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The Burden of Knowledge

Christian Turner
University of Georgia School of Law, cmturner@uga.edu

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ARTICLES

THE BURDEN OF KNOWLEDGE

Christian Turner*

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* Assistant Professor of Law, University of Georgia School of Law. J.D., Stanford University. Ph.D., Texas A&M University. B.S., University of South Carolina. I wish to thank the many individuals to whom I presented this work on the academic job market for their very helpful comments. For their help with various drafts of this Article, in particular, I wish to thank Kerry Abrams, Gregory Adams, Robert Bartlett, Daniel Bodansky, Jennifer Brown, Guido Calabresi, Brigham Daniels, Matthew Diller, Christopher Elmendorf, Brandon Garrett, Gregory Klass, Michael McCann, Jedediah Purdy, Daniel Richman, Theodore Ruger, and Benjamin Zipursky. For invaluable editorial assistance, I am indebted to Diane Renbarger, James McPhillips, and the rest of the Georgia Law Review staff. For her research assistance, I would like to thank Logan Clare.
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I. INTRODUCTION

A. THE BURDEN OF KNOWLEDGE

Sometimes we are better off not knowing things. This near-aphorism is unremarkable when understood as an observation about our everyday lives. Do you really want to know the day, time, and circumstances of your own death? Do you want to know the details of your children’s (or parents’) love lives? Do you want to know whether your neighbors are scrupulous in paying their taxes? To these, and many questions like them, we answer almost reflexively, “I’d rather not know.” We are happier, indeed better off by many measures, if ignorant.

But why? Ignorance prevents us from anticipating the consequences of our actions. Knowledge, conversely, is the power to predict, the power to exploit our position in the world. It would seem to follow that more knowledge is better.

Despite the advantages knowledge often confers, ignorance is sometimes preferable because it shields us from unpleasant realities, keeps us from facing difficult choices, or immunizes us against attack by others. This Article explores the manifold interests people have in remaining ignorant and the societal interests in supporting or denying those interests.

As our society becomes increasingly information-dependent and information-saturated and as we become better predictors of our futures, we will be confronted more frequently with the dilemma of knowledge. With knowledge comes the power to make informed choices but also the burden of knowing. Knowing one has an incurable genetic disease may enhance the ability to plan—perhaps even to mitigate somewhat the ill effects—but may also make less happy and enriching the time one has left. Knowing that evidence is false will cause a lawyer to refuse to put the evidence forth or face the risk of serious sanctions. In situations like these people may well decide, where possible, not to know.

Conscious ignorance is keeping a secret from one's self. We keep such secrets for some of the same reasons we keep secrets from others: because we are afraid of what the person may do with the information; because we are afraid of what she will not do; because
we are afraid of what she may think of us, the world around her, or herself; or only because we are afraid she will tell others.

When we keep secrets from ourselves, we are motivated by these same concerns. Receiving information may compel one to perform undesirable conduct, whether that be taking medications, undergoing surgery, firing an employee, or spending large sums to clean up contaminated property. Conversely, information can restrain us from performing desirable conduct, either (a) because the information reveals that the desired conduct is harmful or (b) because possession of the information while performing the conduct will cause others to infer that the conduct was undertaken on account of the information.¹

Besides affecting what activities one performs in the world, knowledge can alter our self-regard or worldview. Whether it challenges our deeply held religious or moral beliefs or reveals us as a different kind of person—perhaps one more vulnerable or less adaptable to change—than we imagined ourselves, knowledge can shake our operating framework in unwelcome ways. Maintaining ignorance is a way the current self can extend itself, avoiding the realization of a morally and practically distinct future self. In this sense, ignorance is a form of self-preservation. This is to say nothing about society's interest in forcing or preventing such private upheavals, only that these risks are reasons individuals might have for remaining ignorant.

Finally, it is sometimes impossible to learn something without permitting others to learn the information as well. Diagnostic tests require technicians to read, interpret, and store the results. Investigations often require professional investigators. It is even the case that we do not always trust ourselves to maintain secrets. Consequently, there is a risk with obtaining knowledge that the knowledge will be shared with others. Even if we would not be harmed directly upon acquiring knowledge, the information could be very damaging if held by others. The risk of further dissemination is a reason individuals may have not to acquire the information at all.

¹ This situation applies to conduct such as refusing to hire an applicant whose race was solicited on an application form.
In Part II of this Article, I explore these reasons for remaining ignorant through four examples: HIV testing, genetic testing, the collection of information concerning race on credit applications, and lawyers faced with client perjury or false evidence. These examples are not archetypes that cover the field. Rather, each presents a different mix of the justifications for ignorance and helps to elucidate the strength and foundation of those justifications. I treat these interests systematically in the third Part.

Recognizing that people sometimes strongly wish to remain ignorant, or would so wish if they had a choice, the question arises whether law should aid them, frustrate them, or do nothing. In the fourth Part, I focus on society's reasons and means for using law to aid ignorance. The rather extraordinary step of preventing the spread of knowledge to someone who wishes not to have it can be justified on several grounds.

First, law may protect ignorance in order to give effect to the individual's own reasons for preferring ignorance. In other words, we may recognize a "right not to know" grounded in respect for an individual's autonomy, though our understanding of autonomy affects the nature and extent of such "rights."

Second, ignorance might serve the instrumental goals of the jurisdiction, without regard to the individual's own reasons for wishing to remain ignorant. A jurisdiction's purely instrumental interest in maintaining an individual's ignorance may coincide with an individual's interest either (a) because the individual's interest, if frustrated, would lead to broad social harms or (b) just by happenstance. Only the former category is relevant to this Article.

For example, if the law does not protect an individual's "right" to remain ignorant, he or she may be driven away from societal participation to a degree or in a fashion that the jurisdiction believes is undesirable for social, rather than paternalistic, reasons. If the results of HIV tests must be disclosed to those to whom the tests are administered, then some may not consent to testing that serves

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2 Of course, there may also be instrumental reasons for giving effect to individual desires; the distinction here is not meant to be hermetic.

3 Reasons in the latter category, "happenstance," would apply whatever the individual's knowledge preferences. This Article is concerned with ignorance that serves an individual's interests.
broader social goals. Some pregnant women may shun prenatal care if it necessarily includes such tests. But in addition to being driven away, a person may respond to learning something in other socially undesirable ways. Society may wish to prevent these consequences, even if the individual's own wish to remain ignorant has nothing to do with the socially undesirable consequences of her knowledge.

Whatever the collective determination on the question of ignorance, there is an array of regulatory options for meeting or frustrating an individual's desire to remain ignorant. Law can intervene or not. It can regulate the third parties that are intermediaries for suspect information. It can, by imposing liabilities that might follow from not knowing, shift the risk of ignorance to the knowledge avoider.

Though we have many tools to affect the distribution of knowledge in society, the regulation of knowledge as a resource has to contend with many inherent difficulties. For example, even when society is willing to aid in the avoidance of knowledge, it may be practically impossible to do so. Attempting to probe an individual's true desires might have the effect of conveying some or all of the suspect information. Thus, it is sometimes necessary to make choices for individuals either because of the difficulty of ascertaining their true preferences or because we are distrustful of an individual's ability to act in his or her best interest.

But most importantly, knowledge regulation must take account of the key respect in which knowledge differs from traditional forms of property. Unlike a computer, a hat, or even a ticket to a show, knowledge cannot be abandoned.4 While it can be fortuitously lost

4 Though it is often said that real property cannot be abandoned, 1 AM. JUR. 2D Abandoned, Lost, and Unclaimed Property § 5 (2005), that is only true in a legal sense. Any attempt to abandon the property will be deemed ineffective. Knowledge, though, resists abandonment as a matter of fact, not law.

Interestingly, however, drugs now exist that can help us forget. See Adam Kolber, Freedom of Memory Today, 1 NEUROETHICS 145, 146–47 (2008), available at http://www.springerlink.com/content/2rx1lh758836121/fulltext.pdf (describing amnesia-inducing effects of propofol and arguing that research into such compounds should not be unduly impeded). See generally Adam J. Kolber, Therapeutic Forgetting: The Legal and Ethical Implications of Memory Dampening, 59 VAND. L. REV. 1561 (2006) (examining legal issues surrounding memory-dampening technology and arguing against broad restrictions). Despite these recent developments, we are still quite far from the day, if it ever comes, when our brains can be treated like the readable and writable storage of computing devices.
through forgetfulness, harmful knowledge, once gained, is not easily eradicated. Purposeful efforts to forget are doomed to failure. Thus, if knowledge would be harmful if held, an individual's only realistic option for avoiding that harm is not to acquire the knowledge in the first place. If law is to help such an individual, its focus must obviously be on preventing its initial acquisition, not on dispossession ex post.

From a consideration of the reasons individuals have for remaining ignorant and the reasons societies have to respect that choice, a considerably more complex picture of the "right not to know" emerges. The law of knowledge, of which this Article discusses just one piece, is an intricate ordering of social practices. Just as property law is most helpfully conceived as an assortment of practices that on the whole describes the legal connections between people and the resources that exist independent of law, whether land, manufactured good, or software, the law of knowledge describes our attempt to order the connections between people and the thoughts that animate us. These thoughts, like traditional property, are distributed among the populace. They can be shared, withheld, and used in beneficent and dangerous ways. This Article highlights one respect in which knowledge is radically different from most other kinds of property: it can, regardless of how it is ultimately used and despite our determined efforts to cast it out, cause us harm.

B. THE NATURE OF KNOWLEDGE

Knowing is a personal experience. One's store of knowledge is no more, and no less, than the configuration of certain of the contents of his or her brain. However, there are differing views as to what characteristics are necessary to label some cognitive state, or thought, as "knowledge." Some would require that a thought be justified, true, and believed.\(^\text{5}\) It is highly contested precisely what

\(^5\) This definition has a long pedigree. See, e.g., PLATO, THEAETETUS 114–15 (Robin A.H. Waterfield trans., Penguin Books 1987) (examining whether but not concluding that knowledge is "true belief accompanied by a rational account"); PLATO, MENO 58–59 (Benjamin Jowett trans., Liberal Arts Press 1949) (describing true opinions as inferior to knowledge for their fleetingness against the stability of knowledge, which is true opinion "fastened by a
kind of truth and what kind of justifications, whether in the form of pure logical entailment or mere evidence, are needed to elevate a mere belief to the special, objective status of knowledge. Some are happy not to insist on truth or justification at all. These differing views do not, however, constitute a substantive debate. They merely describe, using the same label, slightly different things. To the extent there is a disagreement, it concerns which of these "things" is worth talking about.

For my purposes, it is sufficient to reflect on the functional nature of the qualities of those thoughts I am calling knowledge. The problem that is the subject of this Article is how to handle situations in which people might gain thoughts they would rather not have. What kind of thoughts? Not pure desires, though surely an interesting issue surrounds the tendency of the brain simultaneously to provoke and to inhibit conduct by fueling our stores of desire, guilt, and inhibition.

Since my concern is with the effects of thoughts encapsulating predictive and descriptive facts about the world, particularly the ill effects, I tend to think of knowledge as a presumed capacity. That is, knowledge is a quality of the brain that represents what the holder presumes to be a capacity to act with purpose, to predict, and to understand sensory information. This description is similar to another definition of knowledge as a quality that "empowers its possessors with the capacity for intellectual or physical action," but does not require that this capacity be actual.
Whether this is a particularly good or complete formulation is less important than the distinction it draws between knowledge and information. Information is not a quality of the brain—certainly not a capacity in and of itself. Rather, information is external to humans, captured by our sense organs and produced, on those occasions when we consciously produce it, through our communicative capacities. We attempt to convey knowledge to others by encoding that knowledge into communicable information. When we listen to others, we try to decode the information we hear into knowledge on which we can later act or predict.\(^1\) Again, it is not of great importance to me whether there are better descriptions of "information" or data in the abstract. What does matter for the issues under consideration here is the observation that knowledge and information are not identical.\(^1\)

After all, the transfer of knowledge from one person to another is often a far more expensive proposition than simply transmitting information that encodes the sender's knowledge. Compare the expense of delivering a copy of a chemistry text to a college student and the expense of teaching chemistry to that student. Though the textbook may represent a complete encoding of the knowledge a professor intends to convey to the student, the information in the text may not be sufficient to ensure that the student gains the decoded knowledge the professor wants her to have. And so, the professor conducts lectures, assigns readings, and administers tests to present multiple encoded versions of the same knowledge and multiple opportunities for decoding.

Similarly, if I know how to fix a tire on a bicycle, meaning that I actually can do it, I might endeavor to encode my knowledge in

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\(^1\) See Losee, supra note 5, at 260 (describing transmission of knowledge as multi-step process of encoding, transmitting, and decoding).

\(^1\) Though my description conceives of information as external signal, whatever its origin, and knowledge as certain cognitive states, a debate rages as to whether information is a sensible concept absent human understanding. See, e.g., id. at 255–56, 266–67 (collecting sources and describing approaches for defining information and knowledge).
writing and diagrams for the purpose of transmitting my knowledge to someone else or even to my future, forgetful self. The success of this transfer depends on both the quality of the encoding and on the ability of the recipient to translate the information into usable knowledge. The encoding might have made use of obscure symbols, assumed familiarity with the use of particular tools, or been otherwise formulated in a manner that leaves some recipients puzzled and with no practical knowledge gain. Teaching means transmitting both information that could be decoded into a capacity and information that will help socialize the recipient to enable the decoding.

Deeper philosophical implications and caveats aside, this coarse distinction between knowledge and information reminds us that a transfer of knowledge might, depending on the context, require more than a transfer of information the sender is capable of decoding. When we consider situations in which people desire ignorance, we refer to their aversion to some knowledge. Fulfilling their desire may not necessarily mean restraining the dissemination of the information that encodes the unwanted knowledge.

There is one more comment on the nature of knowledge worth making for the purposes of this Article. Unlike some definitions of knowledge, mine includes objectively false information. Defining knowledge as thoughts that the holder presumes are a capacity for action or prediction includes thoughts that in fact do not represent such a capacity. So, for example, attempts by the German government to prevent the spread of scientology are, under my definition, knowledge regulations, even if scientology is bunk. This is not to sweep under the rug important distinctions between information that is false and information that is true. If I know the details of how to construct an atomic bomb, I could, given sufficient resources, do so and potentially cause harm by using the device. My knowledge gives rise to a capacity to cause harm. But if, in contrast, I "know" that my baseball cap can be used, through mental effort

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alone, to unleash a death ray, no amount of effort on my part will convert this "knowledge" to the harm I hoped to cause.

However, it is critical to realize that "false knowledge" can cause harms, even though such harms may stem from causes other than the ones the holder anticipated. Believing falsely that one's death, or that of a loved one, is imminent leads to all of the psychological trauma and deviations in conduct that an accurate belief would cause.13 Thus, for the purposes of understanding the harms that knowledge can cause its holder, we should not ignore "knowledge" that is objectively false.14

The oracle at Delphi is the source of an excellent example of the harms false knowledge may cause. According to Herodotus, the oracle told Croesus that if he launched a war against Persia, he "would destroy a mighty kingdom."15 Ultimately, the oracle was correct.16 (Like all great oracles, its pronouncement could be deemed true in several possible, but radically different, futures.) It was, however, Croesus' own empire that fell.17 The information from the oracle was received by Croesus, and decoded into the knowledge, which turned out to be false, that his attack would lead to the downfall of the Persian empire. When we consider knowledge harms, we must bear in mind that such harms proximately result not from the objective information itself but from the private, decoded version of the that information—what I call knowledge.

While information is often easiest to regulate through dissemination restrictions, affecting the privately decoded knowledge but permitting the encoded information to pass is also feasible. For example, additional information may be transmitted alongside the potentially dangerous information. This meta-information may be calculated to impact the decoding of the

13 E.g., WILLIAM SHAKESPEARE, ROMEO AND JULIET, act 4, sc. 3.
14 One could contend that I should have entitled this Article "The Burden of Belief" and avoided describing false cognitive states as knowledge. Indeed, Losee disparages the subjective view of knowledge as confusing the issue by assimilating knowledge to belief. Losee, supra note 5, at 267. Perhaps, but I have no desire to develop or adopt an objective theory of truth for use here. Whatever the label, I am concerned here with the negative effects on individuals of received information however processed and evaluated.
16 Id. at 71.
17 Id.
dangerous information so as to render the knowledge gained less harmful. Indeed, this is the whole point of genetic counseling in conjunction with predictive genetic testing: preparing the patient to receive and most beneficially decode vital health information.\(^\text{18}\)

It is with this regulation-centered understanding of "knowledge" that we now move to a consideration of unwanted knowledge. Though society at most can control the information that gives rise to and amends knowledge, it does so to affect the actions that may follow from the decoded versions of that information. That is, the collective is concerned with what individuals ultimately do. Limiting the flow of information is only a means to an end, not an end in itself. But because information, unlike knowledge itself, is susceptible to control and is by definition the stuff of which knowledge is born, knowledge regulation is achieved through the regulation of information. With these understandings in mind, I will turn to the problem of information that is decoded into undesirable capacities. Such information results in knowledge that burdens, rather than empowers, its holder.

II. EXAMPLES OF BURDENSOME KNOWLEDGE

All knowledge, of course, both empowers and constrains to some extent. Knowing enlarges our set of possibilities but also narrows it. It can reinforce our beliefs or overturn them. It is, in short, a chaotic force, one often beyond our control, that carves our lives into a restricted set of rational objectives, dividing conduct into the rational and the impermissibly irrational, and changes the way we see ourselves and the world around us. Even when knowledge is not toxic, meaning that it directly harms us, it might be a dangerous weapon capable of being turned against us by others.

In this Part, I discuss several examples to illustrate some of the many situations in which people would rather be ignorant. The

\(^{18}\) See, e.g., Secretary's Advisory Committee on Genetics, Health, and Society, Dep't of Health and Human Servs., Realizing the Potential of Pharmacogenomics: Opportunities and Challenges 71 (2008), http://oba.od.nih.gov/oba/SACGHS/reports/SACGHS_PGx_report.pdf (recommending genetic counseling to accompany predictive genetic testing to ensure understanding).
examples help to concretize ignorance interests and to suggest conflicts that law and society have to resolve. My goal in this Part is not to evaluate the worth of individuals' ignorance interests from a social perspective, but only to account for them and to describe them from the perspective of the knowledge holder.

A. GENETIC TESTING

1. Power and Avoidability. The "right not to know" has received perhaps its most thoughtful and sustained consideration from writers in medical ethics, and genetic ethics in particular. Knowledge of our genetic makeup gives, in principle, the information necessary to determine how our bodies evolve and respond to our environment. To be sure, the sheer quantity of inputs, the diversity of environmental conditions, and the limitations on our capacity to model and accurately predict the evolution of complex chemical systems curb our practical ability to use this genetic knowledge to make precise predictions. But technologies so far devised have already enhanced greatly our abilities to assess an individual's risks of developing certain diseases and to gauge some of his or her other propensities.

Of course, knowledge of this kind is hardly novel. Knowing that two people are related is a type of genetic datum that doesn't require one even to know that such a thing as DNA exists. Simple familial knowledge permits inferences that at least some maladies that affect one member of a family have a marginally greater chance than usual of affecting another. For example, we did not need sophisticated DNA techniques to learn that Huntington's Disease runs in families. That one's breeding, independent of upbringing,

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20 Id. at 217–18 (stating that 1,500 genetic tests are currently available and "[h]ealth and science communities are abuzz with the promise of personalized medicine and other benefits offered by genetic testing").
21 See George Huntington, On Chorea, 26 MED. & SURGICAL REP. 317, 317 (1872) (discussing hereditary chorea and its effect on the nervous system). Huntington's Disease is an incurable, degenerative disease causing physical, cognitive, and psychological decline. Id.
influences one's characteristics is an idea, and a potentially quite dangerous one at that, espoused by Plato:

> [T]he best of either sex should be united with the best as often, and the inferior with the inferior, as seldom as possible; and that they should rear the offspring of the one sort of union, but not the other, if the flock is to be maintained in first-rate condition.  

Without detouring for any great length into the debate over whether genetic information is “essential” or radically different from other kinds of health information, I will observe a couple of reasons why genetic knowledge is potentially troublesome and one reason why the option not to know is particularly viable in this context.

First, by examining one's genes directly, we can improve our estimates of various risks, sometimes approaching certainty and other times making small improvements over non-genetic estimates. Whether revolutionary or merely evolutionary, genetic technology offers the opportunity to predict our futures more accurately than we have before—and sometimes with blinding clarity. Thus, it should not be surprising that this form of

Symptoms usually appear during middle age, and death often comes, indirectly, within ten years of onset. *Id.* It was described by Dr. George Huntington in an 1872 paper and address, in which he referred to the disease as hereditary chorea. *Id.* at 320.


Before genetic assays, those at risk for Huntington's Disease, i.e., those with a parent diagnosed with Huntington's, lived knowing only that they had a 50% chance of developing the disease. Amy Harmon, *Facing Life with a Lethal Gene*, N.Y. TIMES, Mar. 18, 2007, at A1. Now, the genetic test for Huntington's predicts with near certainty whether an individual will develop the disease. *Id.* The tests for genes associated with breast and other cancers also greatly improve risk estimates. The background, lifetime risk for development of breast cancer in women is a little over 13%. National Cancer Institute, Genetic Testing for BRCA1 and BRCA2: It's Your Choice, http://www.cancer.gov/cancertopics/factsheet/risk/brca (last visited Jan. 9, 2009). For those with altered BRCA1 or BRCA2 genes, the risk is somewhere between 36% and 85%. *Id.*

I tend to think it the former, especially considered in context alongside advances in computing and modeling. *But see* Douglas H. Ginsburg, *Genetics and Privacy*, 4 TEX. REV. L. & POL. 17, 23 (1999) (arguing that genetic information does not pose qualitatively different challenges for law and society than other types of medical information).
knowledge is as socially combustible as any that serves as an oracle. With oracles come both power and the potential for madness.\textsuperscript{25}

Second, even if our genetic data do not define us, they are unique to us and determine a substantial share of our physiological functioning. An ephemeral infectious disease we once caught, our history of accomplishment and conflict, our written work—all these compose in large, though not exhaustive, measure our histories, but they are aspects of our cultural personhood. Our genetic data define our physical personhood, even if our environment and social relations shape both the expression of that physical personhood and our sensation of it.\textsuperscript{26}

Because of the important correspondence between our code and ourselves, we may be socially marked by that code. We may be grouped with others based on similarity and separated from still others by genetic differences. Genetic data as salient characteristics are potential triggers for discrimination, both invidious and rational.\textsuperscript{27} And thus our genes can become a source of shame, disadvantage, or fear.

Third, people actually can, as a practical matter, choose not to know about their genetic information. It is true, for example, that people whose family histories place them at risk of disease also may experience great distress on account of their knowledge of this risk. However, while learning the health and disease status of one's parents is an unavoidable incident of most people's lives, the revelation of detailed genetic information is not a byproduct of day to day living in any of the world's cultures as now constituted. And so, these days at least, the question arises whether an individual

\textsuperscript{25} Ancient mythology is rife with the tragedies that befall individuals after consulting oracles. The information they receive drives them to behavior that often unwittingly fulfills the prophecies they hoped to avoid. Robert Klitzman, Genetic Testing Creates New Versions of Ancient Dilemmas, N.Y. TIMES, Jan. 17, 2006, at F5. As Dr. Robert Klitzman put it: "As science progresses, as more genes are found, their meaning uncertain, we will be unsure how to proceed. Much like the ancients, we will get information that we don't want to know and don't know how to use." Id.

\textsuperscript{26} One way to understand genetic data is as computer code. The code is wildly complex and the range of inputs almost inconceivably great. Thus, predicting the ultimate behavior of the code from a mere examination of it is fraught with peril. The expression of the code when run is something more than the code itself—it is the interaction of rules with a sea of inputs.

\textsuperscript{27} See infra notes 49-52 and accompanying text.
wants or should want to undertake measures to ascertain more accurately his or her disease risks, whether to consult the oracle or not.  

The benefits of having more certain knowledge, even if it is grave and even if there is no opportunity for treatment or mitigation, are real. For example, one author has suggested the following benefits from genetic testing for early-onset Alzheimer's where there is a family history of the disease: (1) elimination of crippling anxiety caused by uncertainty, (2) increased incentive to engage in productive planning for the future, (3) increased likelihood of obtaining counseling, (4) increased chance of participation in clinical studies that benefit society and the individual, and (5) an enhanced ability to make reproductive choices.

But what to one person appears to be the elimination of uncertainty and an opportunity for planning appears to another as the death of hope. Writing for the New York Times about whether she would want to take a hypothetical genetic test for a gene variant linked to diabetes, Denise Grady wrote, "I'm not sure I want that straight-up shot of reality. Even with my family history, I figure there's a chance I got lucky and didn't inherit whatever my mother had. A test could erode that bit of optimism." The choice whether to know or not know being pressing, practically available, and difficult, how does an individual decide what to learn about his own genetic make-up?

2. Genetic Information That Poses Choices. The results of predictive genetic testing can have a profound impact on an

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28 Of course, genetic data are not unique in this respect. Other diagnostic tests may similarly reveal information an individual would not otherwise receive. The key here is the ability of the test to reveal something salient about a person's future that is not obvious from his or her present condition. That is a relatively new capacity of medicine, and genetic testing perhaps provides the most stark example through which to analyze the problem.


30 Denise Grady, Genetic Test for Diabetes May Gauge Risk, but Is the Risk Worth Knowing?, N.Y. TIMES, Aug. 8, 2006, at F5. She concludes:

So what do I want to do? Right now, I'm leaning toward having the test if it becomes available. I'm not sure what I'd do with the results or whether they would mean anything for my future. But I'd like the information, and the right to decide for myself whether to act on it.

Id.
individual’s array of rational choices. Our life plans can be dramatically altered by a test confirming a fatal or totally disabling disease. One of the most dramatic choices genetic testing now imposes is the choice a woman has to make whether to undergo a prophylactic, radical mastectomy when she is found to carry mutations of the BRCA-1 and BRCA-2 genes. Without the procedure, she faces a lifetime risk of breast cancer of up to 80%, compared with a background risk of around 13%.\(^1\) Surgical removal of the breasts reduces this risk by perhaps 90%.\(^2\) Faced with these figures, a woman who carries variants of these genes faces the agonizing decision whether to undergo a mastectomy, an operation that, it goes without saying, she desires very much not to undergo.\(^3\)

It should come as no surprise that many women have a difficult time deciding whether to be tested at all for these variants, even when they have a family history of breast cancer. In an article for the *New York Times*, Dr. Robert Klitzman relays the intra-family stress caused when one sister wanted this genetic information and the other, Susan, who already had breast cancer, did not.\(^4\) The sister who wanted the information pleaded with Susan, whose testing would be covered by insurance, to get the test. If Susan’s test were positive, her cancer-free sister would consider a radical mastectomy. Susan, initially, refused to be tested. Dr. Klitzman wrote of the sister’s desire to know: “I admired this woman’s courage. I realized that I wouldn’t want to have to face these choices myself. She wanted to know her fate. But not everyone does. Countless patients struggle daily, unsure what to do.”\(^5\)

Similarly, fetal genetic testing leaves parents to decide which genetic defects they can live with and which defects will drive them to abort.\(^6\) It can be an agonizing decision, and faced with the stark,

\(^1\) See supra note 23.
\(^4\) Klitzman, supra note 25, at F5.
\(^5\) Id.
\(^6\) See Lori B. Andrews, *Prenatal Screening and the Culture of Motherhood*, 47 HASTINGS L.J. 967, 981 (1996) (describing various impacts on women after learning their fetus has
but at the same time abstract, reality of raising a disabled child, would-be parents overcome religious and political convictions to choose abortion, an action they desperately wish not to take but feel they must.\textsuperscript{37} Lori Andrews cites a study in which "two couples — who had previously consented to prenatal testing for Huntington's disease during two pregnancies and had terminated the pregnancies as a result — refused prenatal testing during their third pregnancies and carried to term.\textsuperscript{38}

Genetic testing can have very real impacts on one's immediate conduct. Avoiding hard choices is one reason some decide that ignorance is, if not bliss, at least preferable to the cold, crystal ball. The knowledge conferred by genetic tests can thrust upon people the choice to undergo a mastectomy or to abort a baby a couple truly wants to have.\textsuperscript{39} That people desperately wish to avoid doing either is a reason they might have for not wanting the knowledge in the first place.

3. Genetic Information That Hurts. In the crystal ball, we may also see futures that require no conduct but that are bleak and frightening. We may be psychologically unprepared for the images of ourselves that we discover in the analytic brush strokes of genetic assays.\textsuperscript{40} Confirming what we may suspect from family histories, genetic tests might, while eliminating the anxiety of uncertainty, also eliminate hope and cause psychological harm.\textsuperscript{41} On the other hand, more precise knowledge might vindicate hope, though perhaps even then not without cost.\textsuperscript{42} This quandary only becomes more

\textsuperscript{37} Amy Harmon, Dilemma: Deal with Disability, or Abort?, LEXINGTON HERALD-LEADER, June 20, 2004, at A20.

\textsuperscript{38} Andrews, supra note 36, at 984 (citing S. Adam et al., Five Year Study of Prenatal Testing for Huntington's Disease: Demand, Attitudes, and Psychological Assessment, 30 J. MED. GENETICS 549, 552 (1993)).

\textsuperscript{39} See supra notes 33, 36 and accompanying text.


\textsuperscript{41} 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 (Ruth Chadwick et al. eds., 1997).

\textsuperscript{42} See, e.g., Graeme T. Laurie, Challenging Medical-Legal Norms: The Role of Autonomy,
pervasive as, with the increased use of genetic screening, "more and more people come to know that they are at risk from a serious disease with no real chance of reducing that risk or of obtaining an effective treatment." 43

What studies have been done are not at all clear on the psychological effects of predictive genetic testing. Some commentators have suggested that genetic testing can cause depression and suicide. 44 Studies have demonstrated at least some negative impact on family functioning from predictive testing for Huntington's Disease—a test that can confirm with near-certainty whether one will develop this disabling disease. 45 The data are inconclusive, 46 but likely suffer from substantial selection bias. 47 It may well be that living with the knowledge that one will develop an incurable disease turns out to be better than living with uncertainty. At least, it may only be different rather than "worse." When asked what it was like finally to know that she had Huntington's, one young woman replied that "[i]t's hard to think the other way anymore of not knowing,' . . . . 'It's become a part of my life.'" 48
4. Security and Privacy. Even if someone is prepared emotionally to receive his genetic information, he may not want anyone else to receive that information. Keeping such information secret from others because of the harms that dissemination might cause is not the direct concern of this Article. However, the worry that being tested at all will result in unwanted dissemination is a reason an individual may have for refusing a test and remaining ignorant.

The fear of genetic discrimination is no longer the stuff of science fiction. Angela Liang points to "more than two hundred cases where healthy people were denied health insurance or employment because of their genetic makeup" and to surveys revealing that those at familial risk for genetic diseases experienced fairly widespread difficulty obtaining adequate health insurance. Indeed, doctors have reported cases in which "patients who could make more informed health care decisions if they learned whether they had inherited an elevated risk of diseases like breast and colon cancer refuse to do so because of the potentially dire economic consequences."

These fears may be eased somewhat by a new federal law. The Genetic Information Nondiscrimination Act prohibits insurance companies and employers from discriminating based on genetic status and from requiring genetic testing. Importantly however, the law does not apply to providers of life, disability, or long-term care insurance and may be difficult to enforce. Genetic

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49 Liang, supra note 40, at 448.
51 See 29 U.S.C.A. § 1182 (West, Westlaw through P.L. 110-233) (forbidding genetic discrimination by health insurance companies); 42 U.S.C.A. § 2000ff (West, Westlaw through P.L. 110-233) (stating it will be effective eighteen months after May 21, 2008 and governing employer genetic discrimination). There are a number of state regulations as well. See, e.g., William F. Mulholland, II & Ami S. Jaeger, Comment, Genetic Privacy and Discrimination: A Survey of State Legislation, 39 JURIMETRICS 317, 317 (1999) (revealing that nearly all states had or were considering laws to prevent genetic discrimination). It is uncertain how these will interact with the new federal law.
information, in spite of laws meant to make it less so, is still somewhat risky information to uncover, and many rationally could prefer to remain ignorant.

B. HIV TESTING

1. Fear of Knowing. In 1987, determined to do something about the AIDS epidemic that was then an epicenter of public anxiety, the Illinois legislature passed, and Governor James R. Thompson signed, a law conditioning the grant of marriage licenses on proof that the partners to the proposed marriage had been tested for HIV and then informed of the results of each other’s tests. 53 Though it was opposed by the state’s health department and called “a ridiculous example of institutionalized panic” by public health officials, 54 this statute was not a policy outrider. Most other states were considering similar legislation at the time, but the tide was turning, even in Illinois. 55 After the law went into effect, a substantial number of engaged couples made for the state’s borders, and the law was repealed after only twenty months. 56

There are certainly stories one could tell about this episode related to collective hysteria, political malfunction, or train wrecks of science and policy. But the incident is useful here to consider why people might be inclined to go out of their way to avoid learning

53 40 ILL. COMP. STAT. ANN. § 204(b) (West 1988) (repealed 1989). The statute required the presentation to the county clerk of a certificate from a physician “indicat[ing] that the required tests were administered and that the results [were] provided to both parties, but . . . not indicat[ing] the results of the tests.” Id. The test had to be taken within the thirty days prior to application for the license, and physicians were required to give notice of positive results to both parties and to the state health department. Id.


55 See id. (noting that thirty-three states besides Illinois had considered similar laws).

56 Jack McKillip, The Effect of Mandatory Premarital HIV Testing on Marriage: The Case of Illinois, 81 AM. J. PUB. HEALTH 650, 650 (1991). McKillip analyzed marriage data from Illinois and surrounding states during and around the period of the law’s enforcement. Id. He found a 14% drop in marriage rates while the law was enforced, a rebound when it was repealed, and an increase in marriages in bordering states roughly equal to the drop in Illinois. Id. at 652. See also Julie D. Levinson, Note, While Ignorance May Not Be Bliss, It Is a Mother’s Right: Implications of Testing Newborn Babies for HIV, 3 CARDozo WOMEN’S L.J. 71, 81 (1996) (citing studies that found 40,000 people left Illinois and married elsewhere while statute was in effect).
their HIV status, which is surely an important health datum in anyone's life.

Opponents of the law often pointed to its cost, both to individuals and to the health system generally. If cost were the driving force causing couples to marry out of state, then the Illinois experience is not a good example of a challenge to individuals' interests in not knowing. Someone who foregoes an HIV test on account of its cost may not necessarily have any real interest in not knowing his HIV status. All that can be said is that the value to him of this knowledge is less than the monetary cost of being tested.

One study, however, considered and rejected the hypothesis that cost could account for the declines it found in Illinois marriage rates attributable to the law. Though its conclusion on this score was not empirical, the author's reasoning is compelling. He noted that the mean testing cost was only around $30. This small amount was less than the difference in cost of a marriage license in Wisconsin and one in Illinois. The Wisconsin license cost $35 more, leaving aside Wisconsin's longer waiting period and whatever logistical expenses couples incurred traveling there. These facts provide some confidence that many couples that avoided marrying in Illinois on account of the law truly desired not to be tested at all.

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57 See Wilkerson, supra note 54 (citing test costs from $25 to $300 a person). Even if cost was not a prime motivation for couples to wed in another state, Illinois's program was very expensive overall, costing perhaps over $300,000 for each HIV positive individual identified. Bernard J. Turnock & Chester J. Kelly, Mandatory Premarital Testing for Human Immunodeficiency Virus: The Illinois Experience, 261 JAMA 3415, 3418 (1989).

58 While all of the interests in ignorance I discuss here could be considered knowledge costs that sometimes outweigh the simultaneous knowledge benefits, the commitment of resources needed to acquire knowledge is not a category of deterrents to knowing that I will discuss. Rather, my focus is on subjective judgments that would lead to a preference for ignorance even if the information that could dispel it were freely available. The effect of pricing on knowledge flows is critically important, but I leave consideration of it for another day. See generally Amy Kapczynski, The Access to Knowledge Mobilization and the New Politics of Intellectual Property, 117 YALE L.J. 804 (2008) (examining politics of intellectual property law from perspective of access to knowledge).

59 Such low, but nonnegative, values could be due to high confidence in one's HIV negative status, either from an evaluation of risk factors or from a fairly recent test, or to a prior positive test result. In the latter case, the value of a new test decreases with the confidence in the former test or tests.

60 McKillip, supra note 56, at 652.

61 Id.

62 Id.
The author speculated that a more general wish to avoid the subject of AIDS altogether could be the real reason for the border hopping: "Perhaps AIDS had become such a specter that the issue itself is to be avoided. Couples may have chosen a way around this unhappy topic by being married in a state that allowed them to avoid HIV testing.\textsuperscript{63} Perhaps, but traveling to another state to get married specifically to avoid HIV testing does seem an odd way to avoid the issue of AIDS.

There does not appear to be a clear answer as to why this significant drop in marriages accompanied Illinois's HIV testing prerequisite. One suspects that each couple had a slightly different mix of reasons for their decision. Some may have worried that their testing information would be reported to state agencies. Others may have wanted to shield the information from themselves or even their spouse. But, whatever the reasons, getting married out of state represented a choice to remain ignorant of HIV status, at least for those who had not yet tested positive, and even to incur additional expense to do so.

When surveyed, people who refuse HIV testing give varying reasons for their refusal. A South African household survey found that the bulk of refusals stemmed from aversion to blood draw, sometimes on religious grounds and sometimes not.\textsuperscript{64} Not wanting to learn one's HIV status was the reason given by 7% of respondents.\textsuperscript{65} One study in Los Angeles aimed at determining reasons for refusal found that "don't want to know" was cited by 23.9% of the subjects, with concerns about confidentiality cited by 2.2%.\textsuperscript{66} Other studies have found the primary reasons given for refusal to be "already tested" and "not at risk," with much lower rates of other answers.\textsuperscript{67}

\textsuperscript{63} Id. at 653 (citation omitted).
\textsuperscript{65} Id.
\textsuperscript{66} Paul A. Simon et al., Reasons for HIV Antibody Test Refusal in a Heterosexual Sexually Transmitted Disease Clinic Population, 10 AIDS 1549, 1549 (1996).
\textsuperscript{67} See, e.g., Rebecca V. Liddicoat et al., Refusing HIV Testing in an Urgent Care Setting: Results from the "Think HIV" Program, 20 AIDS PATIENT CARE & STDs 84, 89 (2006) (finding "not at risk" to be most popular response). The authors claimed that the two dominant
Clearly, there is a great deal of variation in these findings. Notably, despite claims that better understanding of HIV would reduce refusal rates, at least one study has suggested that there is no such correlation. Another notes that people often overestimate the distress that will accompany a positive result and, interestingly, underestimate their distress after a negative result.

Whatever the precise incidence of and number of justifications, many people around the world still desire not to be tested for HIV. Though HIV can now be managed, at least by those lucky enough to live in richer nations, as a chronic illness, it still is a dreaded disease that carries serious social and physical burdens. Learning that one carries HIV not only conveys information about one's own medical status, but it is also tantamount to learning that unprotected sex with a partner may harm that partner and that sharing needles may harm those with whom one shares. It is, in short, to become aware that one's lifestyle may have to change in order to avoid harming others and that one's own life, even if not tragically shortened, will now include significant medical interventions and side effects.

The fact that many people prefer not to be tested should not come as a surprise to policymakers. After all, most states have passed statutes preventing HIV testing without informed consent, often with specific procedures for obtaining that consent. Unlike most

responses were often erroneous and that much better HIV detection would occur if subjects (a) did not rely on old testing data and (b) had more accurate self-perceptions of risk. Id. at 90. The authors found only one percent refused because the information was “too personal.” Id. at 89. The rest refused either because they were “feeling too sick,” because testing “took too long,” or because they already knew they were HIV positive. Id.

See T.A. Duffy et al., Women’s Knowledge and Attitudes, and the Acceptability of Voluntary Antenatal HIV Testing, 105 Brit. J. Obstetrics & Gynaecology 849, 849 (1998) (“This study... has shown that knowledge regarding HIV is good but does not increase the uptake of testing.”).

Elaine M. Sieff et al., Anticipated Versus Actual Reaction to HIV Test Results, 112 Am. J. Psychol. 297, 297 (1999).

Though it is true that unprotected sex always carries risks, knowing that one is HIV positive provides evidence that it poses a substantial risk of serious harm to one’s (unprotected) sex partners. I am not concerned at the moment with whether this information will or should actually change behavior or whether any change in behavior is something the law should mandate, encourage, or ignore.

situations in which medical informed consent is solicited, in the HIV testing context the informed consent procedure is intended to ascertain whether the individual truly wants to know a medical fact about himself, not whether he wishes to undergo a particular medical procedure that poses both risks and benefits.  

2. Security. In addition to the harms some people fear they would experience upon learning their test results, concern over the insecurity of their testing information is also a reason some might choose to remain ignorant of their HIV status. As frightful as it is to know one has a deadly disease, the consequences of others knowing that fact can be even worse. Others could use the information to discriminate in employment or in providing insurance. Women who are pregnant and HIV positive may, with some justification, fear interference with their maternal rights.

On the other hand, one study found no correlation between the adoption of mandatory reporting laws, which require the filing of names of HIV-positive individuals with the state’s health agency, and voluntary testing. If these findings are robust, they suggest that most people are not concerned either with the risk of dissemination, as they estimate it, or the effects of dissemination of individual’s right to refuse testing, including the testing of prisoners and especially sex offenders, testing of donations from blood donors, testing after a health care worker or public safety officer suffers a possible exposure to blood products, and more. See, e.g., id. at 5–10 (citing provisions of Alabama code that contain these exceptions).

Some might argue that the requirement to obtain informed consent is justified by the fact that HIV testing is a medical procedure. Perhaps, but if that is all that justifies it, then the scope of information necessary to disclose would be limited to the risks, benefits, and alternatives to the various means of HIV testing—the minuscule risks of blood draw and efficacy of the various tests. In short, the informed consent procedure would be meaningless.


See Levinson, supra note 56, at 81 (“For example, in several instances women have temporarily lost custody of their children due to their conduct before the child’s birth. In addition, several existing statutes might be employed to punish HIV-positive women who give birth to HIV-infected children.”); see also Scott H. Isaacman, Are We Outlawing Motherhood for HIV-Infected Women?, 22 Loy. U. Chi. L. J. 479, 482 (1991) (noting that HIV-transmission statutes might be applied to pregnant women like narcotics law).


Several serious methodological limitations were reported. Id. at vi.
their HIV status, that people are not sufficiently informed or thoughtful about the effects of dissemination, that people effectively undermine the law by avoiding reporting, or that people are generally unfamiliar with the law and thus its effect on the security of their HIV status information. There are some data to support the latter alternative.\textsuperscript{77}

Whether people generally accept or are unaware of the risk of dissemination of their HIV status under state reporting procedures, some may choose not to be tested to remain ignorant themselves and avoid this risk. We need not find that all or even a majority of individuals have serious security concerns to decide to protect the interests of those who do.

The relatively certainty provided by a test result is not the only kind of HIV status information that governments disseminate. Many states have passed partner notification laws requiring that any partners of the HIV-positive patient, including spouses, sexual partners, and people with whom a patient has shared needles, be notified that they may have been exposed and that they should be tested.\textsuperscript{78}

These laws affect both those who have been tested, presenting another set of security concerns, and those who are notified. First, it might be suspected that these laws would discourage people from being tested, for fear that notification will have the effect of disseminating their HIV status information in ways that are harmful, even if their names are omitted. The fear that finding out one's HIV status will likely cause others to learn it as well may obviously be a reason not to be tested. However, one study found that the introduction of a partner notification law in New York had no effect on HIV testing rates.\textsuperscript{79} It is not obvious, though, whether this indicates that people who would seek tests are undeterred by the prospect of partner notification. As with studies indicating that reporting to government health departments has no effect on testing rates, the negative finding here could be explained by a host of

\textsuperscript{77} See id. at xiv (finding limited awareness of New York's mandatory reporting law).

\textsuperscript{78} See, e.g., N.Y. PUB. HEALTH LAW § 2133 (McKinney 2002) (requiring notification to contacts of the HIV-infected person).

\textsuperscript{79} N.Y. IMPACT REPORT, supra note 75, at 34.
factors, from ease of evasion to lack of knowledge about the program. Indeed, two-thirds of HIV-positive individuals identified in the calendar years 2001 to 2003 reported no partners at all.\textsuperscript{80}

3. The Ignorance Interests of Others. The other party whose interest in not knowing is implicated by partner notification laws is the notified partner. These laws contain no mechanism by which the partner can completely opt out of being informed he or she has been placed at risk.\textsuperscript{81} Short of a statewide pre-registration approach, there is no practical way to ascertain someone's preference for the information without disclosing substantially all of it.

Though the information provided by notification improves on the estimation of an individual's risk of HIV infection over background,\textsuperscript{82} it may not, in particular cases, improve an individual's own estimation at all. Some people who are contacted under such programs will be well aware that they have engaged in risky behavior with individuals who may be HIV positive.\textsuperscript{83} The more, however, that the information does improve risk estimation, the more useful it might be and, at the same time, the more distressing. "A study of 132 partners of HIV-positive individuals located through health department notification found that 87% thought the Health Department did the right thing in telling them

\textsuperscript{80} Id. at 22.
\textsuperscript{81} See, e.g., N.Y. PUB. HEALTH LAW § 2133 (containing no opt out provision).
\textsuperscript{82} Several studies have examined partner testing rates and the rates of HIV positive tests among notified partners. The numbers vary. Anywhere from 65%–97% of notified partners agree to be tested, with from 10%–20% of those turning out to be HIV positive. See Centers for Disease Control and Prevention, Dep't of Health & Human Services, Partner Counseling and Referral Services to Identify Persons with Undiagnosed HIV – North Carolina, 2001, 52 MORB1DITY & MORTALiTYWKLY. REP. 1181, 1881–82 (2003) [hereinafter Partner Counseling] (studying South Carolina patients); Johan Giesecke et al., Efficacy of Partner Notification for HIV Infection, 338 THE LANCET 1096, 1096 (1991) (studying Swedish patients); Randolph F. Wykoff et al., Notification of the Sex and Needle-Sharing Partners of Individuals with Human Immunodeficiency Virus in Rural South Carolina: 30-Month Experience, 18 SEXUALLY TRANSMmTED DISEASES 217, 219 (1991) (studying South Carolina patients and finding 97% agreement rate to testing).
\textsuperscript{83} Indeed, studies indicate many notified partners have already been tested for HIV, and of those, a significant percentage have already tested positive. See, e.g., Partner Counseling, supra note 82, at 1182 (finding 68% of previously tested partners were HIV positive).
about their exposure, and 92% thought that the Health Department should continue to notify persons exposed to HIV.\textsuperscript{84}

Many are obviously happy to learn their HIV status, and there is now great therapeutic benefit in doing so. This has not always been the case, and many still prefer not to know for various reasons.\textsuperscript{85} Whatever becomes of social attitudes toward HIV testing, incurable infectious diseases—the diagnoses of which present only altruistic benefits to those tested—will surely continue to present serious information regulation problems. Thus, this example reminds us that the rationality of a desire for ignorance, to the extent we can assess it, may be entirely dependent on social context.

C. RACE AND APPLICATIONS

In 1995, and again in 1998, the Board of Governors of the Federal Reserve System proposed a rule that would permit nonmortgage lenders to ask potential borrowers their sex, race, religion, and national origin.\textsuperscript{86} Though the governing federal statute, the Equal Credit Opportunity Act, does not explicitly bar the collection of such information, it does prohibit the use of race and other status information in making lending decisions.\textsuperscript{87} However the Board’s regulations implementing the statute have long prohibited these lenders from “inquir[ing] about the race, color, religion, national origin, or sex of an applicant or any other person in connection with a credit transaction.”\textsuperscript{88}

Obviously, to the extent that racism is a problem in lending, one way to combat it is to prohibit the lender from knowing an applicant’s race altogether. Even an avowed racist is unable to discriminate if he or she does not know the race of the person with

\textsuperscript{84} N.Y. IMPACT REPORT, supra note 75, at 5 (citation omitted); see also Jeffrey L. Jones et al., Partner Acceptance of Health Department Notification of HIV exposure, South Carolina, 264 JAMA 1284, 1285 (1990).
\textsuperscript{85} See Jones et al., supra note 84, at 1285 (discussing reasons notified partners gave that notification was harmful, including depression, loss of confidentiality, and upset partners).
\textsuperscript{88} 12 C.F.R. § 202.5(b) (2008).
whom he or she is dealing. Though an information prohibition approach may be effective in reducing discrimination, especially when transactions are not conducted face to face, various federal agencies, including the Department of Justice, expressed their "belie[f] that the ability to obtain and analyze data about race and ethnicity (such as creditors might collect on a voluntary basis) would aid fair lending enforcement." Additionally, a few creditors suggested that collecting the information could help them to "evaluate compliance with fair lending laws" and to develop "marketing and outreach initiatives."

Information prohibition is not the strategy of Title VII. Under federal antidiscrimination in employment laws, employers are free to collect race information, for example, from potential employees so long as they do not use it to discriminate. The Equal Employment Opportunity Commission (EEOC) cautions, however, that eliciting race information "unless otherwise explained, may constitute evidence of discrimination prohibited by Title VII." Notably, many state employment antidiscrimination regimes do prohibit the collection of race information.

This difference in approach, between regulating knowledge to prevent harmful conduct and prohibiting only the conduct itself, is an interesting dynamic that is found in many areas of knowledge regulation. But its relevance to this Article lies in the attitude of the regulated community. Among those most opposed to lifting the ban on collection of status information by nonmortgage lenders were "banks and banking trade associations" and their congressional

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90 Id.
91 See 42 U.S.C. § 2000e-2(a) (2000) (prohibiting employers from using this information to discriminate but not prohibiting them from collecting it).
92 OFFICE OF PUBLIC AFFAIRS, EQUAL EMPLOYMENT OPPORTUNITY COMM’N, PRE-EMPLOYMENT INQUIRIES & EEO LAW (1981), reprinted in 2 EMPLOYMENT PRACTICES GUIDE 4143, 4143 (Commerce Clearing House, Inc. 2008). This source was cited in Mark A. Rothstein, Wrongful Refusal to Hire: Attacking the Other Half of the Employment-At-Will Rule, 24 CONN. L. REV. 97, 124 n.146 (1991). Rothstein noted that "[b]ecause merely requesting the information is illegal in some states and the use of the information is illegal under federal law, it is questionable why a rational employer would seek to obtain the information." Id.
allies. Mustering what can only be described as an unusually healthy level of consumer empathy, Senator Phil Gramm, then Chair of the Senate Banking Committee, issued a press release: "Allowing banks and other creditors to collect information about the race, religion or national origin of their would-be clients will once again raise the specter of abusive creditors injecting prejudice into the credit process."95

The institutional interests of the lending community were reflected more directly in comment letters on the proposed rule change. Their concerns fell into several categories, which can be reduced to concerns about cost and liability.96 First, lenders worried about the economic impact on them of keeping such records.97 Even if collecting and keeping the information were only voluntary, they were concerned that the rule would eventually lead to a requirement to collect such data.98

Second, collection could lead to "unfair" use of the data.99 If the data were collected, it would be mined and claims of discrimination could be manufactured either by the Justice Department, regulators, or plaintiffs.100 The concern is not so much with the harm that will befall a lender on account of its knowledge, but with the harm that will occur if others have access to the information. However, since much lending does not occur face to face but via telephone, mail, and even over the Internet, remaining ignorant of the borrower's status is an excellent way to avoid the inference that the potential borrower's status was taken into account. As the Credit Union National Association (CUNA) put it in a letter to the Board:

97 Id.
98 Id.
99 Id.
100 Not collecting the information, lenders worried, would only lead to another set of bad inferences: that they had something to hide. Furthermore, commenters argued the data would be unreliable on account of a lack of standardized collection techniques and notation. Id.
The burden of knowledge

Borrowers may perceive that the information is being used to discriminate, regardless of how it is actually used by the creditor. Borrowers may be uncomfortable providing such information and if denied credit, these borrowers may feel discriminated against. This perception should not be facilitated by permitting the collection of this information.\textsuperscript{101}

In other words, lenders prefer not to have this information because having it permits the inference that the information was used illegally.

In 1996 and again in 2003, the Board decided not to drop the information collection prohibition.\textsuperscript{102} Instead, in its 2003 rule amendment, the Board opted to enlarge the "self-test" privilege to permit collection of status information.\textsuperscript{103} Information collected as part of a self-test is privileged from disclosure to regulators or plaintiffs.\textsuperscript{104} So learning race information in this manner does not pose the same degree of security or bad-inference concerns that caused the industry to oppose dropping the prohibition (though, perhaps importantly, the fact that a self-test was conducted is not privileged, nor is the fact that information was collected).\textsuperscript{105} However, self-tests must be actual tests that will lead to corrective action to comply with ECOA, and thus are not a vehicle through which such status information can be routinely and continuously collected.\textsuperscript{106}


\textsuperscript{103} 12 C.F.R. § 202.5(b)(1) (2008). Collection for a self-test requires disclosure to the applicant that providing the information is voluntary, that it is being requested in order to monitor compliance with ECOA, that federal law bars discriminatory use of the information or discrimination on the basis of a refusal to provide information, and that if not the provided lender may use visual information or surname to attempt to collect the information. Id.


\textsuperscript{105} Id.

\textsuperscript{106} See 12 C.F.R. § 202.15(b) (defining self-test).
The lenders involved in this regulatory tussle sought to preserve ignorance as a means to avoid successful, or just expensive, accusations of discrimination. Whatever value knowledge of the race or gender of loan applicants would have for them, the value of ignorance, as a shield, is greater. But this is not a shield meant to hide bad conduct. Only with knowledge could the lenders cause the harm at which the law is aimed.

D. LAWYERS AND OTHER AGENTS

Finally, consider knowledge that is unwelcome to practicing lawyers. Just as patient autonomy has become the dominant lens through which medical ethical dilemmas are resolved, so too has client autonomy been exalted in modern legal practice. The general public appreciates that the essence of a lawyer’s role, at least in our adversarial system, is to represent, and perhaps to advance, the interests of his or her client before courts and in negotiations with others. Lawyering, though, is a profession, complete with external and internal obligations that may conflict with a lawyer’s ability to serve as a mere educated conduit for whatever tale a client desires to present to a court or to his adversaries.

Monroe Freedman has described one manifestation of this role-related tension, calling it the “perjury trilemma.” The trilemma arises when a lawyer is faced with a client who wants to put on perjured testimony or otherwise present false evidence. This

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107 See, e.g., Katherine R. Kruse, Fortress in the Sand: The Plural Values of Client-Centered Representation, 12 CLINICAL L. REV. 369, 375–85 (describing the client-centered view of lawyering and noting that it arose as part of “a larger movement to demystify professional expertise and reallocate power between professionals and clients”). In her discussion of the now dominant, client-centered approach to clinical legal education, Kruse cites the observations of the movement’s founders:

Binder and Price note that clients “are remarkably sensitive to, and easily swayed by, what they guess their lawyer thinks is best for them.” When a client makes a decision based on what the client “surmises the lawyer thinks is best,” the authors argued, the lawyer has illegitimately usurped what should be client decision-making.

Id. at 379 (quoting DAVID A. BINDER & SUSAN C. PRICE, LEGAL INTERVIEWING AND COUNSELING: A CLIENT-CENTERED APPROACH 166 (1977)).

predicament exposes the lawyer's incompatible commitments to (1) zealous representation and diligent investigation, (2) the duty of confidentiality, and (3) serving as an honest officer of the court.\textsuperscript{109}

Whatever existential crisis this quandary creates for the profession, the rules that codify these commitments mandate a resolution. Rule 3.3 of the Model Rules of Professional Conduct provides:

A lawyer shall not knowingly . . . make a false statement of fact or law to a tribunal . . . [or] offer evidence that the lawyer knows to be false. . . . A lawyer may refuse to offer evidence, other than the testimony of a defendant in a criminal matter, that the lawyer reasonably believes is false.\textsuperscript{110}

Put differently, “the rules of professional duty leave no room for knowing violations, but they do leave some room for not knowing.”\textsuperscript{111} If a lawyer “knows” the client's evidence or testimony is false, the lawyer is forbidden from offering it. Something short of “knowing” is sufficient to give the lawyer grounds for refusing to put on the client's evidence or otherwise putting the brakes on what would be his duty to be the client's zealot.

And yet, the lawyer's role as client's agent is deeply engrained. Freedman argues that it is a betrayal of the client to refuse to put on “false” evidence.\textsuperscript{112} Whether this view is accepted by courts and state bars—and it generally is not—is not the point. Many lawyers do view their role this way and, thus, may attempt to maximize their ability to commit to zealous representation and minimize their role as officer of the court. The result: what Freedman calls “selective ignorance.”\textsuperscript{113}

\textsuperscript{109} Id. at 111.
\textsuperscript{110} MODEL RULES OF PROF'L CONDUCT R. 3.3 (2002). Though Rule 3.3 perhaps best exemplifies the conflicting duties facing lawyers, Rule 4.1 places a similar obligation of candor on lawyers with respect to their communications to third parties. Id. at R. 4.1
\textsuperscript{112} See FREEDMAN, supra note 108, at 111 (arguing that sacrificing the duty of candor to court is the only way to resolve perjury trilemma and maintain “traditional lawyer-client model”).
\textsuperscript{113} Id. at 109–10, 130.
"The idea is to inform the client in advance that there are some things which the attorney would prefer not to know, and that if the attorney should learn of them, she may have to pass them on to the judge or adverse party." The lawyer thereby makes a decision, without knowing what would be revealed, to leave to the client the decision whether information might be damaging enough to justify withholding it. The ABA, Freedman, and the courts are all allied against this technique, though not in how it should be eliminated. They say that encouraging the client to withhold, in order to permit the lawyer not to disclose, interferes too greatly with the professional obligation of the lawyer to represent the client's interests and to investigate the case. In addition, clients will be inhibited from confiding in their attorneys.

Another strategy the lawyer may undertake to avoid the harm he or she sees in disclosure is to learn the information in a way that will not ascribe knowledge to her. The lawyer may do this by encouraging the client to speak in hypotheticals. Doing so enables the lawyer to receive information in such a way that she can later make the claim (perhaps only to herself as she lies awake at night) that she did not gain relevant knowledge. The information might objectively be viewed only as referring to a hypothetical, but the lawyer decodes the information into knowledge of what actually happened. Freedman refers to this strategy as "disingenuous," rather than "selective ignorance." It enables the lawyer to "have it both ways," gaining the tactical advantage of knowledge and the immunity-providing benefit of ignorance.

In both cases, the lawyer has acted to avoid gaining knowledge that she believes will harm her interests. The lawyer believes her interests are nearly perfectly aligned with those of her client, and so she seeks to avoid the disclosure to adversaries and the court of information that will damage the client's case. Ignorance allows the

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115 See id. at 852 (citing Miranda warnings as example of selective ignorance).
116 See id. (statement that ABA and courts believe selective ignorance deprives client of "guiding hand of counsel").
117 FREEDMAN, supra note 108, at 141.
118 Id. at 119.
lawyer to avoid the choice between disclosing damaging evidence and accepting a risk of punishment for failure to disclose the evidence. Through selective ignorance, she attempts to insulate herself from the damaging information, even to the point of depriving herself of whatever use she could have made of it. Through disingenuousness, she also seeks to avoid having to disclose but does so without paying the price of remaining truly ignorant.

In these cases, ignorance confers a benefit, in the form of immunity from legal rules, that enables desirable conduct: using evidence without fear that she must disclose its falsity.

III. TYPES OF IGNORANCE INTERESTS

A. SOME SIMPLE DISTINCTIONS

From these examples, we can begin to appreciate that a desire for ignorance is not so unusual, is sometimes rational or at least understandable, and may arise from quite different considerations. In some of the examples above, knowledge was unwelcome because it posed difficult choices to its holder. In others, knowledge posed no uncomfortable choice at all, but simply changed the holder's view of himself or the world around him. And in some, knowledge was unwelcome because holding it increased the risk the holder would convey it to others—with harm potentially flowing from their knowledge.

To bring some order to these observations, I propose a few distinctions that result in a small number of categories, all summarized in the figure below. First, I will distinguish between knowledge that harms by affecting one's conduct and knowledge that is harmful despite having no direct effect on conduct. In the first category are forms of knowledge that tend to compel conduct the holder does not want to undertake or to restrain conduct which the holder wishes to perform. Because these kinds of knowledge either provoke or inhibit conduct, I will call them provocative and inhibitory knowledge, respectively. Each may be undesirable, from the holder’s viewpoint, for its interference with his or her autonomy.
Within the second category, knowledge that harms for reasons other than its direct impact on the holder’s autonomous choices, I will make an additional distinction. Knowledge may bring disutility either because the substance of it is objectionable to its holder or for reasons unrelated to the impact of the substance on the holder. If the desire for ignorance is due to the substantive impact of the knowledge, then I call the knowledge disruptive, as it disrupts some desirable conception of the world to which the holder clings. If substantive impact is immaterial, then the ignorance preference must be due simply to the fact that the knowledge is acquired and held.

In this last category lies the final distinction. If the simple fact of possession of some knowledge would harm the holder, I assert that it must be because others may disadvantage the holder if they (a) learn of the holder’s possession of the knowledge or (b) learn the substance of the holder’s knowledge. The first sort of disadvantageous knowledge I will call “bad inference knowledge,” as
the concern is with what others will make of the fact that the holder possesses the knowledge. By contrast, if the fear is that others may learn the substance of the knowledge, then the holder’s concern is with insecurity. Insecure knowledge is knowledge that if acquired at all might be transmitted (via information of course) to others and ultimately used by others in ways disadvantageous to the original holder.

B. AUTONOMY-HARMING KNOWLEDGE

As the above examples illustrate, knowledge can inhibit or provoke conduct. Knowledge can drive individuals to avoid particular forms of conduct they find desirable or to perform conduct they find undesirable. It is thus a kind of autonomy constraint but one of the holder’s own making. I treat these two forms of intrusive knowledge— inhibitory knowledge and provocative knowledge—separately.

1. Inhibitory Knowledge. Inhibitory knowledge constrains an individual’s range of “allowable conduct.” That is, upon learning something, an individual might be effectively barred, or at least inhibited from, doing something he or she finds desirable. This occurs because knowledge reveals that acts an individual wishes to perform are in some way harmful. When one learns that what one plans to do, enjoys doing, or has habitually done is harmful, the choice whether to do it is made more difficult. A re-evaluation is required, plans broken, old habits soured. A woman who learns she is pregnant is pressured, even in her own internal deliberations, not to smoke or drink. A man who learns he is HIV positive is put on notice that engaging with others in unprotected sex or needle sharing carries a high risk of transmitting HIV. Ignorance permits avoidance of the difficult choice whether to forego desirable, but harmful, conduct.

In the two preceding examples, knowledge reveals a fact of the world that would have been true whether or not discovered by the knowledge holder. That is, whether or not the HIV-positive man ever received a diagnosis, he is HIV positive. Unprotected sex with others thus poses a significant risk of transmission. Whether or not a woman is aware she is pregnant early in her pregnancy, she is
pregnant, and smoking and drinking may harm the developing fetus. The knowledge gained by diagnosis does not alter these facts, but only causes the holder to realize them.

A slightly different situation is presented by the perjury trilemma. An attorney, upon learning that her client’s intended testimony is false, may be deterred from putting on the testimony, because doing so with the knowledge that the testimony is false would be harmful. Even if the attorney would be happy to put on false testimony—as would a pure, zealous advocate—doing so carries the risk that she will be sanctioned. Had she never known, no harm would have befallen her. She does not care that a lie was told, only that her knowing complicity in the lie would subject her to some kind of liability.

Now if this lawyer took seriously her role as an officer of the court, internalizing that aspect of her role, then her position would be similar to the HIV positive man discussed above. This lawyer does not want to learn that planned testimony is false because it would reveal to the lawyer that her planned conduct will be harmful—and that it would have been so even if she had never learned of the falsity. False testimony harms the truth-seeking function of courts, and part of her job is to prevent such pollution of the process. Remaining ignorant of the falsity of the testimony does nothing to ameliorate the harm.

Though it might seem that the interests of these two lawyers, the officer of the court and the client zealot, ought to be placed in different categories, there is in fact no difference between their interests in ignorance. The former desires ignorance because it permits her to put on evidence without fear that she will be charged with knowingly presenting false evidence. The latter, to the extent that she has an interest in not knowing, must be motivated by the same desire. That motivation may well be weaker than that of her more zealous counterpart; her interest in ignorance may be overwhelmed by her commitment to her role as an officer of the court. But the pressure she may feel to shield herself from information that would uncover falsity can only be due to her desire to use the evidence despite its untruthfulness.

119 See supra notes 108–09 and accompanying text.
In sum, the interest they have in not knowing is the same for each, an interest in being free to put on evidence regardless of its falsity. That is the essence of this kind of ignorance interest—to be free to engage in conduct that knowledge may reveal is harmful.

2. Provocative Knowledge. The second way in which knowledge might be harmful to its holder arises when knowledge provokes conduct the holder views as undesirable. For example, a woman is faced with the choice whether to undergo a mastectomy after testing positive for the breast cancer genes.\textsuperscript{120} So too, the individual diagnosed with HIV may be compelled to notify partners, to take medications, and to take precautions to avoid transmitting the virus.\textsuperscript{121} And he may do so, either because the law compels him, or because this is the conduct he would choose to perform upon becoming aware of the diagnosis.

Just as with inhibitory knowledge, knowledge may provoke action either because it unveils a need for the conduct that exists without reference to the knowledge itself or because the need for conduct commences with the knowledge itself. The woman who learns she carries the disease-causing gene variants of BRCA-1 or BRCA-2 has knowledge that merely reveals facts that are independent of the knowledge itself, facts which provoke some action.

On the other hand, a homeowner who learns that his property is contaminated with lead may have to undertake expensive remediation or disclose this fact to buyers, not because he wants to do so, but because the law requires it. An employer who conducts an investigation into misconduct and uncovers wrongdoing by a valuable employee may be obligated to fire that employee or to undertake expensive reorganization efforts.\textsuperscript{122} In these examples, the holder's attitude toward the harm that law or social norms attempt to prevent determines the nature of the holder's disappointment in knowledge. To the extent the actor has internalized the same values, knowledge simply reveals conduct that was necessary without reference to the knowledge itself—such

\textsuperscript{120} See supra note 33 and accompanying text.
\textsuperscript{121} See supra note 70 and accompanying text.
\textsuperscript{122} See, e.g., Karen W. Arenson, What Organizations Don't Want to Know Can Hurt, N.Y. TIMES, Aug. 22, 2006, at C1 (using various corporate examples to illustrate that more information is not always desirable).
as remediation, firing, notification, or taking medicine. But just as with inhibitory knowledge, whatever the holder's attitude, his interest in ignorance is the same—avoiding the conduct by not knowing information that makes the conduct appear necessary.

Of course, knowledge that conduct is required in order to avoid a bad consequence does not always produce that conduct. I am concerned here, though, with the unwanted pressure knowledge can bring to perform conduct. Such pressure is a reason to avoid knowledge, regardless of whether the individual would bow to that pressure or succumb to the harm.

Finally, I wish to distinguish provocative and inhibitory knowledge from knowledge that is so distressing that it eventually leads to self-destructive behavior. Though this is a kind of harmful conduct, it is not the sort of knowledge harm I place in these two categories. Rather, my concern here is with knowledge that reveals action or inaction to be harmful that formerly appeared benign, or at least more benign. One's attachment or commitment to that conduct or inaction makes the knowledge unwelcome.

C. HARMFUL KNOWLEDGE THAT DOES NOT AFFECT CONDUCT

1. Evaluative-Framework Harms Caused by Disruptive Knowledge. Even though it has no immediate influence on an individual's conduct, what I call disruptive knowledge challenges an individual's operating assumptions about the world. The challenge may come in the form of an assault on self-image or an upheaval of external worldview, essentially a disruption of the individual's evaluative framework. The religious devotee whose faith is shaken by scientific revelation, the innocent person who realizes her mother is part of criminal conspiracy, the taker of a genetic test who realizes he is prone to disease and now confronts a world in which he is considerably more vulnerable than he once believed: all are confronted with disruptive knowledge.

I include in this category the panoply of purely psychological harms that knowledge can cause. Some people may be happier not knowing with certainty whether they will develop Huntington's Disease. Others may wish to avoid an HIV diagnosis because they are unprepared emotionally to accept the fact of their
infection—irrespective of any actions the diagnosis would compel them to take or to avoid.

To the extent that knowledge may cause anxiety or depression, it may, of course, lead to social disengagement or self-destructive conduct. Receiving a diagnosis of Huntington’s Disease or early onset Alzheimer’s may lead to depression and even suicide. Why, then, is this kind of knowledge not just an example of provocative knowledge discussed above?

Disruptive knowledge may well lead to different behaviors than would have occurred but for the knowledge. But the essential attribute of both provocative and inhibitory knowledge is that they thrust an unwanted choice directly upon the holder. Disruptive knowledge, in contrast, may change one’s opinion of life’s value and alter one’s imagined tomorrows. It is unwanted because it is painful to hold, not because a choice it provokes is painful to make. The anxiety and depression that results from disruptive knowledge may be so overwhelming that some are driven to self-destructive behavior, a result of their inability to cope with the knowledge. Suicide and depression may thus be manifestations of a psyche smashed by unwelcome knowledge.  

Ruth Chadwick is the author of an oft-cited essay on the “right not to know” genetic information, in which she identifies some of the same rationales for ignorance I have identified in this Article, including the risk of emotional distress.  Although knowledge can help an individual make better choices, it can also lead to a loss of hope. “Certain kinds of misery,” Chadwick writes, “should perhaps be given special weighting.” According to Chadwick, the misery that comes from the loss of hope that would befall a woman who is informed of the near-certainty of developing premature Alzheimer’s Disease may be just such a case.  Though, to be sure, some will

123 Some knowledge might be argued to make difficult the choice whether to live or not. (To be or not to be, that is the question.) The distinction I am trying to draw, and it is not a perfect one, is between knowledge that is painful to hold, and knowledge that entails a painful choice. Obviously, many kinds of painful knowledge are of mixed type.

124 Chadwick, supra note 41, at 18.

125 Id.

126 Id.
"experience [such] knowledge as a liberation from the agony of uncertainty." 127

Closely related to this interest is the potential injury to what Chadwick calls "integrity" or the "sense of self."128 This harm arises from intrusion into the private sphere. For example, a woman with a genetic predisposition to the development of breast cancer "may have a self-image that is incompatible with this as a possible future."129 While it may be unrealistic for a woman not to entertain the idea that she is at least some risk of developing breast cancer, she may have a self-perception incompatible with the level of risk a genetic test would disclose. Chadwick asks, appropriately I think, whether "there [is anything] more to this than the removal of hope."130

I classify both of these interests together as evaluative-framework harms. Both surely rest at bottom on the same crisis, the clash between an imagined future and the future new knowledge presents. Hope, after all, is just an emotional wish for the unfolding of a future selected from a particular class of futures. Our self-image, at least our imagined future-self, is also a belief in the rightness of some futures over others. A belief in the self as having a positive future and the perdurance of hope are one and the same. Knowledge hurts when it forces an unwelcome reevaluation of one's standing in the world.

2. Bad Inference Knowledge. Even if knowledge does not immediately frustrate an individual's desired choice of conduct and even if its substance is not disruptive, knowledge may be fraught with disadvantage simply because it is held and because the fact of its possession, regardless of its substance, is known by others. Here, the knowledge holder worries that she will be disadvantaged by others because of some inference others may draw from the fact of her knowledge.

The possibility of such ascriptions was at least one reason lenders opposed the lifting of the prohibition on the voluntary collection of

127 Id.
128 Id. at 19.
129 Id.
130 Id. at 20.
race and other status information by nonmortgage lenders. If they are bound not to collect the information, and do not collect the information, they cannot be accused either of having used the information or of intentionally not collecting the information for fear of what it would show.

Other examples abound. For instance, suppose a stock trader receives nonpublic information about a company in whose stock he or she trades. Although the information may not have altered the trades he or she planned to make, trading after receiving the information creates an inference that the trade occurred because of the new knowledge. While trading is not inherently harmful, trading based on material, nonpublic information arguably is.

Consider an employer who wishes not to hire a job applicant. Even though the employer may lawfully refuse to hire the applicant on any number of grounds, he or she may not do so based on the applicant's race. If the employer does not know the applicant's race, no claim that race played a role in the hiring decision could be successful. But if the employer does know the applicant's race, there is at least some pressure, depending on the circumstances, to make the hire. In all walks of life, people will desire not to receive information in order to conduct themselves freely, without fear of accusations that they used the information.

In each of these examples, it is the fact of the holder's possession of the knowledge, not the substance of the knowledge, that the holder would like to keep secret. The lender does not care if others find out that some people denied loans were racial minorities. But they do not want anyone to find out that they acquired this racial information. The trader does not care if others learn the substance of the stock tip but does care if others find out that she knew the substance of the tip. Consider as well the classic tale of the mafia witness. He is most concerned whether others, namely the mafia, will learn the fact of his knowledge, not whether they will find out the substance of his knowledge, which they presumably already know.

131 See supra notes 99–101 and accompanying text.
132 Ironically, the employer's decision to change his or her desired conduct to avoid the harmful inference is a decision made on the basis of his or her knowledge.
From these examples, it becomes clear that if the consequences of the bad inference others may draw are sufficiently severe, the actor may forego the desired conduct to avoid the inference. In this way, we may conclude that this category is isomorphic to a subset of the joined categories of provocative and inhibitory knowledge. After all, the reason one may not want this kind of knowledge is to retain the freedom to engage or not engage in conduct. The potential for bad inferences interferes with that freedom.

I include bad inference knowledge as a separate category, however, because protecting ignorance of this kind of information may call for different treatment. The person seeking to avoid bad inference knowledge is seeking to avoid harm that will result only if others learn of his knowledge and draw inferences concerning his conduct. He is not troubled by the substance of the information he receives and would not alter his conduct on the basis of it, but for the inferences he fears others might draw. Diffusing the anticipated harm can be accomplished through avoiding the knowledge or keeping secure the fact of his knowledge.

3. Insecure Knowledge. Finally in the list of interests in ignorance I will consider comes the risk of insecurity. Here, the concern is that someone else will receive the substance of the holder's knowledge and use it, whether purposely or unwittingly, to harm the holder. Insecure knowledge is knowledge that is prone to further dissemination, either because it requires the help of others to discover (who may then have the knowledge themselves and may disseminate it), because it is discovered by the holder in a way that makes it possible for others to discover, or because the holder himself may not be able to resist disseminating it.

A person may desire to remain ignorant to avoid the insecurity that accompanies knowing. It is harm from third parties the individual seeks to avoid, not any direct harm caused merely by holding the insecure knowledge. For example, one might refuse an HIV test because conducting the test necessarily involves the participation of other individuals, creating a risk that the information will be spread to someone in a position to cause direct harm to the tested individual. Daniel Solove has identified this
concern over insecurity as a species of privacy interest. He characterizes the present harm of insecurity as "the injury of being placed in a weakened state, of being made more vulnerable to a range of future harms."  

Chadwick also notes insecurity as a reason for ignorance because by avoiding this knowledge, one may avoid the adverse "social consequences . . . of stigmatisation discrimination." However, she considers these to be "arguments for restricting the access of others to the knowledge rather than for a right of the individual concerned not to know." Chadwick is correct that the individual's ultimate interest is in preventing dissemination, but ignorance can be a means of achieving this end, just as ignorance is a means of achieving the ends of maintaining psychological well-being and avoiding hard choices.  

One might also object that some of the ignorance interests already discussed are actually security interests. Consider, for example, the interest in remaining ignorant in order to avoid the inference that conduct was undertaken on account of the knowledge. Harm will only result if such an inference occurs, and the inference will only be reached if the fact of the actor's knowledge becomes known to others. So, an employer who knows the race of an applicant and refuses to hire him may only be accused of racism if others conclude that the employer knew the applicant's race. Thus, it could be argued, the employer's true interest in remaining ignorant lies in his fear that others will learn of his knowledge. 

Insecure knowledge, however, is knowledge the substance of which the holder wants to keep from others but worries that she cannot. Avoiding insecure knowledge is one way that we can help prevent others from learning the substance of the information that would give rise to the knowledge. But avoidance is no guarantee that others will not independently encounter the information, at

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134 Id. at 519.
135 Chadwick, supra note 41, at 18.
136 Id.
137 I consider below whether society ought to place any substantial weight on an individual's idiosyncratic evaluation of the risk of insecurity and the magnitude of the harm that may follow dissemination. See infra note 161 and accompanying text.
which point the very harms feared from acquiring insecure knowledge might occur.

In contrast, what I call bad inference knowledge is knowledge that can lead to harm from others if they became aware of the fact that the holder possesses it. Avoiding bad inference knowledge frees one to engage in desired courses of conduct without fear that others will make inferences about how the knowledge was used in the decision to engage in the conduct. The holder desires ignorance to preserve his freedom of action, but he is not worried that others will discover the same substance that he avoided. Indeed, in many situations true security is impossible.138

D. THE HYBRID WORLD

Most individual decisions whether to receive information or not involve a weighing of various interests, both those in ignorance and those in knowing. Against the power the knowledge confers must be set the interests in not knowing discussed above. When considering a genetic test, one must consider not only its advantages—in terms of planning, mitigation, and perhaps even treatment—but also its disadvantages—including the risk of dissemination to discriminators, the psychological impact of the results, and the unsavory choices one may face upon receiving the results. I now turn to how society should view and respond to calls for assistance in the effort to remain ignorant—how we might sort through these myriad interests.

IV. COLLECTIVE INTERESTS

Just because a person wishes to remain ignorant does not mean that law must aid him. Nor does it necessarily mean that law should override his desire. What then are the circumstances in which law intervenes? How should it intervene?

138 Recall that even the self-test privilege cannot be used to protect evidence concerning the fact of the lender's knowledge of status characteristics, only the results of the lender's analysis of the information it gathered. See supra note 103 and accompanying text.
When we enforce or support an individual's ignorance in order to give effect to his reasons, we are supporting either his autonomy, meaning his ability to make independent choices concerning his own destiny, or his privacy, meaning his interest in maintaining a private sphere into which the rest of us do not intrude without permission. But a society may also have its own reasons for supporting ignorance, so that it acts not to respect autonomy or privacy (even though it objectively might be doing just that) but to meet other social goals. In between these two poles, society might act to support an individual's choice for ignorance, not to meet its own goals but to serve what society deems are the best interests of the individual, either those an individual would have held after rational reflection or those the society thinks he should have.

Of course, these are the options confronting society in determining how much weight to afford any individual interests, not just ignorance interests. I do not expect ever to read a simple, grand unified, prescriptive theory of autonomy from which the proper societal response to every particular situation can be derived. Whether an elegant theory of everything will ever arrive, it is not my project here.

Rather, I will briefly discuss several discrete issues raised by the special problem of unwanted knowledge. First, I will consider how under different conceptions of autonomy we might analyze the ignorance interests identified in the last Part. Next, I note an important difficulty with satisfying actual knowledge preferences—the tendency of polling to convey information that would frustrate an ignorance preference. Third, I review several societal objectives that we might wish to advance instrumentally through knowledge regulations. Finally, I consider some legal tools that we might use to protect or attack ignorance interests.

139 I am referring here to what Graeme Laurie calls “spatial privacy.” Laurie, supra note 42, at 27. The distinction Laurie draws is between spatial privacy, “a state of nonaccess to the individual’s physical body or psychological person,” and “informational privacy,” an interest in maintaining control over personal information. Id. Spatial privacy resembles the privacy interest Solove identifies as that against “intrusion.” Solove, supra note 133, at 552–53. Solove intends to identify with this label our interest in being let alone and in maintaining voluntary seclusion from both information, like junk mail, and physical and social intrusions. Id. at 553.
The shape of knowledge, and its character as nonrivalrous, nonexclusive, and sticky, results in the appearance of certain conflicts and considerations that do not appear in allocating movable goods or real property. We have seen something of this already in reviewing individual ignorance interests. I will focus on these characteristics that make knowledge regulation a harder, or at least different, problem than, for example, real estate regulation. With this limited scope in mind, let us consider some of the special problems that knowledge poses for autonomy, instrumentalism, and regulatory tools.

A. IGNORANCE AND AUTONOMY

1. Existing Approaches. One reason to prevent the dissemination to an individual of some information is the individual’s own desire not to receive it. A presumed moral obligation to support individual autonomy has been used by several authors as the underlying rationale for recognizing a “right not to know” particular kinds of information. Some appear to assume effortlessly that, at least as to certain forms of knowledge, a “right not to know” is fundamental and worthy of constitutional protection. When considering certain highly charged information transactions, respect for individual choice can appear to be such an obviously essential attribute of freedom or engrained social value that support for autonomy-promoting legal rules scarcely seems to need justification.

For example, mandatory HIV testing laws have been decried for their unconstitutionality, the authors more or less assuming that such laws burden a fundamental right to privacy. Others have similarly argued that giving a patient a right to refuse genetic testing, or its results, is justified as vindicating a patient’s autonomy, a “basic bioethical principle.” As Andorno explains,

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140 See infra notes 143–45 and accompanying text.
141 See infra note 142 and accompanying text.
143 Andorno, supra note 43, at 436.
though such choices are often justified by a rational interest in remaining free of the psychological harm that might follow from receiving test results, the right to assess that harm and make a choice whether to know lies solely with the patient.\textsuperscript{144} Adopting wholesale Mills's classical definition of autonomy, these authors argue that freedom of choice should be limited only to the extent that those choices would harm others.\textsuperscript{145}

Various international agreements and national laws include explicit protection for patients' rights not to be informed. Article 10(2) of the European Convention on Human Rights and Biomedicine states: "Everyone is entitled to know any information collected about his or her health. However, the wishes of individuals not to be so informed shall be observed."\textsuperscript{146} Andorno notes that this provision embodies a strong pro-autonomy position: "The Explanatory Report to the Convention justifies the right not to know by saying that 'patients may have their own reasons for not wishing to know about certain aspects of their health.'"\textsuperscript{147}

Not all such edicts are as unflinching in their support for patients' autonomy. For example, the Dutch Code provides that "[i]f the patient has expressed a wish not to be informed, information shall not be provided, except where the interest of the patient is outweighed by the harm to himself or others which may ensue from withholding it."\textsuperscript{148} This provision incorporates a "best interests" limit even on choices that would affect only the individual himself.

Because they operate only within the confines of a content-specific subset of knowledge choices, these approaches do not offer a general principle or set of principles to help us decide how much weight, if any, to give to individuals' own desires (or even the usual

\textsuperscript{144} Id. at 436–37.
\textsuperscript{145} Id. at 437; Roger Brownsword, An Interest in Human Dignity as the Basis for Genomic Torts, 42 WASHBURN L.J. 413, 455 (2003).
\textsuperscript{146} Convention on Human Rights and Biomedicine art. 10(2), Apr. 4, 1997, Europ. T.S. No. 164. Other conventions and national laws provide for a right not to know. See, e.g., Universal Declaration on the Human Genome and Human Rights, G.C. Res. 16, art. 5(c), U.N. ESCO, 29th Sess. (Nov. 11, 1997) (protecting rights of individuals to not be informed of genetic exam results); Andorno, supra note 43, at 436 (describing similar provisions in French, Dutch, Belgian, and Hungarian health laws).
\textsuperscript{147} Andorno, supra note 43, at 436 (footnote omitted).
\textsuperscript{148} CIVIL CODE art. 449 (Neth.), available at http://www.healthlaw.nl/wgboeng.html (emphasis added).
desires rational individuals have) in arbitrary instances in which knowledge may be unwelcome. Instead, they pick out particular information-providing situations thought to intrude on individual freedom or privacy and analyze the competing interests involved in those situations.

This ad hoc approach has merit. After all, whatever general principles we might develop we must ultimately return to narrower applications. If, however, there are some general principles at work, they could bring a bit more order and rigor to the process of developing domain-specific legal rules. The goal is to develop analytical instruments that are both less ad hoc and less blunt, so that changes in factual context require re-application of the same set of tools, rather than repeated resort to first principles. With this in mind, I will proceed to analyze more closely the autonomy interests at stake in the ignorance interests identified in the prior Part.

2. Knowledge Affecting Conduct. The interest in avoiding provocative or inhibitory knowledge lies in avoiding difficult choices, or in preserving easier ones. An actor who avoids such knowledge prefers to make an uninformed choice in order to engage in desired conduct or to avoid undesirable conduct. Knowledge would pressure him to make a different choice—one he does not wish to make. Thus, it is natural to view unwanted knowledge of these sorts as infringements on the holder's autonomy, as it inhibits the actor's ability to choose conduct that accords with his true, present desire.

Aiding the actor in remaining ignorant, however, is necessarily consistent only with certain conceptions of the autonomous pursuit

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149 For example, the above-cited articles arguing for strong, individual rights to decline HIV testing depended for much of their force on the fact that even in 1996, HIV was still viewed as a death sentence (and the prevention of vertical transmission was poorly understood). See supra note 142 and accompanying text. An HIV diagnosis in 1996 carried more social consequence than it does today. See Closen, supra note 142, at 462–63 (“Since an individual infected with HIV may look forward to several years in an asymptomatic state, many people may prefer several years of good life without the constant torment of knowing of their sentences of death from HIV infection.”); Levinson, supra note 56, at 88–89 (noting possible medications that might slow onset of AIDS). Of course, today an HIV diagnosis is still a profound event in the life of an individual, and perhaps the uncommon but merciless commands of constitutionalism should still have some regulatory role. It is plain, though, that people may often have serious interests in when and how to obtain information that do not rise to the level of constitutionally protected rights.
of well-being, those that involve achieving optimal mental states and those concerned with actual preference satisfaction. These theories of autonomy focus on the actor’s own preferences and are unconcerned with any factual, logical, and value-related mistakes the actor may make in choosing preferences or in making choices consistent with the chosen preferences.

But autonomy may also be defined by reference to the actor’s ability to satisfy not his actual desires but his “ideal preferences,” those he would hold if fully informed and deliberative. Rules that tend to promote an actor’s ideal preferences paternalistically correct his mistakes of fact and logic but do not obviate his subjective evaluations of the worth of various options.

Remaining ignorant in the face of difficult choices is often not consistent with a theory of autonomy based on the satisfaction of ideal preferences. To ignore information that might lead one to make a different choice is precisely the kind of mistake of fact or logic that an ideal theory would correct. Thus, only in a regime committed to actual preference satisfaction would we invariably give great weight to individuals’ interests in remaining ignorant of provocative or inhibitory knowledge, which of course must compete with society’s own interests.

There are important situations in which the choice to have one’s conduct determined by a consciously limited dataset is perfectly rational. Most law professors, and many teachers in other disciplines, are familiar with “blind grading.” When grading exams, we intentionally deprive ourselves of information that would match exams with names. We do this in part, clearly, to serve our

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151 Id. at 1680; see also Aditi Bagchi, Deliberative Autonomy and Legitimate State Purpose Under the First Amendment, 68 ALB. L. Rev. 815, 817–18 (2005) (explaining concept of “deliberative autonomy” as interest in being treated “in a manner consistent with their capacity to think for [one’s self]”). There are a range of such theories that require more or less information and more or less deliberation. Id.

152 The latter is the office of objective theories of value. Lewinsohn-Zamir, supra note 150, at 1686.

153 The other, obvious, reason that we grade blind is to avoid students’ drawing the inference that we used their identity to arrive at a grade. This is a form of bad inference knowledge, which I do not treat separately from these categories, as it is, for autonomy
interest in avoiding provocative knowledge. If I know which student wrote the exam I am grading, it might lead me to assign a different grade than if I did not know that information. If we believe, as most of us do, that it would be better for grades on exams not to depend on the identity of the exam taker, then we must conclude that it would be preferable not to know the identity in the first place. Of course, we all hope that this is not true, that we could retain objectivity even with the information. But humble about our cognitive deficits in this regard, we resort to blind grading.

This is only one of the more familiar of a large number of examples. Consider the very purpose of the Federal Rules of Evidence, with its myriad rules that require keeping information from jurors so “that the truth may be ascertained and proceedings justly determined.” Consider the sailors who accompanied Odysseus and who dutifully stuffed their ears to avoid hearing the Sirens’ call. Consider Odysseus himself, who tied himself to the mast so that he could receive information, information that provided its own pleasure, and yet act as though he had not.

Where the avoidance of provocative or inhibitory knowledge represents a conscious effort to avoid cognitive defects—that is, an effort to enhance the rationality of decision making—we would expect more ready societal support for ignorance. Where it represents an effort to avoid making a rational decision, legal support for the effort might only be justified in those situations in which actual autonomy is our primary concern. And only the most “private” decisions, those intimately affecting our sense of self and

154 Fed. R. Evid. 102. Interestingly, one commentator has argued that the goal announced in this rule is “to position its triers of fact in such a way that they may acquire justified true belief (JTB), which is traditionally the tripartite criteria of knowledge.” Alani Golanski, Why Legal Scholars Get Daubert Wrong: A Contextualist Explanation of Law’s Epistemology, 22 Whittier L. Rev. 653, 654 (2001). This may similarly be the goal of genetic testing in conjunction with counseling. The test results alone would convey information, but not the kind of knowledge we collectively think best decodes the information.

155 Homer, The Odyssey 241 (Rodney Merrill trans., Univ. of Mich. Press 2002). Note the reproduction here of the dynamic explored above between regulation of conduct and avoidance of knowledge. See supra notes 86–94 and accompanying text. Avoidance of knowledge is likely to be the safer route, but regulation of conduct may often be cheaper and less intrusive.
having the least potential impact on others, will probably qualify for such protection.

It is worth noting that the interests in remaining ignorant of provocative and inhibitory knowledge are not equals for purposes of autonomy promotion. Provocative knowledge drives its holder to perform unwanted conduct. Preventing ignorance of provocative knowledge thus tends to compel the performance of specific conduct. Inhibitory knowledge, by contrast, will discourage certain conduct.

Laws that compel conduct are often thought to be more problematic from an autonomy perspective than laws that prevent conduct. In tort law, for example, duties to refrain from conduct are common, while duties to perform conduct arise only in special situations, such as where the duty holder is in a special relationship with the duty beneficiary. And in the criminal law, banning conduct is common; requiring conduct, absent the voluntary assumption of a position that creates a duty to act, is virtually unheard of.

For this reason, we should expect laws that operate to encourage transmission of inhibitory knowledge to be more readily justifiable than those that encourage transmission of provocative knowledge.


Moving on to evaluative framework harms, it would appear that we have found an ignorance interest that just about any theory of autonomy can get behind. Because rational deliberation can end in the conclusion that the harms from the knowledge will outweigh the benefits of knowledge, remaining ignorant of evaluative framework harms can satisfy even an individual’s ideal preferences.

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156 Eric Rakowski, The Sanctity of Human Life, 103 YALE L.J. 2049, 2089 n.102 (1994) (“Political morality and constitutional law typically make coerced action more difficult to justify than coerced inaction, because requiring somebody to act usually infringes his bodily autonomy and personal freedom more than does compelling him to refrain from acting. The government can more easily forbid somebody from selling one of his kidneys than it can require him to sell one to the state. The government can ban obscene publications even if it cannot require people to pen edifying verse.”).

157 One must be careful in sorting through this distinction, though, as inhibitory knowledge can be difficult to distinguish from provocative knowledge. For example, HIV status information is inhibitory knowledge to the extent that it would lead one to refrain from risky sex. But the same knowledge, as it affects the same conduct, could also be seen as provocative as it tends to compel the taking of precautions during sex. The line dividing the two is, obviously, no more defensible than that between commission and omission.
However, our ability to anticipate the psychological effects of information is notoriously limited. Carl Schneider argues, with some evidence, that as individuals we (a) do not really have preexisting evaluative frameworks for most things, but rather engage in ad hoc framework construction in the course of making and justifying a decision, and (b) are exceedingly bad judges of our enjoyment and distress at future events.\(^{158}\)

If this is the case, then we may opt not to leave this calculation completely to the individual concerned. Perhaps there ought to be an expanded role for the intermediary to help avoid misjudgments. Schneider marshals evidence, however, that prompts a dim view of even the most lavish information-providing procedures to convey true understanding and an ability to choose rationally.\(^{159}\) Under an ideal preferences theory, we might still conclude that an individual is better off without the knowledge. And there may be a host of reasons besides pure rationality to leave this decision substantially to the affected individual. Yet, the evidence should cause us to pause before making conclusory assertions that the individual himself is best positioned to anticipate the ill effects of knowledge.

Even if an individual has no rational basis for wishing to remain ignorant, meaning the putative disruptive knowledge would either turn out not to be disruptive or at least not so disruptive as to wipe out the benefits of knowing, those favoring Mill's liberty principle would likely still favor permitting and even aiding in ignorance.\(^{160}\) For disruptive knowledge, by definition, has no impact on the future course of conduct of the holder. Knowledge or ignorance—which of the two is chosen matters only in the mind of the one who might hold the knowledge. If ignorance harms, at most, only the one who chooses it, many would argue that the choice is worth protecting.

4. Insecure Knowledge. Consider an individual whose interest in ignorance is purely one of maintaining the secrecy of the suspect information. The individual gauges the insecurity risk on the basis of both the risk he perceives that the information will spread if he


\(^{159}\) See id. at 418–20 (finding patients had strong feelings concerning treatments they did not comprehend).

\(^{160}\) See supra note 145 and accompanying text.
receives it and the gravity of the harms that will occur if the information spreads. What justification is there for leaving those determinations to the affected individual?

Though there is some reason to believe that the individual is well suited to evaluate the gravity, to him, of the harms that might result from dissemination, it seems purely a matter of context whether the individual has any competence to judge the level of risk of dissemination. He certainly does not appreciate the inner workings of county health departments, adoption offices, or other information storehouses. On the other hand, the HIV positive individual is probably better suited to estimating the risk that one of his partners, if notified that he has been exposed to HIV under a partner notification program, will deduce the source of the exposure.

While there is a greater justification here than with regards to other forms of knowledge for making a societal judgment concerning the risk of harm, it is not absolute. An information-providing program whose security depends on the personal situations of the knowledge recipients, whether the strength and porosity of their social networks, the degree to which the provision of information will be conspicuous, or the recipients' own abilities to maintain security, ought to afford some respect to the recipients' own, subjective security evaluations. And similarly, other factors, such as the salience of the information within the participants' networks, point toward taking seriously the recipients' subjective evaluations of potential harms of information that is accidentally broadcast.

B. THE PROBLEM OF ASCERTAINING PREFERENCES BEFORE DISSEMINATION

If we do strive to promote autonomy with our knowledge laws and practices, we will often run into a practical problem. A preference for ignorance is often difficult to measure precisely because ignorance is dispelled the instant it is pointed out. Without asking directly, it is impossible to be absolutely certain whether an individual wants, at a given moment, to learn some piece of information. But, asking that question itself conveys information,

161 And, as just discussed, there is reason to doubt even that.
diminishing to at least some degree the ignorance the individual might have wanted to maintain. Imagine a doctor telling you that, while treating you, she has become aware of significant information about your future health but that she needs your consent to say more. The very act of seeking your consent conveys some information, though imprecise information, concerning risk. In this way, those who truly prefer ignorance in such matters may now find it difficult to resist learning more, despite wishing they had never known they were at risk to begin with.

If we are committed to respecting an individual's own reasons either for ignorance or for knowledge, how can we go about ascertaining their preferences? How do we distinguish those bits of information an individual would want to know from those he would not? What questions should we ask, and what evidence should we consider?

Thankfully, it is sometimes not at all injurious to the individual's preferences to ask whether he wants to know something. The lawyer in the mode of client zealot, for example, may genuinely not wish to know that the client's proposed testimony is false, and that preference may persist no matter how close we come to revealing to him information that suggests the testimony's falsity. For it is the ultimate question on which he wants to remain ignorant, because only actual knowledge would require him to disclose the information to the court or to refuse to use the evidence. Mere reasons to suspect one way or the other might not matter to him at all.

In general, there are a couple of clear answers to the question of how we go about ascertaining preferences. Bad inference knowledge and insecure knowledge do not present the preference acquisition problem. With each, the objection of a potential knowledge recipient is to what their possession of the knowledge would signal to others, not to the effect on themselves of the substance of the knowledge. Thus, polling is only a problem with autonomy-constraining

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162 See Dorothy C. Wertz & John C. Fletcher, Privacy and Disclosure in Medical Genetics Examined in an Ethics of Care, 5 BIOETHICS 212, 221 (1991) (noting phenomenon with respect to Huntington's Disease).

163 See, e.g., MODEL RULES OF PROF'L CONDUCT R. 3.3 cmt. 8 (2008) ("[P]rohibition against offering false evidence only applies if the lawyer knows that the evidence is false. A lawyer's reasonable belief that evidence is false does not preclude its presentation to the trier of fact.").
provocative and inhibitory knowledge and with disruptive knowledge and most obviously with the latter.

With these problematic types, clearly, we could err on the side of being too revelatory. Faced with the possibility of abrogating autonomy by revealing too little or abrogating it by revealing too much, it might make sense to reveal too much. Though doing so may pose choices the individual wishes to avoid and a risk of psychological harm, the insult of underinforming is arguably greater. The core of autonomy is freedom of choice, and underinforming interferes directly with that freedom.\textsuperscript{164}

On the other hand, we might risk erring by overwithholding. To inform is to pierce a bubble of privacy. We should be sure, the argument goes, that the individual wants a bit of potentially explosive information before we assail her with it. "The presumption is that individuals' psychological privacy should be respected unless there is good reason not to do so."\textsuperscript{165}

Neither side of this debate makes absolute claims. We often do not know for sure that a patient wants to be informed that he has an arterial blockage that requires a medical or surgical procedure to treat. We may have no reason to think he does not wish to know this information, and we think that any rational person in similar circumstances would want to know. And so, we inform. Similarly, we already recognize the propriety of a doctor's withholding information when the physician determines the information would be harmful to an unstable or depressed patient, especially if there is no effective treatment.\textsuperscript{166}

If our aim is to give effect to an individual's actual or ideal preferences, then we should try to ascertain those preferences without negating them. It would seem that the "best interests" approach is suited to making an initial, autonomy-respecting determination.\textsuperscript{167} That is, we should presume first that an

\textsuperscript{164}See Andorno, supra note 43, at 438 ("[T]he right not to know cannot be presumed, but should be 'activated' by the explicit will of the person.").

\textsuperscript{165}G. Laurie, Commentary, A Response to Andorno, 30 J. MED. ETHICS 439, 440 (2004).

\textsuperscript{166}This is the so-called "therapeutic privilege." See TOM L. BEAUCHAMP & JAMES F. CHILDERESS, PRINCIPLES OF BIOMEDICAL ETHICS 84 (5th ed. 2001) (describing therapeutic privilege as controversial exception to rule of informed consent).

\textsuperscript{167}Again, I am considering for the moment only those situations in which we have determined that an individual's own interests can be determinative.
individual's desires match those any ordinary, rational person would have in his position. Under this presumption, nearly all interactions will be found not to implicate a rational interest in not knowing.

Once the burden has been placed, either in favor of or, rarely, against dissemination, particularized evidence concerning an individual's preferences can sometimes overcome the initial presumption. Such evidence might come in the form of statements of which the intermediary is aware or decisions made with respect to other information.

Note that the task here is much more difficult than in, say, end-of-life cases. There, the task of ascertaining individual desires is made easier because (a) more people anticipate this kind of dilemma and thus indicate, sometimes even formally, their preferences in advance, and (b) we can more freely delegate the decision to family members who are likely to be best positioned to know the patient's true wishes. So too in *cy pres* cases, if we wish to reform a charitable trust to match as closely as possible the disposition the settlor would have reached, there is often at least some indication from the settlor regarding his or her ultimate intent.

In "right not to know" dilemmas, we will often lack direct information about what the potential recipient would want and also will be unable to probe either him or those best positioned to know his desires. Those who have the sorts of relationships with an individual that would give them insight into his or her likely information preferences are exactly the class of individuals that could not be counted on, and may not even be able or permitted, to maintain the confidentiality of the information that would be kept from the individual.

Because the decision making process will be insulated from the one from whom information is being kept and others who take an

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168 Though they may do so quite badly and unreliably. *See* Schneider, *supra* note 158, at 425 (discussing living wills).

169 Or, at least, so the argument goes. It may well be that, precisely because of their attachments to their loved one, family members often have preferences adverse to those of the dying patient. It is likely that similar conflicts of interest would arise if family members were delegated the choice whether their loved ones should be informed of potentially damaging information.
interest in her affairs, there is a special danger that an intermediary administering a "best interests" presumption will either consciously or unconsciously substitute his own preferences and interests for both archetypal "reasonable preferences" and the affected individual's interests. That is, beginning with a best-interests approach carries the danger that the intermediary's own preferences and interests will count too much, either because the intermediary is insulated enough to enable corruption or for purely innocent reasons. When reflecting on what people generally desire, we sometimes substitute what we would desire for ourselves, however idiosyncratic this judgment might be.\footnote{The reason being that we are prone to believing that our own decisions are more representative than they really are. See Lee Ross, David Greene & Pamela House, The "False Consensus Effect": An Egocentric Bias in Social Perception and Attribution Processes, 13 J. EXPERIMENTAL SOC. PSYCHOL. 279, 292–93 (1977) (showing that whether subjects believed acquiescence was common or uncommon affected their decision making). Interestingly, this effect was not observed when participants were given some representative information concerning another's prior decisions and incentives for proper assessment. See Dirk Engelmann & Martin Strobel, The False Consensus Effect Disappears If Representative Information and Monetary Incentives Are Given, 3 EXPERIMENTAL ECON. 241, 253 (2000) (noting that study's results indicate that "the false consensus effect might not be very relevant for economic applications" but that effect might be real if observer does not have access to "explicit information without uncertainty" regarding earlier decisions of their counterpart).}

The rise of patient autonomy as a central tenet of medical ethics represents the adoption of a belief that people's preferences concerning their treatment can and do vary widely, and that doctors, while better positioned to predict the consequences of various treatment options, are inferior to patients themselves in valuing various outcomes and weighing risks. This assertion can apply to any intermediary charged with deciding whether to disseminate information the recipient may not want. While others may be more expert in interpreting such information, only the recipient can decide whether he or she is better off with or without it.

There are circumstances, however, that ought to increase our confidence in the "best interests followed by evidence" approach. If the best interests analysis is performed under stable professional norms, and especially where those norms are publicly revealed and debated, we can be more confident that such analyses will not
become proxies for the intermediary's own preferences. Professionally agreed upon factors and weights are important, as is the need to document the analysis. For example, in the nascent genetic testing debate, all seem to agree that the lack of any treatment for a genetic condition revealed by a test weighs against disclosing the information to the patient in the absence of any indication that the patient wants this information.\footnote{See Andorno, supra note 43, at 435 (noting this information may lead to depression); Brownsword, supra note 145, at 456 (stating that, in this situation, not telling should be default position); Laurie, supra note 42, at 50 (recommending no legal redress for a reasonable decision not to disclose).}

More generally, where the harms the information might cause are extremely subjective and where they vary widely in magnitude among the population, we should be cautious in withholding. Whatever choice we make in such a context is prone to large error.

C. SOCIETY'S REASONS

Satisfying individual desires cannot be the sole concern of any society. As a collective, we must be alert even to the gentler ripples that emanate from the activities of individuals. After all, social problems emerge not only as the direct conflicts among individuals but also as unhappy collisions of our society's rules against the sea of individual actions. Problems concerning knowledge distribution are no different.

I will not analyze here all social justifications for enforcing ignorance or mandating knowledge. The concern of this Article is only with knowledge an individual finds unwelcome. Thus, this discussion of society's instrumental interests is confined to those rationales that relate directly to the individual's own interests in ignorance. Though there may be many of these, I will start by briefly discussing two: disengagement and harm to others.

1. Disengagement. As with any unwelcome requirement, a knowledge mandate will be resisted by those who do not want knowledge. If knowledge is the price of engagement in some social interaction, there will be some who decide that the price is too high to justify the burden of the knowledge they fear they might gain.
For example, required prenatal HIV tests may drive women away from prenatal care altogether.\textsuperscript{172} So too, one might imagine, would mandatory genetic tests.\textsuperscript{173} In each, the collective value we place on testing must be set against the anticipated cost of those who opt out in order to achieve ignorance. Though we might believe, perhaps even rightly, that all pregnant women should receive prenatal HIV tests in order to protect their children, we must be aware that mandating testing will drive some women from seeking prenatal care at all. Without even considering the value we place on satisfying such a woman’s own preferences, though we surely must include that in our balance, we must still evaluate the costs and benefits that will be incurred when choosing between a mandate, with its prenatal opt-outs, and no mandate, with its testing opt-outs.

2. Harm to Others. Chadwick points to another reason society may choose dissemination where an individual would choose ignorance.\textsuperscript{174} Set against the individual’s self-interest in ignorance is the individual’s duty of solidarity. Where the knowledge one could gain would have consequences for others, choosing not to know may have the effect of hiding the information from such others, depriving them of a choice whether to know or not to know.\textsuperscript{175}

What Chadwick calls a duty of “solidarity,” that sometimes may compel learning in order to alert others, is at bottom a duty to aid others. When there should be such a duty to help others is a question well known in tort law. There is, generally, no duty to rescue, absent a special relationship between the victim and the would-be rescuer.\textsuperscript{176} Chadwick discusses a possible duty of solidarity with respect to the group of one’s genetic peers, those with whom one shares relevant genetic similarities. Most often this will

\textsuperscript{172} See Erin Nicholson, Mandatory HIV Testing of Pregnant Women: Public Health Policy Considerations and Alternatives, 9 Duke J. Gender L. & Pol’y 175, 183–84 (2002) (“There is reason to believe that the women for whom prenatal care and the HIV test are most important, may be the very women who do not come in for care if they know it is predicated by an HIV test.”).

\textsuperscript{173} See Andrews, supra note 36, at 984–85 (“The fear of undergoing involuntary genetic testing may deter women from seeking medical care during pregnancy . . . . ”).

\textsuperscript{174} Chadwick, supra note 41, at 20.

\textsuperscript{175} Id.

\textsuperscript{176} See 57A Am. Jur. 2d Negligence § 81 (2004) (stating general rule that there is no common-law duty to rescue, but that duty may arise from some special relationship).
be one's own family members.\textsuperscript{177} Does mere membership in a grouping of the genetically similar give rise to a special relationship triggering a duty to rescue?\textsuperscript{178}

Duty to others is, in different contexts, a rather uncontroversial reason to force knowledge, regardless of the idiosyncratic desires of the subject. This duty is easiest to see and to support when the subject has placed himself in a position in which others are dependent on his knowledge. For example, trivially, passengers on a plane have the support of society in demanding that their pilot be forced to know the details of landing procedures at their destination airport, no matter the pilot's irrational desire to live dangerously. Agreeing to know such things is implicit in becoming a pilot. Though an individual's view of his role may differ from that society takes, when that role is heavily regulated to prevent harm, that is when the role presents substantial public welfare concerns, we often dictate duties to know and to learn certain information. Somewhat less trivially, engaging in sexual activity with another may also justify imposing a duty to know rather than to remain ignorant. There is, quite obviously, a relationship, however fleeting, and each partner is dependent on the other to acquire information concerning the risks posed by sex.

Let us return to our lawyer who astutely avoids learning information that may reveal crucial evidence to be false. Ellman gives several reasons why we should not permit lawyers to hide from the truth in criminal cases, even when they believe it would help their clients.\textsuperscript{179} First, he is skeptical concerning the abilities of most clients and lawyers "to ensure that the lawyer learns what she must but does not hear what she would rather not."\textsuperscript{180} Secondly, whether it concerns an individual lawyer or not, avoiding the truth may become a staple of the lawyer-client relationship, blossoming beyond the bounds the lawyer anticipated.\textsuperscript{181} Finally, Ellman notes that the lawyer as truth-avoider is inconsistent with the role society

\textsuperscript{177} Chadwick, \textit{supra} note 41, at 14–16.
\textsuperscript{178} See \textit{supra} notes 34–35 and accompanying text. For example, does Susan's sister have a valid claim that Susan has a duty to be tested?
\textsuperscript{179} Ellman, \textit{supra} note 111, at 905–06.
\textsuperscript{180} \textit{Id.} at 905.
\textsuperscript{181} \textit{Id.}
has defined for lawyers in our legal system; while we do not demand that they serve as neutral assistants in inquisition, neither are they instruments for the advancement of false claims.\textsuperscript{182}

The first two of these reasons appear to be consistent with an ideal preferences, autonomy approach. The lawyer who hides from the truth is surely interested in advancing his client's interests to the extent possible, but, in general, we are skeptical that by avoiding knowledge the lawyer is in fact fulfilling his own end. The third, however, asserts simply that we do not want lawyers to engage in this conduct because that is not how we have defined lawyering. The lawyer's ignorance is a threat to a system in which the lawyer plays a role, and so his preference for ignorance may be displaced by the broader social value.

D. REGULATORY TOOLS

Legal options to negate or support an interest in not knowing are not difficult to compile. In general, we might look for tools that mandate or prohibit knowledge transfers or that alter the incentives for knowledge acquisition of avoidance. Each of these could target potential knowledge recipients or intermediaries.

1. Focus on Intermediaries. Law already regulates many important knowledge intermediaries, like doctors. Informed consent laws require health care providers to convey information about treatment to patients in hopes that patients will then have the knowledge necessary to make decisions that accord with their true preferences.\textsuperscript{183} When there is reason to think an individual would prefer to remain ignorant of some of this information, we could, through law, ignore this preference and continue to enforce the duty to convey all relevant information. We could, alternatively, absolutely forbid the conveyance of suspect information. But it is also possible that law could delegate to the caregiver this highly

\textsuperscript{182} See id. at 906 ("[W]e as a society do not have lawyers in order to enable people to prevail on false claims.").

\textsuperscript{183} See RUTH R. FADEN & TOM L. BEAUCHAMP, A HISTORY AND THEORY OF INFORMED CONSENT 25–26 (1986) (noting that failure to obtain informed consent constitutes tort grounded in right of self-determination and physician's fiduciary duty to his or her patient).
sensitive decision. This discretion could be absolute or held to some legal or professional standard.

With respect to third party disclosure of suspect information, the law could force disclosure, forbid disclosure, or leave disclosure within the third party’s discretion. It is important, though, to keep in mind that the regulatory choice we make will affect more than the information exchanges between intermediary and client. It is not possible to affect one aspect of most such relationships without simultaneously affecting other aspects. Mandating or encouraging dissemination of unwanted knowledge will discourage some from interacting with knowledge intermediaries at all.184

2. Focus on Potential Holders. Of course, another regulatory target is the individual who wants to avoid knowledge. Law can forbid anyone from transferring the suspect information to him, perhaps through tort law.185 Law might require the individual to learn the information, despite his wishes.186 Law may play no role at all. We might also create incentives for knowledge (or remove incentives for ignorance) in the form of (a) rules that create liability for conduct that knowledge would have prevented or (b) rules that abrogate the advantages of ignorance (willful blindness).

a. Shifting Ignorance Risk Through Liability. An autonomy-respecting and yet social utility enhancing option is to permit the knowledge avoider to remain ignorant if he chooses, despite the risk of some harm that might be averted by knowledge, but make the avoider liable for the injuries the knowledge could have averted.

Whenever law makes one liable based on what one “should have known,” it abrogates individuals’ interests in not knowing. If a lead paint statute makes it illegal to fail to disclose the existence of lead paint when an owner knows or should know about it, the statute interferes with a seller’s interest in remaining ignorant. The force of that interference varies with the extent of liability imposed.

The effect of such rules is to place the risk of ignorance on the actor who fails to become informed. So our homeowner is not forced,

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184 See supra notes 172–73 and accompanying text.
185 See Brownsword, supra note 145, at 455–62 (arguing for tort duty not to inform).
186 For example, to enforce a duty to others or a duty created by the individual’s chosen role.
by law, to test his home for lead, but when he remains ignorant he assumes the risk of paying for injuries that result from any lead that is there. If the law requires full compensation for such injuries, then a "should have known" rule will almost certainly compel knowledge, as lead paint injuries can be severe and costly.\footnote{See generally Chris A. Milne & Robert K. Rainer, Milne Law Offices: Lead Paint Litigation—Challenges in the 1990s, http://www.childtrust.com/pages/articles/challenge.html (last visited Sept. 22, 2008) (providing summary of 1990s lead paint litigation).}

HIV testing provides another interesting example. In many jurisdictions it is criminal to have unsafe sex knowing that one is infected with HIV.\footnote{See generally State Statutes, supra note 71 (noting, e.g., section 5-14-123 of the Arkansas Code (criminalizing sex with uninformed partner by one who knows he or she is HIV positive)).} Acting with a purpose to spread the virus is generally not required. Such statutes do not, either directly or indirectly, require an individual to obtain an HIV test. In fact, they provide \textit{precisely the opposite incentive}, at least for those who wish to engage in risky sex.

But one can certainly imagine statutes that create liability, civil or criminal, for engaging in activity that has some nontrivial likelihood of transmitting the virus when one knows \textit{or should know} that he is infected.\footnote{Alabama, at least, has a statute that might encompass such a duty: "Any person afflicted with a sexually transmitted disease who shall knowingly transmit, or assume the risk of transmitting, or do any act which will probably or likely transmit such disease to another person shall be guilty of a Class C misdemeanor." ALA. CODE § 22-11A-21 (West, Westlaw through 2008 Sess.) (emphasis added).} Under this regime, the incentive is at least partially reversed. Individuals must internalize the risk of enforcement before engaging in the risky conduct, having declined to be tested. Here (some of) the cost of ignorance is shifted to the actor, the lesser of the expectation of enforcement or foregoing desired conduct.

Going further, consider a statute focused on preventing the spread of a dangerous pathogen that is more casually transmitted than HIV. A statute similar to the hypothetical one just considered might make everyday conduct, maybe even riding a subway or going to a movie, illegal when performed by those who should be aware that they are infected. Again the costs of ignorance are placed on
the actor, but the costs come in the form of (a) the expectation of enforcement or (b) the cost of disengaging from everyday activities.

So, we see that in general, laws that create either negligence-type or strict liability shift the risk of ignorance to the actor, in effect promoting rational autonomy while protecting the interests of others. The actor must now weigh the total costs to him of becoming informed against the total costs of ignorance, generally the lesser of the expectation of enforcement and the cost of not performing the conduct for which the actor could be liable.

b. Abrogating the Benefits of Ignorance. There are, to be sure, situations in which we want people to choose information over ignorance, if they are aware of the risk their conduct might create. But, we may nonetheless not want to sweep up all negligent ignorances by imposing strict liability. Nor do we want to impose knowledge mandates.

Making this distinction is the office of the "willful blindness" doctrine, sometimes called the "conscious avoidance" doctrine. When avoiding the knowledge that would make an actor liable for his conduct is a conscious objective of the actor, liability that would ordinary require a defendant's knowledge is established despite the actor's ignorance. The willful blindness doctrine prevents an explicit calculation by the actor of the costs of being informed but permits other kinds of negligence without incurring liability. In short, it prevents one whose conduct would be criminal (or tortious) with the requisite mens rea from burying his head in the sand.

V. CONCLUSION

This Article is a step toward a fuller exploration of the problem of knowledge. This problem is broader than dealing with that subset of knowledge individuals themselves do not wish to have. Though we hear cries that information wants to be free and that more knowledge is better, that knowledge is power, I have shown

190 See, e.g., In re Aimster Copyright Litigation, 334 F.3d 643, 650 (7th Cir. 2003) (finding that "willful blindness" is knowledge in copyright law).
already that there are types of knowledge that we, ourselves, believe we are better off without.

But even knowledge individuals desire may, if acquired, be socially ruinous. A growing chorus of futurists, scientists, and other scholars is warning of the dangers of new forms of knowledge. Much of the focus of this modern disquiet is on potentially destructive (or disruptive) technologies, such as genetically engineered viruses and nanotechnology. Many worry that our rapidly expanding knowledge will make more and more destructive power available to an ever greater number of smaller and smaller groups. Indeed, it is a fortuitous accident of geology and physics that the production of atomic weapons requires a level of organization and commitment of resources typically mustered only by advanced nation states. But there is no guarantee that new, equally destructive technologies will be as taxing to master and to deploy. Rather, it is virtually guaranteed that some will not be.

The voices pressing for regulation are hardly revolutionary. For nearly as long as we humans have conveyed to one another the sort of persistent knowledge that can form the basis for action, factions of us have agitated against knowledge acquisition, or for regulation of knowledge, on religious, social, and scientific grounds. These groups have in common an argument that collective action is required to avert particular harms likely to flow from particular distributions of knowledge—whether these harms be to the broader group or to the knowledge recipient himself.

Through law, we regulate corporate disclosure and insider trading, disclosures relating to home purchases, private information, official government information, information relating to national security, and much more. Through social and other private controls, we mediate the acceptance of information conveyed by scientists and political pundits; we form groups devoted to fostering knowledge and groups devoted to resisting certain forms of knowledge; and we spend resources to keep information private and to discover information about others and the world.

The social and legal structure of modern knowledge regulation is complex and diverse. It comprises the collection of tools by which we collectively achieve distributions of knowledge that we deem right or desirable and avoids distributions we dislike. It is in this
sense that we can understand knowledge as a kind of property, by which I mean only the following. First, knowledge, though influenced in distribution and magnitude by law, exists without reference to law, like traditional forms of property. Though law may influence its creation and provide it protection, knowledge requires no set of laws to exist. Second, in any given bit of knowledge an individual may be granted some congress of potentially transferable interests. (It is hardly novel to suggest that at least some kinds of knowledge are a form of “property.” The entire field of intellectual property is premised on it.) Like other branches of property law, the law of knowledge is a loose collection of approaches with context-sensitive application, rather than a coherent, comprehensive branch of law, like tort or contract.

Knowledge, though, is distinct in important respects from most other resources that are subjected to various of the property law doctrines. First, it is not naturally exclusive—meaning that more than one person can know the same thing at once. It is also nonrivalrous, meaning that one’s knowledge is not diminished by another’s possession of the same knowledge. Third, it is transferred imperfectly via information. For this reason, the “law of knowledge,” though concerned ultimately with regulating the distribution of knowledge in society, has as its subject information.

Fourth, knowledge is deeply connected with the very idea of conscience. To regulate what someone is permitted to know is to regulate who they are. It is no surprise, with knowledge itself a quality lying at the intersection of property and conscience, that knowledge regulation is often a focal point of fights between those advocating individual freedom and those arguing for any number of conceptions of the collective good, national security, or individual, “spatial” privacy.

Finally, knowledge is sticky. It cannot be intentionally abandoned, only forgotten accidentally. Only avoiding exposure to

192 An important caveat: what one can do with knowledge may well be hampered by the ability of others to do the same thing based on the same knowledge. So while my knowledge of a secret formula is not diminished by another’s simultaneous knowledge of the formula, my ability to capitalize on the knowledge may well be. Thus, the property, as a store of value is rivalrous in the sense that only one instance of the knowledge can be used to realize that value.
information that one is able to decode will ensure that ignorance is maintained.

It is from this perspective and with these characteristics in mind that I have attempted to identify an individual's own interests in ignorance and the force of these interests. From interference with choice to disruption of psyche to maintenance of plausible deniability, sometimes we are truly better off as individuals not knowing things—that much is easy to say. The hard problem is to decide when we are better off as a society when our people choose ignorance.