

W h a t O r r i n U n d e r s t a n d s

ORRIN HATCH is a conservative. The senior senator from Utah, former chair of the Judiciary Committee, he is a critical force in practically every sphere of the Senate. He was a candidate for president in 2000. And he is admired by most, especially on the Right, as a principled politician and a decent man.

But there's something funny about Hatch. He betrays "policy anomalies"—positions that can't quite be explained on a simple left/right scale. Some of the things that he believes in most are puzzles to many conservatives. And puzzles in a politician are trouble. Unpredictability is not an asset in a political world where results cost lobbyists millions to buy.

Two of Hatch's anomalies are at the core of this book. The first is his concern about the market power and behavior of the Microsoft Corporation. And the second is his affection for emerging technologies like Napster. Hatch was a strong supporter of the Justice Department's investigation into Microsoft's behavior; he is a strong skeptic of the power that music labels have over innovation in the arts.

The pundits think they have an explanation for Hatch's resistance to Microsoft: Corel Corporation, which purchased WordPerfect. WordPerfect had been the dominant word processor. It was a Utah-based company. As with many leading technologies, WordPerfect fumbled the move to GUI interfaces. Microsoft picked up the ball and ran far. Many attribute Hatch's skepticism about Microsoft to these sour grapes.

Hatch's views on Napster are explained in a different way. Hatch is a mu-

sician. He has written and recorded many Christian songs. But you don't find the senator's CDs in record stores; the recording labels were not much interested in recruiting the senator from Utah. Thus, Hatch again may have a motive to resent the labels. Therefore, when a new technology comes along that threatens the power of the labels, it is *Schadenfreude*, not concern, that drives the senator.

It is hard to believe that any politician does what he does for a reason of principle. We live in an era when principled politicians are characters in TV dramas; real politicians are something very different. Thus, the idea that a successful senator would do something that might harm him politically because of *ideals* strikes us as a fantasy. The stuff of Hollywood, perhaps, but not of Washington, D.C.

But as this book has made clear, there is a principle that would explain Hatch's stand. And while I am no friend of Hatch's, or of many of the policies that he has pushed, I do believe that what pushes Hatch to both positions is a matter of principle. Concentrations of power worry conservatives like Hatch; and in both of these anomalies, concentration of power is at stake.

In the Microsoft case, the fear is that this dominant controller of the platform will be able to use its power to direct evolution. Power over the platform will mean the ability to direct how the platform develops. And the ability to direct how the platform develops is a dangerous power for any single company to hold. It would be awful for the FCC to decide what technologies should look like in the future, then force those technologies on us through the power of law. But likewise, while it wouldn't be *as awful*, it is still fairly bad that any single company, whether by virtue of the law or because of its control over a platform, could control how technology should develop. Hatch is a believer in the diverse, decentralized market that allows consumers to choose the future. Thus, though he is among the oldest members of the Senate, his spirit is among the closest to what makes the Net run.

The same can be said about the production of culture. Obviously, the government has no legitimate role in controlling how our culture should evolve. What music people listen to and what art they find compelling are matters of private, not public, choice. But even if not *as bad* as it has been, the world we now have controlling media in our country is worse than the world that Hatch would want. The concentration of power that Hollywood has permits Hollywood a power that Hatch would rather it not have. A bet-

ter system is less concentrated, less controlled, more diverse and decentralized. As Hatch has written:

[I]f those digital pipes through which the new music will be delivered are significantly narrowed by gatekeepers who limit access to or divert fans to preferred content, a unique opportunity will be lost for both the creators of music and their fans. That is why I think it is crucial that policymakers be vigilant in keeping the pipes wide open.¹

As I have argued throughout this book, the architecture that keeps the “pipes wide open” is simply the original architecture of the Net. And a commitment to keeping these pipes open is a commitment to preserving the Net.

In both of these contexts, the senator sees something that ideologues miss: that the greatest lesson of our history is the strength that comes from our economic and cultural diversity. That concentration in either threatens innovation in both—not because concentration alone is necessarily bad, but because concentration gives the concentrated the power to steer evolution as it benefits them.

That power is not within our tradition. It is not what has built the America we admire. And whether you’re from the Right or the Left, there is a lesson in what this conservative preaches. We make choices, Hatch shows us, that affect how easily the concentrated can direct the future. We should make choices, Hatch insists, that make it less easy for the future to be directed. Decentralized, diverse, nominated: this is the tradition that Hatch defends; this is the architecture of the original Net.

AS I write the last pages of this book, the threat to those values grows. A court has just effectively shut down Napster, thereby assuring that the recording industry gets to choose what kind of innovation in the distribution of content will be allowed. Another court has ruled against Eric Eldred’s challenge to copyright’s bloating, finding that “copyrights are categorically immune from challenges under the First Amendment.”² Though the Constitution speaks of “limited times,” Congress is free to give Hollywood “perpetual copyright on the installment plan.”³ And streaming across my computer as I write these final paragraphs, judges from the D.C. Circuit Court of Appeals are asking skeptical questions of lawyers for the government defending the judgment against Microsoft. Commenting on the gov-

ernment's defense of Java technologies, one judge has just said, "We are going to replace one monopoly with another . . . right?"⁴

Though we've seen the new only when it has been freed from the old, that lesson is lost on the Napster court. And though our Framers saw as clearly as we can today that free content fuels innovation, that lesson was forgotten by the court that decided Eric Eldred's case. And though the clearest lesson of the past twenty years is that innovation flourishes best when it flourishes freely on a neutral platform, the judges deciding the Microsoft case cannot even imagine the value of a neutral platform. Is one monopoly really just as good as another?

Alexander Hamilton promised that the judiciary would be "the least dangerous branch." The early history of the Net confirmed Hamilton's predictions. The Court in *Reno v. ACLU* spoke of the values in a free Net. It resisted the popular efforts by Congress to regulate it quickly, even if Congress was regulating in the name of important social values.

But the most significant governmental actions affecting the Net in the twenty-first century so far are instances of judges intervening to protect the old against the new. Rather than "wait and see," the law has become the willing tool of those who would protect what they have against the innovation the Net could promise. The law is the instrument through which a technological revolution is undone. And since we barely understand how the technologists built this revolution, we don't even see when the lawyers take it away. As activist and technologist John Gilmore has put it, in a line that captures the puzzle of this book: "[W]e have invented the technology to eliminate scarcity, but we are deliberately throwing it away to benefit those who profit from scarcity. . . . I think," Gilmore continues, "we should embrace the era of plenty, and work out how to mutually live in it."⁵

LATE IN the afternoon of one of California's inevitably beautiful days, Marc Andreessen was driving along one of California's inevitably overcrowded highways. More fitting the traffic than the weather, Andreessen's mood was dark. He was a twenty-nine-year-old computer science graduate who had become one of the most successful entrepreneurs of his generation. Coauthor of an early browser for the World Wide Web (Mosaic), founder of the first company to make the World Wide Web go (Netscape), Andreessen was nonetheless down on the future.

"Innovation," in Andreessen's mind, is what the Web produced. As he told me:

When I came to Silicon Valley, everybody said . . . there's no way in hell that you could ever fund another desktop software company. That's just over. And then in 1995, 1996, 1997, and 1998, all those developers who previously worked on desktop software said, Ah-hah, we're upgrading to a brand-new platform not controlled . . . by anybody—the Internet. [A]ll of a sudden there was an explosion of innovation, a huge number of applications, and [a] huge number [of] companies.⁶

Innovation “resumed” just at the time when the platform for innovation was neutral and, in the sense that I've described, free: when many different actors were able to bring new ideas to the Net; when they knew that this neutrality meant the old could not control how the new would behave; when the new could behave however the market demanded.

But this innovation, Andreessen said, “is slowing once again. . . . Application lock-in . . . [has] actually gotten stronger.” The opportunity to innovate outside of the dominant players has again evaporated. We are back to where we were before this revolution began. As control shifts back to the large, the powerful, and the old, and as that control is ratified by the judges in black robes, the opportunity that drew Andreessen from cold but trafficless Illinois disappears. The chance for something different is lost. The innovation age, Andreessen says, “is over.” And we are back to a world where innovation proceeds as the dominant players choose.

Andreessen's story is the fear of this book. An “explosion” of innovation grew upon a neutral platform; that explosion is burning out quickly as the platform is increasingly controlled.⁷ Whether through changes in the physical, or code, or content layers, the change Andreessen worries about is the shift that I have described.

There is little to stop the transformation that worries Andreessen; there is everything to push it along as fast as it can go. This book will be published just as Microsoft's .NET and Hailstorm initiatives hit the network. They promise to integrate an extraordinary range of functionality into the core operating system that Microsoft owns. Emboldened by an expected victory at the court of appeals, Microsoft has expanded the bundling that the government attacked to include a range of services never imagined by government prosecutors. Authentication, instant messaging, e-mail, Web services—all these will be bundled into the core operating system of the next generation of Windows. Anyone who wants to compete in the provision of these services will face as strong a barrier as Netscape faced against a bundled Internet Explorer.

Microsoft is simply responding to another, very different nonneutral platform—the emerging and dominant platform of America Online. After its merger with Time Warner, AOL and its loyal members are another huge and powerful force influencing the future of the Internet. AOL is not an operating system, but for almost a majority of those who use the Internet, it is in effect an operating system. Functionality is served in the AOL suite of software; functionality beyond that is not.

These two companies—AOL Time Warner and Microsoft—will define the next five years of the Internet's life. Neither company has committed itself to a neutral and open platform.⁸ Hence, the next five years will be radically different from the past ten. Innovation in content and applications will be as these platform owners permit. Additions that benefit either company will be encouraged; additions that don't, won't. We will have re-created the network of old AT&T, but now on the platform of the Internet. Content and access will once again be controlled; the innovation commons will have been carved up and sold.

This is the future of ideas. It could be different, but my sense is that it won't be. If we were more like Hatch, more skeptical of “gatekeepers,” whether private or public; if we were less like Jay Walker, eager to view every government-granted privilege as a God-given property right; if we were more like Richard Stallman, committed to a principle of freedom in knowledge and to a practice that assures that the power to control is minimized; if there weren't so few Paul Barans, willing to struggle for many years to force a monopoly to face itself—if all this were so, there would be reason for hope.

But we are not. We are a democracy increasingly ruled by judges. We elect a Congress that is increasingly chained by lobbyists. And we are a culture that deep down believes in this counterrevolution: that strangely thinks that this increase in control makes sense.

As commentator Gordon Cook writes:

The Internet revolution has come and gone. It has created a tremendous burst of innovation[—a] burst that now looks to have been mismanaged. . . . [T]he people who did the least to advance the new technologies seem most likely to control them. We are left not with the edge-controlled intelligence of the [end-to-end] network but with the central authoritarian control of the likes of AOL Time Warner.⁹

The irony astounds. We win the political struggle against state control so as to reentrench control in the name of the market. We fight battles in the

name of free speech, only to have those tools turned over to the arsenal of those who would control speech. We defend the ideal of property and then forget its limits, and extend its reach to a space none of our Founders would ever have imagined.

We move through this moment of an architecture of innovation to, once again, embrace an architecture of control—without noticing, without resistance, without so much as a question. Those threatened by this technology of freedom have learned how to turn the technology off. The switch is now being thrown. We are doing nothing about it.