census misses a disproportionate number of racial and ethnic minorities. The estimated undercount for Blacks in the 1990 Census was 5.7 percent, compared with 1.3 percent for all other races combined.<sup>22</sup> Hannah analyzes the material consequences of the differential undercount and the political struggles over the use of sampling to correct for it. Hannah's framework is at once scientific and strategic, critical and credible: "...a strategic active participation in the construction of the statistical representations by which individuals are constituted as political actors, objects of social policy, and/or consumers. This participation can encompass all the traditional modes of political action, from pushing legislators to draft laws strengthening electronic privacy to forming citizens' organizations to advocate the creation of a 'multiracial' category" in government social statistics, and, ideally, the broader sense of "the political management of individual information in the course of day-to-day life."<sup>23</sup>

### The Digital Individual

The political management of individual information, of course, has been transformed by the accelerated diffusion of information and communications technologies. Nigel Thrift suggests that we are seeing the development of a "track-and-trace spatial imaginary" that is reshaping our visions of cities, our experience of urban life, and the relations between urban space and informational practices.<sup>24</sup> The range of empirical illustrations of the new spatial dynamics of data is virtually without limit. Trademark and copyright law are colliding with the new spatialities of the Internet, raising difficult questions about the location of legal jurisdiction.<sup>25</sup> Satellite remote sensing and other geographical technologies are being used by agribusiness conglomerates to monitor farms and to sue farmers for patent infringement when there is evidence of saving and replanting genetically-modified seeds.<sup>26</sup> The proliferating legions of private and municipally-managed surveillance cameras are being hooked up to sophisticated facial recognition software and growing databases of 'known' or 'suspected' criminals and terrorists, while FBI officers are (once again) infiltrating activist organizations to take photographs and build their databases.<sup>27</sup> Wal-Mart has begun using digital thumbprinting for identification purposes for customers who write checks, and the behemoth retailer's decision to use radio-frequency identification chips throughout its inventory system has percolated through its supplier networks across the entire wholesale trade

<sup>21</sup> Again, to the degree that we are able to reasonably conclude that there *are* such things. *Al dente!*

<sup>22</sup> Margo Anderson and Stephen E. Fienberg (2000). "Race and Ethnicity and the Controversy over the U.S. Census." *Current Sociology* 48(3), 87-110, citation to p. 89.

<sup>23</sup> Hannah (2001), "Sampling," p. 516.

<sup>24</sup> Nigel Thrift (2003). Paper delivered to a joint panel of the Urban Geography Specialty Group of the Association of American Geographers and the Urban Group of the Institute of British Geographers, Annual Meeting of the Association of American Geographers, New Orleans, LA. Forthcoming, *Urban Geography*.

<sup>25</sup> Should the legality of certain forms of communication be governed by the 'prevailing community standards' of the location of a server? The location of the act of viewing or downloading? The networks connecting origin and destination?

<sup>26</sup> In the United States, a case out of Tupelo, Mississippi was the first to reach a federal appeals court in late 2003. Adam Liptak (2003). "Saving Seeds Subjects Farmers to Suits Over Patent." *New York Times*, November 2, p. 14.

<sup>27</sup> Mitchell Gray (2003). "Urban Surveillance and Panopticism: Will We Recognize the Facial Recognition Society?" *Surveillance and Society* 1(3), July. Available at <http://www.surveillance-and-society.org>.

sector ~ creating the theoretical possibility of real-time monitoring of the location of a product from the factory, to the route followed by the truck driver on the way to the local Wal-Mart, to the supply on the shelf, and all the way to the consumer's home.<sup>28</sup>

If there are few limits to the array of empirical illustrations of the new socio-spatial dynamics of information, there is also little to bound the scope of implications for culture and identity. William Mitchell tries to sketch the range of implications by introducing the figure of Me++, "a biological core surrounded by extended, constructed systems of boundaries and networks.... Walls, fences, and skins divide; paths, pipes, and wires connect."<sup>29</sup> Mitchell argues that "the trial separation of bits and atoms is now over"<sup>30</sup> and that the worlds of information and corporeality ~ bodily existence ~ are becoming fully interdependent, such that on-line events shape our off-line existence, and *vice versa*, creating a cyborg self. And yet Mitchell's cautious optimism, as a "critically engaged designer whose business it is to reflect, imagine, and invent,"<sup>31</sup> hides a more subtle process at work. Here, we need to consider the work of Jon Goss, a geographer at the University of Hawaii, who is concerned about the "instrumental rationality" in the use of information technologies.<sup>32</sup> Goss focuses particular attention on geodemographic marketing systems ~ the systems and databases that are designed to help direct-mail marketers (and other entities) identify, locate, and "target" the right customers for a particular product.<sup>33</sup> The key issue here is not the accuracy of firm's claims in what has been a hype-ridden industry since the late 1980s; rather, the concern is that if enough companies *act as if*<sup>34</sup> the models are accurate, then the entire enterprise will create its own kind of reality and practical truth. If I live in the kind of neighborhood that is viewed through the lens of a negative statistical stereotype, this perception will shape the way that companies (and perhaps government officials) treat my neighborhood. In turn, these actions will gradually shape the range of messages and opportunities I am likely to encounter. Although Goss offers a range of strategic and tactical options open to individuals who are troubled by the geodemographic surveillance enterprise,<sup>35</sup> he is not very optimistic on the long-term prospects: not everyone has the privilege of choosing how to respond to the information industry, and "even those of use who are able to play the game are constrained by the deadly

---

<sup>28</sup> Peter T. Kilburn (2002). "Your Thumb Here: Newest ID of Choice at Store and on Job." *New York Times*, February 2, A1, A16.

<sup>29</sup> William J. Mitchell (2003). *Me++: The Cyborg Self and the Networked City*. Cambridge, MA: MIT Press, p. 7.

<sup>30</sup> Mitchell, *Me++*, p. 3.

<sup>31</sup> Mitchell, *Me++*, p. 6.

<sup>32</sup> Jon Goss (1995). "We Know Who You Are and We Know Where You Live: The Instrumental Rationality of Geodemographic Marketing Systems." *Economic Geography* 71(2), 171-198.

<sup>33</sup> The leading company profiled in Goss' 1995 article remains healthy, prolific, and intensely innovative. Claritas, Inc., has introduced several new consumer segmentation systems beyond those described by Goss. See <http://www.claritas.com>.

<sup>34</sup> Cf. Ben Affleck in *Boiler Room* (2001).

<sup>35</sup> He draws on the French Situationists for inspiration here, recommending that consumers provide marketing firms with a stream of false information, based on 'fantasy identities' and constantly-changing profiles that will destabilize the modeling systems that undergird the enterprise. Goss, "We Know," p. 193. Sometimes the systems will create hybrid identities even without any attempt at insurgent informational practices. One of my favorite pieces of junk mail arrived in my office mail sometime in late 1999. An enterprising firm in Doylestown, Pennsylvania had somehow mixed up its address entries for Lyna Wiggins and Elvin Wyly, both faculty members at a large state university. I became the puzzled recipient of junk mail addressed to someone named Lyna K. Wyly.



serious intent of strategy. The terrain of social life has been systematically territorialized by capital and the state for the purpose of efficient profit and administration, and marketing sciences are able to occupy a position from which to exercise surveillance and control over the field of consumption.”<sup>36</sup> Goss even sees a troubling fusion of public and private interests as privatization proceeds, creating “consumer-citizens”<sup>37</sup> subject to a strengthened infrastructure designed for “strategic control of everyday life.”<sup>38</sup>

Michael Curry, a geographer at UCLA, shares Goss’s deep concern for the implications of these kinds of informational practices. Curry provides a valuable analysis of the contradictory trends in recent U.S. Supreme Court decisions on privacy rights in relation to technological developments, and he shows how some of the dominant early concerns with geodemographic data systems were fundamentally misplaced: initial fears of a grand, centralized, government-controlled database with comprehensive files on everyone overlooked the possibility of “undisciplined information” – the process by which data profiles can be endlessly created, linked, and recombined, as information rapidly migrates whenever different agencies, companies, or researchers build a database from existing sources. There is a highly specialized stream of the techno-scientific geographic literature considering the problems of “error propagation” in this data migration. But Curry’s concern involves the social implications:

“...in a geodemographic world, where profiles are constantly being created, marketed, and recreated, it is hard to see how any individual today can know whether he or she has adequate knowledge of which data exist, has access to those data, has the ability to correct those data, or can be assured that data have been collected only where necessary.”<sup>39</sup>

### *The Case for Optimism*

Curry has taken us to a depressing juncture: we can never really know, or control, all of the data that describes us, and that is used by individuals and institutions to monitor our activities, our lives, our selves. The dilemmas of undisciplined information and the increasing sophistication of geographic referencing systems explain the visceral fear and insecurity operating in consumer life today. But Curry sees a solution in the creation of ever more holistic data profiles – “digital individuals.” “...we might think of the products created by data profiling as ‘digital individuals.’

---

<sup>36</sup> Goss, “We Know,” p. 194.

<sup>37</sup> And it is worth considering how the construct of the *consumer-citizen* has provided the foundation for influential theories that have justified severe constraints on the use of government for wealth redistribution and other mechanisms to reduce inequality. The enormous public-choice literature in urban economics and political science – portraying wealthy, mobile homeowners as ‘voting with their feet’ in ways that would discipline municipalities that sought to raise taxes too high – began with Charles M. Tiebout’s famous theorization that “If consumer-voters are fully mobile, the appropriate local governments, whose revenue-expenditure patterns are set, are adopted by the consumer-voters.” Charles M. Tiebout (1956). “A Pure Theory of Local Expenditures.” *Journal of Political Economy* 64, October, 416-424, quote from p. 424.

<sup>38</sup> Goss, “We Know,” p. 194.

<sup>39</sup> Michael R. Curry (1997). “The Digital Individual and the Private Realm.” *Annals of the Association of American Geographers* 87(4), 681-699, quote from p. 692.

So when I apply for credit, the bank officer ‘sees’ a digital individual; when a credit card company asks Trans Union for a list of prospects, it gets a list of digital individuals; and when the local pizza company sends out a mailing, it sends it not to me, but to a digital individual with my name and address. There has been a tendency to see these digital individuals as mere ‘puppets,’ as images lacking the reality that the ‘real me’ has. But to see them in this way is to be seriously misled.”<sup>40</sup> As Curry emphasizes, a cornerstone of sociological thinking portrays identity formation and personality as intensely partial, contingent, and situational: most of our social interactions involve the presentation of limited facets of who we are, or the performance of specific roles. The informational, digital facets of who we are, then, provide a solution to the problems of privacy. “If we take it as obvious that we have control over our actions” in those places where we only reveal parts of ourselves, “we ought too to conclude that as holders of our own identity in a more continuous, physical sense, we should have control over that much wider range of virtual selves, to the creation of which we have been only partially willing collaborators.”<sup>41</sup> For Curry, a partial solution is possible if we can advance the Hegelian-based theory of moral right, a central foundation for European systems of intellectual property, against the prevailing Anglo-American labor-based tradition that invests rights in the producer of a ‘work.’

On a practical level, this would imply that I have some right over that digital individual who happens to share my name and social security number<sup>42</sup> and my address; under the Anglo-American tradition, that digital individual is called a FICO™ Score, and remains the property of Fair, Isaac, and Company.<sup>43</sup> Fair, Isaac and a handful of other companies cornered the market on consumer credit reporting many years ago, and have assembled digital dossiers on millions of individuals, including me. The company’s profits are derived from royalties and fees charged to companies wishing to evaluate my responsibility in repaying debts, or to evaluate my possible desire for particular kinds of goods and services. But I helped create this digital individual, this individual who now earns profits for a company, and who plays a role in controlling whether I’m approved for a loan, and, in an increasing number of states, whether I will be hired or able to rent an apartment.<sup>44</sup>

---

<sup>40</sup> Curry, “The Digital Individual,” p. 695.

<sup>41</sup> Curry, “The Digital Individual,” p. 695.

<sup>42</sup> And my Canadian Social Insurance Number (which begins with nine, as do all SINs for those on temporary work permits), making me wonder precisely how the data-mining systems keep track of the growing number of people living, working, and consuming transnationally. I’m sure there are some sophisticated algorithms.

<sup>43</sup> Until a few years ago, Fair, Isaac was reluctant to allow individuals to know their credit score, since this knowledge would undermine the neutrality and objectivity of the entire modeling enterprise. See Heisenberg. If I know how my credit score is calculated, then I will find ways of gaming the system to get credit even if I’m a horrible risk. A flood of bad publicity in the late 1990s and into 2001 and 2002, however, led to widespread rumors of what the closely-held algorithms involved, however, and thus the company began a high-profile public relations campaign to try to ease fears of, among other things, racial credit profiling. Federal legislation also changed the legal requirements for credit bureaus to provide full reports at limited cost, and some states have gone further. Details of the algorithms remain tightly-guarded trade secrets, but Fair, Isaac now provides general guidance on the kinds of good consumer behavior that will be rewarded by the model scoring system. See <http://www.myfico.com>.

<sup>44</sup> It remains unclear whether a Hegelian-premised regime of intellectual property law would give me any rights over the activities of the digital individual named Lyna K. Wyly. See note 35, *supra*.

## “The Factfinder Confronts a Thing, Not a Person”

To summarize the argument thus far: facts may indeed be social constructions, but some social constructions can *hurt* you;<sup>45</sup> statistics do bleed; and there is a new movement of activist social science to marshal facts in service of equity, justice, and peace. Radical statistics, statistical citizenship, and the digital individual capture three elements of this movement, and its efforts to create a new and emancipatory politics of social data.

But what practical *political* significance do these ideas have? I offer two examples, drawn from the United States in November, 2000, and today, November 2, 2004. I fear the election debacle of November, 2000 provided a lesson in the social construction of ‘facts’ that political operatives learned only too well; one can only hope that all involved in the sausage factory of electoral systems follow Bob Lake’s plea, for Just the Facts.<sup>46</sup>

November, 2000

Library shelves, video archives, and file servers are overloaded with the accumulated stock of books, scholarly articles, news accounts, think-tank reports, magazine stories, talking-head-talk-show debates, and blogs<sup>47</sup> recounting the history of the U.S. Presidential election in November, 2000. To avoid any appearance of partisanship in assessing the facts<sup>48</sup> of what happened, we will rely on the record reported (although not signed) with the pristine positivist objectivity and neutrality of William Rehnquist, Sandra Day O’Connor, Antonin Scalia, Anthony Kennedy, and Clarence Thomas.<sup>49</sup> After the close-fought national election came to hinge on the outcome in Florida, the Florida Division of Elections reported on November 8 that Bush had received 2,909,135 votes to Gore’s 2,907,351, yielding Bush an apparent margin of victory of less than one half of one percent.<sup>50</sup> The Florida Election Code required an automatic machine recount, which was conducted and narrowed (but did not eliminate) Bush’s lead. Gore then “sought manual recounts in Volusia, Palm Beach, Broward, and Miami-Dade Counties” under the state’s election protest provisions.<sup>51</sup> After a series of disputes over the deadline for county canvassing boards to submit returns to the Florida Secretary of State, the U.S. Supreme Court vacated a Florida Supreme Court decision extending the deadline from a statutory November 14 to November 26, only to have the Florida Supreme Court issue a decision on remand, reinstating the date.<sup>52</sup> On

---

<sup>45</sup> I am grateful to Ruth Wilson Gilmore for this particular way of phrasing the matter. Ruthie’s insight came to me by courtesy of a wonderful anecdote related by Melina Patterson.

<sup>46</sup> Robert W. Lake (2002). “Just the Facts.” *Urban Geography* 23(8), 701-702.

<sup>47</sup> Web-logs. Envision a personal diary with minimal self-restraint hooked up to a high-speed Internet connection. For a fascinating evaluation of the effects of blogs on the current campaign, see Matthew Klam (2004). “Fear and Laptops on the Campaign Trail | \_.” *New York Times Magazine*, September 26, 42-49, 115-116, 123. “Left-wing politics are thriving on the blogs the way Limbaugh has dominated talk radio, and the nastier partisan blogs have been growing the fastest.” p. 48. For an especially hilarious instance of culture-jamming, see the discussion of the ‘Sloganator’ on wonkette.com, discussed in Klam’s article on p. 47.

<sup>48</sup> Al dente. See note 3, *supra*.

<sup>49</sup> *Bush v. Gore*, 531 U.S. 98 (2000), *Per Curiam*.

<sup>50</sup> *Bush v. Gore*, p. 100-101.

<sup>51</sup> *Bush v. Gore*, p. 101.

<sup>52</sup> *Bush v. Gore*, p. 101.

November 26 the Florida Elections Canvassing Commission declared Bush the winner of the state's 25 electoral votes, and the next day Gore availed himself of the state's *contest* provisions.<sup>53</sup> The case wound up again in the Florida Supreme Court, which accepted jurisdiction, in part, on the grounds that Miami-Dade County failed to manually recount 9,000 ballots for which machines detected no Presidential selection ("undervotes"). On December 8, the Florida Supreme Court ordered a hand recount of the 9,000 ballots in Miami-Dade. Bush filed an emergency application to the U.S. Supreme Court, asking for a stay of the Florida Supreme Court mandate; on December 9, the U.S. Supreme Court granted the stay, and on December 12, reversed the judgment of the Florida Supreme Court. The December 12 opinion, an unusual, unsigned *per curiam*,<sup>54</sup> stopped the recount on the grounds of equal protection, leaving Bush the winner of Florida's popular vote (by an official margin of 537 votes), the loser of the national popular vote (by a margin of about half a million), and the winner of the Electoral College vote.

*Bush v. Gore* has been widely attacked as riddled with contradictions. The Court's decision to hear the appeal surprised analysts across the political spectrum, as did the subsequent decision to halt the recounts. Moreover, the Court's reliance on the equal protection clause of the U.S. Constitution<sup>55</sup> presented a bizarre reinterpretation of the contemporary applicability of nineteenth-century efforts to deal with the legacy of slavery. To top it all off, the *Per Curiam*'s close narration of the technical difficulties of ensuring that hanging and dimpled chads would be treated in a consistent manner to ensure the fundamental rights of each voter is interrupted by a remarkable caveat: "Our consideration is limited to the present circumstances, for the problem of equal protection in election processes generally presents many complexities."<sup>56</sup> The Court's statement ~ that the decision was to have no value as precedent for lower courts or even for Congress ~ led one observer to suggest that the Fourteenth Amendment had been drafted into service to ensure "Equal Protection for One Lucky Guy."<sup>57</sup>

Ultimately, the decision focused unprecedented national attention on the inherently localized, multi-scalar dimension of what is often misunderstood as a national election. Everything came down to Florida, and then to the actions of individual county canvassing boards, whose work took place in the crush of media attention, and arriving legions of lawyers and political operatives seeking to alter the application of ballot-recount standards. *Bush v. Gore*, despite its attempt to avoid establishing legal precedent, has firmly established a practical and strategic precedent: equal-protection violations that get certified quickly have a chance at succeeding, while subsequent challenges on equal-protection grounds will face a higher burden of proof on the basis of "the press of time." In *Bush v. Gore*, the Court found equal protection problems stemming from the

---

<sup>53</sup> *Bush v. Gore*, p. 101.

<sup>54</sup> Latin, "by the court." *Per curiam* decisions are typically issued for routine, uncontroversial matters, while major decisions carry the name of the judge who authored the decision along with signatures of concurring Justices. There has been considerable speculation on which Justice authored *Bush v. Gore*.

<sup>55</sup> Created by the passage of the Fourteenth Amendment in 1869. The Amendment was designed to ensure full citizenship and liberties to freed slaves in the aftermath of the Civil War, and established the legal principles of due process and equal protection.

<sup>56</sup> *Bush v. Gore*, p. 109.

<sup>57</sup> John P. McKenzie (2002). "Equal Protection for One Lucky Guy." In Herman Schwartz, editor, *The Rehnquist Court: Judicial Activism on the Right*. New York: Hill and Wang, pp. 23-36.

inclusion of partial recount totals from Miami-Dade County ~ brought about by a “truncated contest period” established by the Florida Supreme Court. “The press of time does not diminish the constitutional concern. A desire for speed is not a general excuse for ignoring equal protection guarantees.”<sup>58</sup> But a few pages later, the Court laments that “the recount cannot be conducted in compliance with the requirements of equal protection and due process without substantial additional work.”<sup>59</sup> But the Court stopped all the efforts to do this additional work, deciding instead that the press of time *does* diminish the constitutional concern, and does provide a general excuse for ignoring equal protection problems. Florida law “requires that any controversy or contest that is designed to lead to a conclusive selection of electors be completed by December 12. That date is upon us, and there is no recount procedure in place under the State Supreme Court’s order that comports with minimal constitutional standards. Because it is evident that any recount seeking to meet the December 12 date would be unconstitutional for the reasons we have discussed, we reverse the judgment of the Supreme Court of Florida ordering the recount to proceed.”<sup>60</sup>

These and other contradictions established the precedent that future national elections are likely to hinge even more firmly on the outcome of particular struggles and counts at the state, county and perhaps even precinct level in crucial ‘swing’ or ‘battleground’ states. The contradictions of *Bush v. Gore* gave rise to considerable frustration in the dissenting opinions (by Justices Ginsberg, Souter, Breyer, and Stevens). One of the most widely-quoted criticisms comes from the closing lines of the dissenting opinion by John Paul Stevens: “Although we may never know with complete certainty the identity of the winner of this year’s Presidential election, the identity of the loser is perfectly clear. It is the Nation’s confidence in the judge as an impartial guardian of the rule of law.”<sup>61</sup>

### *Bush v. Gore, and the Ballot as a Digital Individual*

But the political and statistical significance of *Bush v. Gore* goes much deeper. The decision seems to have created a fundamentally new dynamic in which the act of counting takes place. The act of counting ballots in time and space, for so long regarded casually in most election systems as nothing more than a minor detail, was unpacked and extended ~ across time and over space, in geographically remarkable ways. As a result, both major parties have invested enormous efforts in controlling this more spatially and temporally dispersed electoral struggles.

Two issues are absolutely fundamental here. First, Al Gore won more 202 votes in Florida on election day in November, 2000 than George W. Bush. Bush is “President” because in the ensuing recounts, attempted recounts, and court battles, a stream of absentee ballots poured in, and most of these went to George W. Bush. When the absentee ballots arrived, the envelopes were opened by county election officials and the results tabulated. But the envelopes provide a key piece of evidence: in a landmark analysis conducted by a group of political scientists in

---

<sup>58</sup> *Bush v. Gore*, p. 108.

<sup>59</sup> *Bush v. Gore*, p. 110.

<sup>60</sup> *Bush v. Gore*, p. 110.

<sup>61</sup> *Bush v. Gore*, 531 U.S. 98 (2000), *Stevens, dissenting*, p. 129.

partnership with the *New York Times*, the envelopes were retrieved, and examined for conformance with Florida election law.<sup>62</sup> A total of 680 overseas absentee ballot envelopes had clear violations that should have disqualified them, such as late or missing postmarks (essential to ensure that the ballot was cast on or before the legal election date). These ballots were not disqualified, because Republican operatives were particularly effective in pressuring county officials in Bush strongholds to err on the side of counting all overseas absentee ballots, while in counties where Gore held a lead the pressure was to disqualify as many absentee ballots as possible. The question addressed by Kosuke Imai and Gary King is simple: would disqualifying these 680 ballots have altered the outcome of the election, which in the formal, final tally gave Bush the apparent victory margin of 537? Answering this question beyond any doubt is impossible, because once the ballots were removed from the envelope, it became impossible to determine the legality of every ballot in question. But the geographical distribution of the ballots across Florida's 67 counties ~ and the geographical variation in the likelihood that an illegal ballot would be disqualified ~ provides a way to judge how likely Bush would have lost if only legal ballots were included in the count. Imai and King approach this problem with a procedure that was developed to deal with the "ecological fallacy" ~ a recurrent problem in social science that occurs when we are interested in *individual* outcomes, but we only have measures for *places*.<sup>63</sup> The ecological fallacy has been a serious problem recognized since the 1960s, but in the 1990s Gary King developed a systematic way of getting past it, and the techniques ~ which involve a combination of set theory to determine bounds, and maximum-likelihood estimation applied to a truncated bivariate normal distribution ~ have been recognized in a growing body of interdisciplinary scholarly work, as well as by courts evaluating the constitutionality of legislative redistricting plans. Imai and King conclude that if the entire state had been recounted under standards adopted by each county, there is a near-certain probability that Bush would have lost (by about 422 votes); but if the only change would have been a refusal on the part of the Supreme Court to stop the manual recount underway on December 10, Bush would have remained the winner by a margin of 242. A variety of other plausible scenarios, based on different decisions by Gore, Bush, the courts, and county officials yield probability estimates for different outcomes between these two extremes.

The second issue involves the separation of the ballot from the citizen, the precarious question of statistical citizenship, and the creation of a new digital individual whose behavior is uncertain. As the struggle over electoral processes has expanded in time ~ with the growing use of early voting provisions ~ and across space ~ with the increased attention paid to overseas absentee ballots ~ the question of how to infer voter *intent* has been re-spatialized. In *Bush v. Gore*, the *per curiam* sought to uphold the principle of equal protection ~ but only this one time, and only for one person, George W. Bush. In the four years since, there have been many changes in local election systems, including the growing use of electronic voting machines. But there is no consistent voting system.

---

<sup>62</sup> Kosuke Imai and Gary King (2004). "Did Illegal Overseas Absentee Ballots Decide the 2000 U.S. Presidential Election?" *Perspectives on Politics* 2(3), 537-549.

<sup>63</sup> Gary King (1997). *A Solution to the Ecological Inference Problem*. Princeton, NJ: Princeton University Press. King's work has received enormous attention in the political science literature, in legal and public policy circles, and in geography. For an introduction to the technique, visit King's website, which also includes freely-available software (<http://gking.harvard.edu>), or for background introductions, see <http://www.geog.ubc.ca/~ewyly/qga/eco1.pdf> and <http://www.geog.ubc.ca/~ewyly/qga/eco2.pdf>.



There is not one Presidential election. There are several thousand county elections, aggregated to the state level and transmitted through the Electoral College to decide a winner. If today's election<sup>64</sup> comes out anywhere near the razor-thin margin predicted by many polls, the key geographical and political questions will focus on equal-protection considerations for factfinders who confront things, not persons; as the *Bush v. Gore per curiam* puts it:

“The law does not refrain from searching for the intent of the actor in a multitude of circumstances; and in some cases the general command to ascertain intent is not susceptible to much further refinement. In this instance, however, the question is not whether to believe a witness but how to interpret the marks or holes or scratches on an inanimate object, a piece of cardboard or paper which, it is said, might not have registered as a vote during the machine count. The factfinder confronts a thing, not a person. The search for intent can be confined by specific rules designed to ensure uniform treatment.”<sup>65</sup>

November, 2004

Regardless of the outcome of the Presidential vote on November 2, 2004, the spatial politics of social data will have played a prominent role, and perhaps even one of what Goss would describe as instrumental rationality.<sup>66</sup> Polling, database management, targeted advertising, and geographically-calibrated get-out-the-vote efforts have been underway for months. Republicans charge Democrats with overzealous efforts to register new voters, which in some cases are alleged to have crossed the line into outright fraud;<sup>67</sup> Republicans have sent postcards to the addresses of all newly registered voters, and in those cases where the postal service reports undeliverable mail, Republicans claim *prima facie* evidence of fraud. Democrats charge that Republicans are working to intimidate or deceive low-income and African American voters: an unknown organization circulated flyers in inner-city Milwaukee claiming that anyone who has voted in any election, or anyone convicted of a traffic violation, is barred from voting (with a threatened penalty of ten years in prison

---

<sup>64</sup> And I use the word “today” with the acknowledgement that in some states, up to fifteen percent of eligible voters have already cast ballots.

<sup>65</sup> *Bush v. Gore*, p. 106.

<sup>66</sup> And the flood of statistics continues. In the hours before most polls on the east coast, The New York Times' Robert McFadden reports that, “Nationally, the Democrats and the Republicans each claimed to have a million volunteers. Democrats said they had made 23.5 million calls and knocked on eight million doors for Mr. Kerry. Republicans said they had contacted 18 million voters. The numbers were impossible to verify, but there was no doubt they were huge.” Charlene Sinclair, an organizer for ACORN (the Association of Community Organizations for Reform Now) is even more succinct: “It's every single person on the streets, every household.” The opposition is equally mobilized. “‘You have to pull them out of their houses and get them into a car and get them to the polls,’ Jeff Flint, a Republican Party spokesman, explained. Volunteers themselves will be tracked and prodded, if need be, by roving supervisors, he said.” Robert McFadden (2004). “Record Turnout Forecast; Vote Drives Intensify.” *The New York Times*, November 2.

<sup>67</sup> Ralph Reed, former executive director of the Christian Coalition, and now the Southeast Regional Director of Bush-Cheney 2004, claims that one of the names on the voter registration lists in Florida is “Donald Blanking Duck,” and that “Mary Poppins” is registered to vote in Cleveland. The Party's response has been to challenge large blocks of registration files (between 10,000 and 20,000) on the basis of automated and semi-automated procedures alleged to uncover irregularities. Charlie Rose (2004). *The Charlie Rose Show*. November 1, 2004.

and ‘your children will be taken away’).<sup>68</sup> The case of the Diebold memos, and other controversies over digital vote tabulation machines, have fused struggles over copyright and intellectual property with troubling questions on what kinds of digital elections each eligible voter creates, and what kinds of things are done to these statistical citizens by county elections officials, Secretaries of State, attorneys, and judges. Prominent pollsters are engaged in an unusually heated (and public) debate over the finer points of respondent selection, the representative reliability of means to reach newly-registered voters, the effects of question wording, and the reliability of respondents’ intentions to go to the polls.<sup>69</sup> Estimates of national turnout range as high as 120 million, compared with 105 million in November, 2000. The expanded number of states permitting early voting have introduced new uncertainties on voter turnout as well as the net impacts of last-minute advertising or outreach efforts. Pollsters and commentators, in rare moments of candor, confess their confusion at the contradictions and illegibility of the full-blast firehose of data: if November 2 brings any kind of decisive margin, it will mark the first national U.S. election in the information age in which all of the industry’s most sophisticated predictive tools have completely failed to edge the meters away from the sharp-edged dividing line of statistical insignificance, as late as twelve hours before the polls began to close.<sup>70</sup>

And, once again, absentee ballots are among the factors that may decide the outcome of the election. Several months ago, the Pentagon began stepped-up efforts to ensure a good turnout among military overseas absentee voters ~ in contrast to the routine, low-profile efforts of previous years.<sup>71</sup> I mailed my absentee ballot on September 29, 2004. I wonder if it will be counted, or if it will count. I wonder if the factfinders will confront the thing, the statistical citizen, the digital individual whose life will be short, but perhaps meaningful.

---

<sup>68</sup> Detroit Public Television (2004). *Tavis Smiley Show*. November 1.

<sup>69</sup> One of the key disputes involves young and first-time voters who have been registered in the last eighteen months. In several states, new registrations are at or near all-time highs, and several pollsters suggest that these younger voters are more likely to rely heavily on cell phones. Cell phones are not accessible to the vast majority of telephone polling systems.

<sup>70</sup> Things could get even more complicated if the election proves as close as all current statistical indicators imply. If court challenges have the potential of reaching the Supreme Court, the poetic justice of the five-member majority’s attempt to avoid setting precedent in December, 2000 will be complicated by the possibilities of a four-four tie. In late October, 2004, Chief Justice Rehnquist underwent treatment for thyroid cancer; although the Court’s initial announcement predicted his return to duties on Monday, November 1, the Chief Justice’s chambers released a statement on that day noting that he continued to recover at home from a course of chemotherapy and radiation. It is possible that his cancer has spread, has become inoperable, and that he may be unable to complete the current term. Under these conditions, any election-day challenges that work their way to the Court will have uncertain prospects. Linda Greenhouse and Katharine Q. Seelye (2004). “Rehnquist Fails to Return, and Speculation Increases.” *The New York Times*, November 2, A1. If the vote brings litigation that has the potential to reach the Supreme Court, the situation could be further complicated if Bush were to make a recess appointment to replace Rehnquist, a provision that would allow a new justice to serve without Senate confirmation until late 2005.

<sup>71</sup> James Brooke (2004). “Pentagon Leaders Tell Ranks to Get Ballots and Use Them.” *The New York Times*, October 8, A20.