Be careful what you read. The next thing that you read might change your life forever. The reason is that information is like a virus; it invades your consciousness and infects your thinking in more ways than you could probably ever imagine. Information spreads in this manner because of something that is called a “meme,” a construct based on the pioneering work of evolutionary biologist Richard Dawkins. Dawkins used the term “meme” to suggest both the English “memory” and the French word “meme” (meaning ’same’). Memes are the cultural version of a gene; they are contagious ideas, persistent traditions, infectious tunes, rapidly spreading styles, and just about anything else that encapsulates or embodies something that can be conceived. Memes can infect their human hosts, like viruses. Thus, memes effectively take possession of us; they won’t let go, even in the face of reasoned argument. Genes propagate by leaping from body to body; memes propagate by leaping from mind to mind.

In the new book, Cultural Software, Yale law professor J.M. (“Jack”) Balkin constructs a unified theory of human understanding based on the fundamental premise that memes are the building blocks of our “cultural software” and thus of culture. Balkin continues the evolution of the meme idea by suggesting that memes gain strength from being part of a system of cultural software. Cultural software is part of an “ecology” in which memes vie for survival.

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1 Robert Penn Warren, All the King’s Men 464 (1946).
Indeed, Balkin suggests, there is a superior form of cultural software, an idea of human justice that is "transcendent," providing a kind of standard for judging norms and refining culture.

For Balkin, the catchy (beware) phrase "cultural software" refers to many things. It refers to the "human tools of cultural understanding." (p. 3) Cultural software is also a theory for rethinking ideology, which Balkin understands as "the socially generated and socially sustained ways in which human beings understand and constitute their world." (p. 2) Perhaps most importantly, cultural software is also a "master metaphor" (p. 287) intended "to illuminate the ways in which human beings are constituted by and express their shared values within a culture." (p. 4) It refers to "cultural know-how" or the "abilities, associations, heuristics, metaphors, narratives, and capacities that we employ in understanding and evaluating the world," (p. 6) and forms the basis for a complex theory that treats the history of culture as the history of continuously upgrading cultural software. The scope of Balkin’s analysis is breathtaking, entailing the synthesis of such diverse fields as evolutionary biology, anthropology, memetics, hermeneutics, semiotics, psychology, philosophy, political theory, linguistics, law, religion, sociology, sexuality, and computer science. This synthesis seeks to clarify the sources of conceptions of ideology, including the means and processes by which humans shape and are shaped by cultural evolution.

The richness of Balkin’s thought is manifested when he applies his theories to concrete issues in law and politics. Take, for instance, his powerful analysis of racism in Part III of the book. On page 258, he suggests how racist ideological effects can be produced by dissonance reduction among subordinate groups, by conceptual imperialism among dominant groups, by faulty inferences from prototypes and salient examples, by concep-

He explains further on the same page that it is much more likely that racial attitudes are produced by many cross-cutting forms of human understanding, which, taken together, have deep roots in our tools of cultural understanding and hence possess great power over our imaginations. Racism [is] produced by many different kinds of cognitive tools, and these tools have repeatedly been used to create new ones, carrying into each new innovation their potential ideological effects. Unjust attitudes about race and gender are woven deeply into the fabric of our thought, and in this weaving more than one stitch and more than one thread have been used. Ideological mechanisms are the result of bricolage and circumstance; their heterogeneity and disorder are the best evidence of their historical emergence.

The inevitable question raised by this analysis is how to undo the ideological effects that produce racist thinking or behavior. The solution suggested toward the end of the book boils down to self-evaluation, self-criticism, and candor about one’s transcendent ideals and limitations of thought, experience, and perspective. As Balkin suggests on page 285, through cultural proliferation, human beings acquire new skills, new abilities, and new forms of knowledge; yet in this process they make themselves subject to ever new forms of hermeneutic power. Culture, in short, is a predicament, and the theory of ideology stands as a particularly apt symbol of this predicament. The study of ideology is the study of the deficiencies of our thought, but it is made possible only because our thought has already provided the means to think them.

In other words, our tools for understanding the world (and particularly for understanding
ourselves and the sources of our cultural identities) are imperfect, but they are good enough. We can use them to explore our understanding of the sources of our ideas and the limitations of that understanding. And we can use them to expand beyond those limitations, if only marginally, through self-evaluation or criticism.

I have three basic questions about Balkin’s analysis, each of which can be answered without much familiarity with the many fields on which Balkin draws. The first is: To what extent can we control the programming of our own cultural software? Much of the literature on which Balkin relies, including psychology, sociology, artificial intelligence, memetics, hermeneutics, and semiotics, suggests a deterministic view of human behavior. While Balkin repeatedly assures us that our cultural software both expands and limits our self- and cultural identities, the question left unanswered by his book is whether, and how much, our cultural software is constrained by forces beyond our control, such as our genetic makeup.

Balkin does not directly answer this question, but he does implicitly suggest one. Perhaps the best way to divine an answer is to find someone who understands his own cultural software and ask how much control that person has over its programming. Balkin appears to have a handle on how cultural software works, so he seems a likely candidate. If Jack Balkin can exercise significant control over the programming of his own cultural software, then he can become a useful model for the rest of us. If Balkin is incapable of achieving such control, then the prospects for the rest of us look dim.

The problem is that we don’t know Balkin and thus cannot know the extent to which he is in control of his own programming. To be sure, the voice of Cultural Software’s narrator is confident, authoritative, and neutral. That Balkin chose to write this book suggests that he believes he has achieved some useful perspective on his subject matter and that he expects others to understand his messages. Particularly, he expects the uninitiated to trust his careful summary, description, refinement, and critique of the arguments and insights of various great Western thinkers.

Yet Balkin also reveals himself – and consequently some of his own limitations – in many ways. To begin with, consider the first and last sentences of his book. The first sentence relates a story from the Talmud, while the last two sentences proclaim, “To participate in the growth and development of our cultural software is our historical destiny. It is our informational fate.” (p. 294) These sentences, along with several other references to the Jewish religion throughout the book (with the one notable exception of the last chapter entitled “Knowledge Made Flesh,” presumably a play on the New Testament), confirm that Balkin is in almost all likelihood either Jewish or quite familiar with Judaism based on personal experience. Moreover, he seems drawn to the idea that we need to make the best use of what we have because it would be a waste for us not to do so. Something grander demands that we do so – call it what you will, God, fate, the collective will.

I hasten to add that I too am Jewish, but do not necessarily agree with his assertion that “What allows people to think of themselves as ‘traditional’ Jews … is not the belief that they are doing exactly what people did 3,000 years ago in ancient Israel. Rather, it is the belief that there is a genealogical continuity between what others who called themselves Jews did in the past and what one is doing now. This approach views tradition as a line of memetic descent … .” (p. 50) I am sure that some “traditional Jews” view themselves just as Balkin suggests. Yet I am also sure that there are
other people who think of themselves as "traditional Jews" primarily because of their biological continuity with those people of 3,000 years ago, even though many of these people might not practice or devote much time to Jewish ritual. And there are certainly others (such as devoted converts to Judaism) who might consider themselves "traditional Jews" not because of their biological continuity but rather because of their commitment to Jewish ritual. Many of these devout Jews do not recognize non-practicing Jews as "traditional" in spite of the latter's biological continuity or the genealogical continuity of their traditions. Aggregating the belief systems of these different kinds of Jews distorts the actual beliefs of individual members of each.

Moreover, Balkin is plainly Western-oriented in his research and outlook. By this I mean that he does not cite a single Eastern philosopher, scientist, mystic, religious leader, or scholar. His book is the embodiment of the best of Western learning; it is almost an anthology of the history of Western thought. I am not suggesting that there is necessarily anything wrong in his outlook but rather that it is limited in the same ways in which Balkin is himself limited (or, conceivably, has limited himself). His only mentions of Eastern cultures are to Taoist philosophy as reflecting the ancient heritage of "nested opposition" (Balkin's preferred theory of deconstruction) and references to the anti-Korean prejudice of American blacks and the anti-semitism of the Japanese. (He also mentions the anti-semitism of some American blacks, again displaying sensitivity to, if not preoccupation with, Judaism.)

It is also not surprising to find that, as the director of the Information Society Project at Yale Law School, Jack Balkin takes the view that information helps to define our destiny. Balkin obviously takes his work seriously, and one purpose of his book is to encourage us to take it seriously as well.

If there is a problem that is posed for Balkin's book by the possibility that he has been constrained to some extent by his own background, memories, and experiences, it is that Balkin does not suggest how he has been able to either control or transcend his own social construction. He has to transcend his social construction in order to provide a road map the rest of us can follow to achieve—and this is the kicker—some kind of self-understanding and self-identity that is not purely socially constructed or a complete self-delusion. To put this slightly differently, we do not know to what extent Balkin has been able to program his own cultural software or instead has been programmed beyond his control and thus drawn, because of his social construction, to certain arguments or insights, whether they be about what makes a traditional Jew, what schools of thought to follow, information's impact on our destinies, or even the best metaphor for describing our social and ideological world and how it works.

The next basic question is whether Balkin satisfactorily resolves one of Western thought's great riddles. He notes that Karl Mannheim first raised the apparent paradox that "if all discourse is ideological, how is it possible to have anything other than an ideological discourse on ideology?" (p. 125) In other words, our conceptions as well as our critiques of ideology are constrained by our ideologies, which are themselves constrained by our social, economic, and political circumstances. Our ideologies are merely traps from which we are not likely to escape. Recognition of this paradox became one of the most telling criticisms of Marxism. Marx had postulated that history reflects the constant conflict between two classes of people, and that each class's perspective was conditioned and limited by its social status. But Marx never explained how
he was able to transcend his own social, economic, and political circumstances to identify history’s dialectical course.

The resolution of this paradox forms one of the central themes of Balkin’s book. Balkin suggests that the fact that this paradox exists does not mean that it is entirely inescapable. Perhaps there is an intermediate solution, or what he calls a principle of “ambivalence.”

He suggests that “the ability of thought to turn upon itself is a prerequisite for an adequate analysis of ideological thinking.” The problem of self-reference, he explains further, “is unavoidable in ideological analysis because this analysis must always be performed by somebody or someone.” Balkin views his metaphor of cultural software as helping to illustrate the absence of this paradox, for “the tools of understanding are empowering as well as limiting, enabling as well as distorting.”

Balkin employs a similar analysis to dismiss Stanley Fish’s extension of Mannheim’s paradox to textual analysis. Fish maintains that, as Balkin explains, “critical self-consciousness is impossible because it requires one to get outside the forms of one’s own thinking in order to reflect critically on what one thinks. Yet one never gets outside the forms of one’s own understanding. One is always already understanding oneself using the forms of thought that one currently possesses.” Balkin maintains that Fish’s argument “does not prove that critical self-consciousness is impossible. It simply directs us toward a more careful consideration of what a critical self-consciousness might be.” In other words, Balkin suggests that our cultural software enables us to achieve a limited understanding of the conditions that constrain or influence our operational or situational outlook. He suggests that we can resolve this paradox by trying to be candid with ourselves and others about the sources of our own thinking. We can transcend Mannheim’s paradox because we must.

Transcending it requires openly understanding the transcendent ideals influencing one’s own ideology. Transcending Mannheim’s paradox is a transcendent aspiration, so to speak.

But Balkin’s proposed resolution is problematic, largely for epistemological reasons: How do we know for sure we have resolved the paradox? Perhaps the paradox is illusory. Perhaps there is no paradox; maybe we’ve been too clever by half and fooled ourselves into thinking that such a paradox exists when in fact it does not. Of course, if there were no paradox, then the cultural software of which Balkin speaks might have even greater potential to make sense of the universe and our place in it.

Alternatively, it is conceivable that the paradox is simply unsolvable. Perhaps the difficulty of the paradox is that it is impossible for us to know with certainty if we have resolved it. Balkin suggests we must try to overcome it, but that is an aspirational declaration. It is not the same thing as actually overcoming it or proving we have overcome it.

More than a few great thinkers have cautioned humility in thinking we could resolve such a great paradox. The philosopher Herbert Marcuse once suggested half-seriously that doing philosophy is like being stuck in the mud: you get deeper and deeper, but you never go anywhere. Similarly, Albert Einstein mischiefously suggested that perhaps God the Creator was a joker. Einstein noted that each great scientific discovery demonstrated even more than the one before how much we had yet to learn in order to understand the universe. If we are either stuck in the mud or prone to a divine joker, cultural software won’t save us, for it might be itself too firmly anchored in the mud and muck to free us from it, or even worse, just part of a very big joke.

When reason fails us in our quest to transcend our circumstances, we rely instead on faith. I believe that this is the source of Balkin’s confidence that “we are sometimes right, or
right enough to effect some improvement in our understanding. And we are right not because we somehow escape our cultural construction but rather because we put it to good use.” (p. 135) Balkin explains that it is not necessary for us to stand outside of ourselves to expand our self- or cultural awareness. Instead, “using our cultural software, we think about what we are feeling, consider what we believe, question our own motives, and compare our views with others. We do all these things with the goal of trying to figure out how we think about the social world and how our thought might be improved.” (Id.) Cultural software is essential for our understanding of ourselves and of the world around us. People understand the world “given the tools of understanding they currently possess.” (p. 137) Because these tools can be refined, people’s understanding is potentially expandable.

The major problem with this argument is that Balkin assumes rather than proves that the expansion is necessarily an expansion of reason. Does believing that you’ve expanded your knowledge of yourself, of others, or even of the world, necessarily mean that you actually have? And if your understanding has expanded, to what extent? This is an epistemological question that Balkin never fully answers. The reason that he does not answer it is, I think, that the answer is a matter of faith. For, as Immanuel Kant suggested, faith rather than reason explains our initial operating premises, the starting points for exercises in reason. It is faith that provides the direction for much of our thinking, and that appears to be true for Balkin as well. Faith provides the book-ends of his thought. There is a faith implicit throughout the book that, having been given certain tools, we must use them to their fullest extent and that if we do so we are likely to understand ourselves and others better. I do not argue with this insight; indeed, I agree with it. I do, however, think that it is an insight grounded at least as much in faith as in something objectively verifiable. After all, Balkin says that ideological discourse “must presuppose a transcendent value of justice,” (p. 143), that “[n]otions of improvement … must be made by some observer” (p. 139), and that ultimately we “must” use our tools of understanding to learn about the world. The imperative in these statements derives in all likelihood from Balkin’s faith that it would be wrong not to use these tools to their fullest potential and that if used to their fullest potential they would increase rather than diminish both our understanding of the world and our understanding of how others understand the world.

Perhaps the most intriguing question posed by Balkin’s book is whether his “master metaphor” of cultural software will catch on. At the end of the introduction, Balkin predicts that his metaphor “will in time seem no more forbidding than the metaphors of engines, or bicycles, or railroads seem today.” (p. xii) He acknowledges that these other metaphors had some negative connotations and thus that his own metaphor “will change its cultural connotations over time.” (Id.) Ultimately, he hopes that the metaphor “will grow, develop, flourish, and spread to other minds, helping those who absorb [it] to understand this world and themselves a little better.” (Id.) Balkin anticipates the most serious objection to his metaphor – that it dehumanizes people and ignores the fact that “human culture is too laden with value and emotion to be compared to information.” (Id.) Balkin responds that “[p]eople who think that cultural information is soulless understand neither information nor the soul.” (Id.)

It is telling that Balkin’s response takes the form a nested opposition. A nested opposition is “a conceptual opposition each of whose terms contains the other, or each of whose
terms shares something with the other.” His response implies that information has something in common with the human soul. The metaphor works for Balkin partly because of something he believes about information and the soul that is metaphysical, something that cannot be empirically studied or verified, something that obviously has elements in common with other concepts used throughout Balkin’s book, such as religious imagery and fate. Interestingly, these concepts provide the book-ends – literally – of Balkin’s thesis. We are brought back full circle to Balkin’s faith.

To be sure, Balkin is right that it is conceivable – indeed, likely – that his metaphor, like others in the past, might fall into disuse. Each of these other metaphors fell out of use as the machines on which they were based themselves fell out of use. It would seem to follow that as computers develop (and as our understanding of computers develops) it is possible we will become less enchanted by, or attracted to, his metaphor.

The difficulty is that Balkin uses the cultural software metaphor to capture not just a human quality but also a scientific concept. But the science of human understanding is not static. If biologist Edward O. Wilson is correct that “with advances in the neurosciences and psychology the [concept of the meme, which Wilson had equated with the node of semantic memory, is] likely to give way to more sophisticated and complex taxonomies.” In other words, scientists are likely to break the meme down into increasingly smaller constituent parts (in the same manner as scientists have broken the atom down into increasingly smaller parts), until the metaphor of cultural software no longer proves adequate for describing the essence of whatever we might find along the road of discovery. Indeed, it might even inhibit further scientific inquiry into the origins of our ideas and thinking. If past is prologue, the metaphor is likely to work for a while until either scientific knowledge or self-awareness renders it useless.

Moreover, Balkin’s metaphor rests on a notion that might not be empirically sound. In his Pulitzer Prize-winning book, Guns, Germs, and Steel: The Fates of Human Societies (1997), anthropologist Jared Diamond suggests that cultures do not develop by means of ideas or information but rather because of special environmental circumstances. It is not clear to what extent Balkin’s metaphor of cultural software allows for environment rather than the competition between ideas to operate as the dominant factor influencing cultural fates. If Diamond is right, then it would be an overstatement, or even misleading, to think that information defines our fate.

Perhaps the most problematic aspect of Balkin’s metaphor is that as a meme, it exists independently of him. Indeed, it is interesting that the same metaphor has been used by Steven Covey when discussing his hugely popular book, The Seven Habits of Highly Effective People. Covey suggests that people’s habits need to be “a part of the software in their head.” Moreover, the metaphor of software has become quite popular among psychologists, some of whom have begun to talk about either the need for people to try to become more in control of their own “programming” or the difficulties that many if not most of us have to face in overcoming the ways in which certain forces, or other people, have “programmed” our thinking.

This is not to suggest that Balkin has appropriated this metaphor from someone else. Instead, I mean to suggest that the idea of cultural software is itself a meme and that, as Balkin has argued, it is difficult to control the origin or spread of a meme, or the uses to which

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it might be put. It is also difficult for us to know precisely how we have come up with certain ideas any more than we know for sure how we have caught or tried to conquer all of the viruses that have plagued us in our lifetimes.

Having said this, I conclude on a point that makes Balkin’s case for him. In suggesting the possible limitations of Jack Balkin’s metaphor, I of course speak only for myself. A more telling event happened just as I finished writing the previous paragraph. My wife, who is an intellectual property lawyer, walked into my office. She said, “You know, the more I think about that metaphor you explained to me the other day – cultural software – the more I like it.” My wife is very popular. She is sure to talk with others. The virus, no doubt, will continue to spread.